PD-ABM-954
90634

Improving Educational Quality Project

Annual Report

October 1993 - September 1994

Prepared for:

Office of Education
Bureau for Research and Development
United States Agency for International Development
Washington, DC

Project undertaken by:
Institute for International Research
in collaboration with
Juárez and Associates, Inc.
and
The University of Pittsburgh

DEC 21 1994

Contracts DPE-5836-C-00-1042-00 & DPE-5836-Q-00-1043-00
Technical Report #7

December 1994

BEST AVAILABLE COPY

A

TABLE OF CONTENTS

Page

Introduction **1**

Fiscal Year 3, Activities and Accomplishments 5

Core Contract: Progress Report, Six Month Goals, Project Workplans

Ghana 10

Guatemala 18

Mali 25

Knowledge Building 32

Requirements Contract: Progress Report, Six-Month Goals and Project Workplans

Delivery Order 1: Africa Bureau Buy-In 38

Delivery Order 2: South Africa Buy-In 43

ATTACHMENTS

Ghana Documents 1
Sample Pupil Performance Tests 1a
Sample Data Reduction Tables 1b
Observation Guidelines and Interview Guidelines 1c
Quarterly Report (January-March 1994) 1d
Quarterly Report (April-June 1994) 1f

Guatemala Documents 2
Executive Summary: Guatemala Phase I Report 2a
Program for Guatemala Fifth National Conference on Educational Research 2b

Mali Documents 3
Rapport du Seminaire de Fin de la Phase I du PAQE

Knowledge Building Documents 4
Defining Educational Quality 4a
Implementing Change in Educational Quality 4b
Choices in Conceptualizing Classroom-Anchored Research and Linking it to Policy/Practice to Improve Educational Quality in 'Developing' Countries 4c
Documentation of the Research-Policy/Practice Link in IEQ 4d
Cross-Country Comparisons, Documentation, and Knowledge Building in IEQ 4e
Cross-Country Comparisons of the Policy-Practice-Research Cycles 4f
Improving Educational Quality: A New Approach 4g
Selected Bibliography of Effective Schools and Educational Quality 4h
Rapport Technique sur la Question de Langue et le PAQE 4i

Fiscal Years 1 and 2: Activities and Accomplishments 5

Newsletter: ***The Quality Link*** **#3** 6

Trip Reports 7

Weekly Reports 8

INTRODUCTION

The previous report summarized ways in which the Improving Educational Quality (IEQ) Project marked progress toward the achievement of our four goals. Each of the research teams in the three core countries examined teaching and learning at the classroom level, established connections with the educational infrastructure, and presented the research findings at a variety of national and international conferences. While the interest on information about classroom life and pupil performance is one of education's "hot topics," how the information is shared and used to improve classroom practice has received less attention.

Herein lies the heart of IEQ. One of the four principles of IEQ states that "the value of the information gathered is measured by its utility." Improvement of educational quality cannot occur unless the knowledge is shared with local, regional and national educators who can and choose to alter classroom practice. The conversion of a research finding to an improved practice seldom occurs.

During the past six months, IEQ has made significant progress in feeding research data back into the system. The research teams have reached out to stakeholders within their educational systems. The teams have created some events and participated in others in order to share their findings AND jointly develop strategies for converting the findings into concrete strategies that address specific learning deficiencies. The IEQ process that begins (assessment) and ends (action) in the classroom uses research as a tool for improved practice. Parents, community leaders, politicians, teachers, and local and regional supervisors weigh the implications and options for improvement based on data. IEQ assimilates these data into its framework. Examples of such assimilations are as follows:

- In Ghana, CRIQPEG team members presented the findings from baseline data collection in oral and written proficiency to the circuit supervisors and head teachers of the seven target schools (P2-P5). At this seminar, participants developed interventions around three goals to improve language learning that became the focus of teacher training workshops. The CRIQPEG team, circuit supervisors, and head teachers supported the implementation of the strategies and the teachers from the target schools gathered at UCC to provide feedback on the implementation. CRIQPEG returned to the classrooms to observe individual pupils.

- In Guatemala the Team Leader conducted workshops on research findings from Phase I for supervisors and teachers. The workshops used a number of different learning contexts to provide information which allowed teachers, supervisors and educational administrators to reflect on such issues as utilizing

small group and cooperative learning contexts in the classroom, stimulating creativity among students, meeting the needs of children whose mother tongue is not the language of instruction, and promoting cross-gender collaboration among children.

- In Mali the completion of Phase I was marked with a pioneering three-day national seminar on educational quality led by the IEQ team. The parents, teachers, community leaders, head teachers, school principals, inspectors of basic education, and regional directors collaborated to develop specific interventions designed to improve language learning. The first of four regional training workshops for support teams, who hold implementation responsibility, took place in Ségou in August and September. Classroom observations are scheduled for January 1995.

In Ghana and Guatemala, the assess - assimilate - act feedback loop is completed and will be repeated. Mali's first cycle will be completed in January 1995 (Mali was the last core country to join IEQ, in 1993).

IEQ offers a dynamic and reflective process. Progress toward improvement must be monitored and assessed: the findings then circulated and discussed (reflected upon in many forms) at all levels of the educational system. The implementation of the recommended actions completes a cycle. In a dynamic and reflective process, the cycles must continue thus enabling the participants to gain ownership in improving the quality of education. IEQ uses research findings to facilitate the capacity of educators to bring about improvement.

Other IEQ achievements include:

- South Africa joins as IEQ's fourth partner country. The project was launched with an opening conference attended by the directors and other representatives of 14 NGO grantees, USAID/South Africa and IEQ staff. Program monitoring and evaluation workshops in conjunction with IEQ assistance to individual grantees supported the development and implementation of NGO impact assessments. IIR opened an office in Durban staffed by a Team Leader and four support staff.

- Continuing discussions and on-site visits resulted in welcoming Uganda as the fifth IEQ partner country. A research agenda that addresses issues of the education reform will flow through the Uganda National Examinations Board. The IEQ Principal Investigator is the Research Director at UNEB who will work with two other IEQ staff. The first national seminar will be held in January 1995.

- Increased reporting on the progress and process of IEQ in international meetings. Two team members from each of the three countries formed two panels at the Comparative and International Education Society meeting in March 1994. The Research Coordinator from Ghana was invited to Swaziland to participate in a workshop on qualitative research, which was reciprocated by a visit to IEQ in Ghana from four representatives of Swaziland's Ministry of Education. The Research Coordinator in Guatemala presented a paper on the Phase I findings at the Fifth National Conference on Educational Research at Rafael Landivar University, Guatemala. A six-member delegation from IEQ in South Africa attended the UCLA annual evaluation conference.

- The producing of several papers that contribute to knowledge-building. ***Defining Educational Quality*** has been published in ***Educational Planning*** (Volume 9(3)(1994)). The second biennial publication ***Improving Educational Quality: a New Approach*** was circulated for review. Two additional papers have been submitted for publication: ***Choices in Conceptualizing Classroom-Anchored Research*** **and** ***Implementing Change in Educational Quality.*** The first of the three-part series on IEQ's use of curriculum-based assessment entitled ***Curriculum-Based Assessment: Linking Curriculum, Assessment and Learning in Developing Education Systems,*** has been circulated. Efforts were initiated to produce reports of cross-country similarities and differences of the IEQ approach. An initial draft of a literature review entitled ***"How Do Teachers Use Textbooks and Other Print Materials?"*** is being reviewed. Although developed in response to a request from IEQ South Africa, it incorporates material from Phase I findings in Ghana.

- The expansion of a video collection that documents project activities. In Ghana, the CRIQPEG team recorded the administration of the curriculum-based assessment tests to P2-P5 pupils, the implementation of the pedagogical strategies in selected classrooms, and the teacher feedback sessions and training sessions. In Mali, interviews with participants at the national seminar record ways in which they consider such conferences useful.

- The production of two issues of The Quality Link which are circulated to USAID overseas missions, AID/Washington and to institutions and individuals involved in international education development. The mailing list contains approximately 460 addresses. Issue #2 reports: the Phase I progress in Ghana and Mali, the study of the impact and implementation of Nueva Escuela Unitaria (NEU) in Guatemala, and the mandate of the South Africa and IEQ partnership. Issue #3 discusses: IEQ's research objectives in Uganda, Phase II of Ghana, a seminar in Mali which concluded the Phase I research, and more (see attachment 6). The fourth issue will focus on how IEQ uses research findings to inform the dialogue about classroom life and how the research leads to improved policies and practices.

- The convening of three meetings of US-based design and management teams to reflect on IEQ progress and refine designs in each country.

As IEQ begins its fourth year, we applaud the international trend by those most traditionally distant from the classroom (e.g. politicians and educators who set national policy) to learn more about what happens in the classroom as a source of information when setting policy. This interest in and commitment to dialogue about classroom life is evident in participation by national representatives (often from ministries of education) in IEQ conferences and shifting responsibilities to regional and local educators. Regional supervisors receive more authority; communities provide more support to the school. There seems to be increased interest in educators at different levels talking to and learning from one another.

This annual report describes progress in each of the four IEQ goals. The calendar following this Introduction displays an inventory of all IEQ activities during Fiscal Year 3 (October 1993 - September 1994).

I am grateful to the following people who wrote the bulk of this report: Don Adams, Ray Chesterfield, Yetilu de Baessa, Jonathan Jansen, Alimasi Ntal-I'Mbirwa, and Aida Pasigna. I am especially grateful to Ina Laemmerzahl who once again has ably orchestrated and edited the preparation and distribution of this report. She departs very soon to begin a new and promising chapter in her own life in Oklahoma. It is with sadness and joy that I wish her Godspeed.

Jane G. Schubert

Jane G. Schubert
Director
Improving Educational Quality Project

FISCAL YEAR 3 *(October 1993-September 1994)*
Activities and Accomplishments

Month	Knowledge-Building	Country Activities	Contact with R&D Community	Administrative	Requirements Contract
October 1993		Ghana: Jane, Don and Abi Harris attended the Second Annual Conference on Improving Quality of Primary Education in Ghana and conducted the fourth professional development seminar for CRIQPEG.	Jane and Don attended the Educational Research Network for West and Central Africa (ERNWACA) Conference in Mali.	Submitted *Trip Report #15: Guatemala.*	Delivery Order 1: Joy Wolf began working as a Survey Specialist under the buy-in. Diane provided support to the Gambia's Curriculum Study. Delivery Order 2: The South Africa Mission signed the buy-in to the IEQ project.
November 1993	Distributed *Translating Research Findings into Practice: Initiating and Sustaining Improvements in Educational Quality.*	Ghana: Completed Phase 2 design and instruments. Aida trained CRIQPEG team on instrument administration, helped pilot test, and led a seminar on continuous assessment. Guatemala: Ray assisted in analysis of Phase I data and trained HCRT in use of database and spreadsheet programs for qualitative data reduction.		Submitted *Trip Report #16: Ghana and Mali.* Submitted *Trip Report #17: South Africa.*	Delivery Order 1: Delivery Order 2: Jane and Paul conducted an Orientation Conference for USAID and SABER grantees in South Africa, prepared an implementation plan, and met key South African educational stakeholders.
December 1993		Mali: Rick and Josh travelled to Mali to conclude Phase 1 activities and to plan Phase 2 activities.		Submitted *Trip Report #18: Guatemala.*	

FISCAL YEAR 3 *(October 1993-September 1994)*
Activities and Accomplishments

Month	Knowledge-Building	Country Activities	Contact with R&D Community	Administrative	Requirements Contract
January 1994		Ghana: Baseline data collection began. Beatrice Okyere, the HCRT Coordinator, gave a presentation at the seminar on qualitative research methodology in Swaziland. Mali: Completed first draft of the Phase 1 Research Report. Guatemala: Ray and Yetilu trained field workers for Phase 2.		Submitted *Trip Report #19: Ghana.* Submitted *Trip Report #20: Mali.*	Delivery Order 1: The Africa Bureau buy-in team organized and attended the Workshop on Basic Education Programs in Zimbabwe. Diane led a seminar on qualitative research methodology in Swaziland. Delivery Order 2: Jane, Jeanne and Regino completed site visits to the SABER grantees to gather information on their monitoring and assessment systems.
February 1994	Produced a draft, *Collaborative Action Research: An Introduction with Examples from the International Literature,* in response to CRIQPEG's request.	Ghana: Aida helped the CRIQPEG team to analyze data and develop interventions. Guatemala: Field workers visited schools and collected observational data.		Submitted *Trip Report #21: Guatemala.* Submitted *Trip Report #22: South Africa.*	Delivery Order 1: Diane and Joy supported the USAID/ Namibia program design team. Delivery Order 2: IEQ opened its South Africa office and hired Jonathan Jansen as Chief of Party.

FISCAL YEAR 3 *(October 1993-September 1994)*
Activities and Accomplishments

Month	Knowledge-Building	Country Activities	Contact with R&D Community	Administrative	Requirements Contract
March 1994	Produced a planning and discussion draft, *Defining and Planning IEQ Documentation Activities.* Submitted Don's *Implementing Change in Educational Quality* to ***Educational Planning.***	Ghana: Two RTL's visited the U.S. to participate in the CIES presentation and a series of professional development seminars hosted by the University of Pittsburgh. Guatemala: Two researchers from IEQ's Guatemala office participated in the CIES presentation and the seminars at Pittsburgh. Mali: ISFRA and IPN sent two representatives to the CIES presentation and the Pittsburgh seminars.	IEQ representatives from the U.S. and the three core countries gave a presentation on classroom and school level research in Ghana, Guatemala and Mali at the Comparative and International Education Society conference in San Diego.	Distributed the second issue of *The Quality Link.* Held meeting on Mali design.	Delivery Order 1: Ash and Diane gave a presentation on the effects of USAID's sustainable reform efforts on basic education in Africa at CIES. Delivery Order 2: Jonathan Jansen held a seminar on effective schools and classrooms.
April 1994		Ghana: two CRIQPEG researchers attended Mali's Phase I Seminar. Guatemala: Ray and Yetilu presented a paper on IEQ at a national meeting of educational researchers at Universidad Rafael Landivar. The team finished the Phase I report. Mali: ISFRA and IPN held Mali's first national seminar on educational quality, focussing on the Phase I research. Rick and Josh began discussions with the team on plans for Phase II.		Submitted *Trip Report #23: Ghana.*	Delivery Order 1: Joy completed a case study on equity issues in Malawi. Gretchen helped complete the report on the Kadoma workshop. Delivery Order 2: IEQ held a one day seminar on effective schools and classrooms. Delivery Order 3: After her visit, Jane prepared a paper on IEQ's role in Uganda.

FISCAL YEAR 3 *(October 1993-September 1994)*
Activities and Accomplishments

Month	Knowledge-Building	Country Activities	Contact with R&D Community	Administrative	Requirements Contract
May 1994	Revised and enlarged IEQ's bibliography of sources concerned with effective schools and educational quality.	Ghana: Aida and Abi helped CRIQPEG to prepare staff development seminars on introducing the interventions in intensive schools. A delegation from Swaziland's MOE participated in these seminars.		Held meeting to assess IEQ's progress toward project goals. Submitted *Trip Report #25: Uganda.*	Delivery Order 1: Joy helped complete Namibia's BERP project amendment.
June 1994		Ghana: CRIQPEG supervised the implementation of interventions and provided feedback to head teachers and circuit supervisors.		Held meeting to discuss Mali's Phase 2 plans. Submitted *Trip Report #26: Mali.* Submitted *Trip Report #27: Ghana.*	Delivery Order 1: Diane and Gretchen conducted a teacher incentives study in Ethiopia. Delivery Order 2: Pat conducted a workshop on program evaluation and monitoring systems. Jane discussed Phase 2 plans.
July 1994	Rick Donato submitted a summary of foreign language learning, *New Directions in Foreign Language Teaching and Learning.* Produced and circulated a discussion paper, *Cross Country Comparisons, Documentation and Knowledge Building in IEQ,* at July's technical review and design meeting.	Guatemala: HCRT completed mid-year data collection and student observations in sample schools. Paul Longo helped to develop video records of children in classrooms. Mali: Josh worked with team to plan Phase 2 intervention workshops and to negotiate cooperative agreements and hiring procedures for a Mali Coordinator.		Held meeting on technical review and design in each IEQ country: interventions, data collection, reduction analysis, products, conferences, and trips. Submitted *Trip Report #28: South Africa*	

FISCAL YEAR 3 *(October 1993-September 1994)*
Activities and Accomplishments

Month	Knowledge-Building	Country Activities	Contact with R&D Community	Administrative	Requirements Contract
August 1994	Don Adams circulated a pre-draft of *Improving Educational Quality: A New Approach,* which looks at IEQ in the context of relevant international research. Submitted Mark Ginsburg's *Choices in Conceptualizing Classroom-Anchored Research* to the ***International Journal of Educational Development.*** Prepared an outline: *Cross Country Comparisons of the Policy-Practice-Research Cycles.* Rick Donato produced *Rapport Technique sur la Question de Langue et le PAQE,* a paper outlining IEQ's role in language learning.	Ghana: CRIQPEG held a feedback seminar for head teachers, circuit supervisors, and teachers involved in intensive schools. Guatemala: Yetilu conducted workshops with supervisors from two regions to explain results from the first year evaluation. Mali: Josh, Rick and Alimasi worked with the team to present four teacher training workshops on pedagogical strategies for language-learning.		Submitted *Trip Report #29: Uganda.*	Delivery Order 1: Prepared seminars on Ethiopia and Ghana. Delivery Order 2: Team visited SABER grantees to strengthen evaluation instruments. Delivery Order 3: Received scope of work for Uganda buy-in and submitted buy-in proposal to contracts. Simon discussed IEQ's role with Mission and UNEB.
September 1994	Abi and Aida circulated part one of a draft entitled *Curriculum-Based Assessment: Linking Curriculum, Assessment and Learning in Developing Education Systems.* ***Educational Planning*** published Don's *Defining Educational Quality.*	Guatemala: HCRT completed the post test application		Held meeting to continue discussions on IEQ accomplishments and future directions. Submitted a concept paper to the Mission on IEQ's role in Ethiopia.	Delivery Order 1: Diane collaborated with UNICEF to train Ghanaian researchers in qualitative research methodology. Delivery Order 2: Seven grantee representatives conducted a 3-week study tour to the U.S.

CORE CONTRACT

GHANA

Goal #1: Understand how and why each country's classroom-based interventions influence pupil performance.

Below is a summary of the major accomplishments towards the goals reflected in the Phase II research questions for IEQ in Ghana.

1. What are the English language proficiency levels of Ghanaian primary pupils?

One of the Phase II research goals is to provide diagnostic profiles of the English proficiency levels of P2-P5 students in participating schools, specifically in the areas of reading, writing, and oral language (listening comprehension and oral expression).

Status. In order to answer this question, the Centre for Research on Improving Quality of Primary Education in Ghana (CRIQPEG) has developed instruments and validated a process that measures pupil progress toward the mastery of oral and written English skills specified in the national curriculum and reflected in the approved textbooks. The CRIQPEG team has collected baseline data and completed preliminary analyses (see Attachment 1a for samples of the pupil performance tests in listening comprehension, oral expression, reading, and writing).

Tables summarizing pupil performance in reading, writing, and oral language have been prepared for each P2-P5 classroom, each school, and overall, across all 14 participating schools (see Attachment 1b for sample tables showing how data have been aggregated at these different levels). Preliminary findings indicate that the most common learning difficulties are in the areas of listening comprehension, oral and written expression, and reading (decoding and comprehension). These findings confirm the hypotheses generated by Phase I research that children lack the skills required to use existing textbooks efficiently and that they need more opportunities to practice and apply beginning English skills.

CRIQPEG is finalizing a report that consolidates the findings from the 14 participating schools (7 intensive intervention and 7 non-intensive schools--approximately 1000 P2-P5 pupils).

2. What are factors inside the classroom (e.g., teacher and pupil characteristics and behaviors) and outside of the classroom (influence of parents, community, educational officers, policy makers, etc.) that affect oral and written language learning?

Another Phase II goal is to describe the factors affecting English language instructional practices and English language learning in primary classrooms.

Status. CRIQPEG has developed and validated classroom and individual pupil observation guidelines and interview guidelines for teachers, head teachers, circuit supervisors, and parents of selected pupils (see Attachment 1c for samples of these instruments). The classroom observation forms allow the observers to describe and assess existing instructional practices. Pupil observations use a time sampling approach designed to monitor pupil exposure to and use of print/written and oral English. CRIQPEG has collected and analyzed baseline data. The report on data generated by these instruments is being finalized and will be incorporated into the consolidated report.

3. What changes are necessary to enable teachers to use instructional materials effectively to promote English language competence?

For purposes of the research design developed for IEQ in Ghana, educational quality is operationally defined within the context of language competence. Hence, a third goal of Phase II is to identify interventions that are associated with improved English language competence.

Status. Collaborative efforts and continuing dialogue among the CRIQPEG research team, teachers, head teachers, circuit supervisors, and parents have resulted in decisions regarding the type and frequency of interventions needed to answer this third research question. The ongoing dialogue and collaboration have taken the form of visits to the school sites, interviews, written communications, consensus-building seminars, professional development seminars, and feedback seminars. The intervention package that has emerged includes: (a) curriculum-based assessment (CBA) instruments; (b) CBA-generated diagnostic profiles communicated to teachers; (c) collaborative problem solving, decision making, and training efforts; (d) training in the use of instructional strategies and materials consistent with basic principles of effective English teaching and learning in a foreign language situation; (e) training in the use of instructional/organizational strategies and job aids that promote active learning; and (f) training in the use of instructional strategies and materials that enhance mastery learning by all pupils, not just a few.

Drs. Aida Pasigna and Abigail Harris conducted a three-day professional development seminar in late May 1994. The instructional interventions were

summed up in three major goals for pupils to be communicated to all the teachers (and to be displayed in their classrooms) by teams of CRIQPEG staff and the head teachers and circuit supervisors of the seven intensive schools. These goals are: (a) constant practice in oral English, (b) constant exposure to print, and (c) instruction geared towards making every pupil a successful learner.

The first two goals require as much "immersion" as possible in oral and written/ printed English--increasing proportionately both the frequency of usage and complexity of content/skills as the grade level goes up. The English teaching strategies shared with the teachers emphasize fundamental principles of learning the four basic linguistic modes (listening, speaking, reading, and writing) in a foreign language situation. The third goal borrows some basic concepts and philosophy from the mastery learning model; it emphasizes to schools and teachers that their main responsibility is to help all pupils to learn and to give all pupils the opportunity to attain their fullest potential. A more detailed description of the instructional strategies and sample materials introduced to the teachers as part of the intervention package is provided in *Trip Report #27, 6-28 May 1994*).

CRIQPEG held the first all-day feedback seminar on August 18th at the University of Cape Coast, approximately two months after the instructional interventions were introduced in the intensive schools. The head teachers, teachers, and circuit supervisors of all seven intensive schools reported encouraging observations of changed behaviors and improved teaching/learning. General recommendations given at this seminar included expanding project participation to P1 and P6 and to other classes, schools, and regions.

Goal #2: Develop a process whereby the findings from classroom research are used to improve the quality of the educational system.

The following are taken as indicators that this process of integration is taking place:

1. Participating Circuit Supervisors provided administrative sanction for teachers to deviate from prescribed syllabi as needed.

Some teachers had expressed their concern that--following the diagnostic profiles and their own pupil performance assessments--they may have to provide remedial instruction to pupils who lack the prerequisite skills for learning what is prescribed in the syllabus and that they may be critically evaluated for doing this. Others were hesitant to implement the first two goals (involving constant exposure to and use of English in the lower grades) because existing policy is against using English for lower primary instruction. The Circuit Supervisors concerned have reassured the teachers that they would support the teachers in a systematic transition from teaching in the vernacular to increased English usage and that they would praise, rather than

criticize, those teachers whose instruction is geared towards what the pupils really need to learn.

2. Head teachers were integrated into the delivery of training process and served as valued role models.

Because they provide instructional leadership to the faculty and are almost in daily contact with them, the head teachers are undeniably in the best position to provide on-going support and supervisory assistance to their teachers. Their integration into the delivery training process is designed to increase their leadership skills and enhance their acceptance as role models in their respective schools.

3. Findings from the Phase II baseline data collection were shared with key leaders prior to providing feedback at the regional and local levels.

Acting Director Atta-Quayson of the Ghanaian Education Service (GES) affirmed the importance of the CRIQPEG findings and welcomed CRIQPEG efforts to intervene. He expressed continued support from his office for the research. He also expressed interest in continued communication so that the GES will be in a position to take timely steps to enable other schools to also benefit from CRIQPEG's findings concerning effective interventions.

Goal #3: Facilitate dialogue about the classroom environment among researchers and educators who seek to improve educational quality at local, regional, national, and international levels.

IEQ has consciously sought to open up and maximize opportunities for dialogue and partnerships at the local, regional, national, and international levels during the period under review. Training teachers and teacher trainers (CRIQPEG, head teachers, and circuit supervisors) to implement the interventions that were introduced into the seven intensive intervention schools is a major accomplishment for this period.

1. Local. Teacher training at each school site has been open to all interested teachers. In most, if not all, of the intensive schools, the "non-participating" teachers decided to participate in the training sessions despite knowing that they would not receive any of the training materials.

2. Local and Regional. Circuit supervisors and head teachers actively participated in the Professional Development Seminar at UCC. Despite other pressing duties, they asked to stay for the full three days rather than just the first day as originally expected. They collaborated in and offered valuable insights into how the teachers should be trained. When the training teams

dispersed to their respective schools, the circuit supervisors and head teachers took an active role as school level trainers.

3. University of Cape Coast. CRIQPEG members also serve as faculty in the USAID-supported Primary Unit of the University. The Coordinator of the Primary Unit and other members of his faculty were active participants at the Professional Development Seminar last May.

4. National. The PREP Project Manager, Mr. Stephen Yaw Manu, visited the Professional Development Seminar at UCC for one day. He expressed interest in the research, the strategies that were being discussed, and the possibility of greater cooperation and collaboration between PREP and CRIQPEG.

5. National and International. Dr. Richard Kraft, a consultant to the PREP project from the University of Colorado, expressed interest in CRIQPEG's materials and findings. He joined discussions on various occasions with Dr. Beatrice Okyere, the CRIQPEG Coordinator, Dr. Abi Harris, and Dr. Aida Pasigna during their meetings with Dr. Jan Orlansky, with the CRIQPEG staff and with Dr. Habib Khan. It is anticipated that these conversations will result in a mutually beneficial dialogue between Dr. Kraft and IEQ/CRIQPEG.

6. International. Early this year, Dr. Okyere participated as a presenter at a training workshop on qualitative research in Mbabane, Swaziland for some of the country's researchers. The workshop participants, among them members of the National Curriculum Centre, were immensely impressed by Beatrice. Four members of the National Curriculum Centre pursued this interest by including CRIQPEG/Ghana in their USAID-sponsored, four-country observation tour in May 1994. Their visit to the Cape Coast coincided with the Professional Development Seminar and enabled the four Swazi educators to actively participate in the group discussions, demonstrations, and other activities.

Goal #4: Maintain an ongoing history of the project to document the rationales for choices made, opportunities and constraints encountered, and lessons learned.

1. This report and its appendices document research and training activities that were undertaken in Phase II of IEQ in Ghana.

2. CRIQPEG keeps minutes of all its meetings and professional development seminars. Research team leaders and members keep a log of what occurs during their visits to the school sites, as these are relevant to the research design and to improving educational quality in general. Also, CRIQPEG

submits detailed Quarterly Reports of IEQ Project activities to IIR (see Attachments 1d and 1f).

3. IEQ has presented videotapes of CRIQPEG activities at professional conferences (e.g., CIES). These videos include one on administering Curriculum Based Assessment to pupils and one of the August feedback session between teachers and the CRIQPEG team. There are plans to increase the use of videotaping to document what goes on in the classrooms and how CBA instruments are administered.

Ghana Workplan for Fiscal Year 4

Activities	1994			1995								
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
I. Data Collection												
Classroom Observation												
Pupil Observation												
Interviews												
Pupil Performance												
II. Intervention												
Training Head Teachers & Circuit Supervisors												
Teacher Training												
Field Support												
III. Data Management												
Data Reduction												
Data Analysis												
IV. Feedback												
Local from Teachers												
To Leaders												
Trips (technical assistance)	2											
V. Products												
Phase II Report												
CBA Papers	#1					#2						

Ghana Workplan for Fiscal Year

Activities	1995			1996								
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
I. Data Collection												
Classroom Observation												
Pupil Observation												
Interviews												
Pupil Performance												
II. Intervention												
Field Support												
III. Technical Assistance												
Trips												

GUATEMALA

Goal #1: Understand how and why each country's classroom-based interventions influence pupil performance.

Completion of Phase I Report. During the reporting period, the Host Country Research Team (HCRT) completed the research report on Phase I findings. The Spanish document was completed in May 1994 and an English version was disseminated in June 1994. The document consisted of: (a) an executive summary that provided the major findings of the research and presented the implications derived from these findings (see Attachment 2a); (b) a literature review that attempted to place Guatemala's *Nueva Escuela Unitaria* (NEU) reform effort within the socio-constructivist paradigm of learning; (c) a methodology section describing the integration of qualitative and quantitative data; (d) a findings section for each of the geographical regions under study; and (e) a conclusions and discussion section which presents a model for examining the NEU classroom interaction.

Development of a Report on Indicators of Democratic Behavior among NEU Children. At the request of USAID/Guatemala, the IEQ data were used to develop a report examining the ways in which the NEU's active learning approach--collaborative learning, peer teaching, the use of self-instructional guides, and participation in student government--encourages democratic behavior among young children. The findings showed that children in the NEU program exhibited significantly more democratic behavior in the classroom than children in comparison schools. Not only were observable democratic behaviors more frequent in the NEU program, but they differed qualitatively from those observed in traditional multigrade rural schools. The majority of turn-taking, collaborative behavior, and supplying directions to others observed in NEU schools took place in the naturally-occurring contexts of child interactions in small groups. When such behaviors were observed in the comparison schools, on the other hand, they were generally directed by the teacher.

The report also pointed out that both indigenous and ladino children in the NEU program had greater incidents of democratic behavior than similar comparison children. In addition, although the NEU program was found to promote democratic behavior among both boys and girls, boys showed greater differences when compared to boys in traditional schools than did girls when compared to female counterparts.

Analysis of Dropouts. The results of the end-of-year dropout in NEU and comparison schools for 1993 was updated using the 1994 enrollment data. The HCRT

will analyze child background data, test data and observational data on classroom interactions to determine causal relationships related to dropping out of school.

Collection of Phase II data. During the reporting period, the HCRT completed the bulk of the Phase II data collection. Fieldworkers observed the second and third grade children that they had observed as first and second graders in Phase I. The fieldworkers observed twelve children in each NEU and comparison school in academic contexts over a three-week period at the start, in the middle, and at the end of the school year. In addition, they developed profiles of the children and--at the end of the year--interviewed parents as to perceived change of behavior in their children at home. Children were also tested at the end of the year on a battery of performance measures including: mathematics, Spanish reading, creativity, and self concept. In addition to testing all second and third graders, the fieldworkers tested first graders on the reading and mathematics measures in order to compare children's progress in a two-year-old program with that of children entering the NEU program during its first year of implementation. As in Phase I, the HCRT is collecting data on children's nutritional status and end-of-year dropout rate.

The HCRT is coding observational data and entering them into a database program. This information will be transferred to a spreadsheet to examine grade and school trends. Finally, the HCRT will transfer the data to an SPSS file and will correlate it with the test data and performance in the previous year. Test data will also be scored and entered into an SPSS file.

Goal #2: Develop a process whereby the findings from classroom research are used to improve the quality of the educational system.

Dissemination of Research Reports. In addition to disseminating the research reports through the IEQ mailing list, IEQ provided copies to the Minister of Education and USAID/Guatemala. IEQ also prepared a special version of the executive summary for the NEU program developers. This document served as a discussion piece for talking about the findings and for planning regional workshops where the findings would be shared with regional supervisors and NEU teachers.

Workshops on Research Findings with Supervisors and Teachers. The HCRT conducted four workshops during August and September 1994, drawing together approximately 30 supervisors in each region where NEU is being implemented. Subsequently, workshops were held with approximately 60 NEU teachers in each region. The workshops highlighted the importance of using research results to improve classroom practice and provided exercises to encourage reflection on the research results. The sessions were highly participatory, allowing the participants to utilize the techniques that teachers implementing the NEU program are supposed to use (e.g., knowledge construction versus knowledge recording or memorization,

building on previous experience, decentralizing the learning by creating a variety of learning situations including small groups). Participants were given observations of actual classroom interaction and asked to reflect on the observations as a group and to make comments on what was well done and what could be improved. Groups then met in general sessions to develop steps for improving the teaching-learning dynamic.

In order to document the workshop interactions, one of the HCRT members not participating in workshops observed the sessions. In addition, the HCRT collected information from the participants on their understanding of the purpose of evaluation before and after the workshop. Participants were also asked for suggestions for further workshops built around the research results. The results of the seminar--in terms of things the supervisors or teachers suggested they would change or try in the schools and supervisors' and teachers' evaluation of the seminars--will be used to modify the workshop design to present the Phase II findings during 1995. The HCRT will prepare a report of the workshop results based on these data.

Goal #3: Facilitate dialogue about the classroom environment among researchers and educators who seek to improve educational quality at local, regional, national, and international levels.

Participation in a National Conference on Educational Research in Guatemala. In April, Dr. de Baessa, the Research Coordinator, and Dr. Chesterfield participated in the Fifth National Conference on Educational Research at Rafael Landívar University in Guatemala City. The conference, sponsored by UNESCO, focused on education in rural areas (see Attachment 2b for the conference program). Dr. de Baessa presented the Phase I research results, whereas Dr. Chesterfield talked about the importance of using multi-method research approaches to understand the classroom dynamics that contribute to improved educational quality for all children.

Participation in World Bank Seminar on Managing Educational Reform. Dr. de Baessa has been asked to participate in a seminar on implementing educational reform. The seminar will take place in Coban, Guatemala in early October under the auspices of the World Bank and will focus on the experience of Colombia's *Escuela Nueva* and Guatemala's *Nueva Escuela Unitaria.* Dr. de Baessa will present the IEQ findings.

Planning for USCEFA Conference. Initial planning for the HCRT's participation in the United States Coalition for Education for All conference in December 1994 was begun. As all of the core countries are examining issues of instruction in the mother tongue and second language learning, IEQ will develop a panel on language issues for the conference in Baltimore.

Workshop on Classroom-Based Research. The IEQ Guatemala team is developing a proposal to give a workshop at the Interamerican Psychological Association meeting in Puerto Rico. The workshop would deal with the use of qualitative and multi-method approaches to study educational reform at the classroom level. The workshop would be structured around the IEQ experience and would deal with both classroom-based research and integrating the research results into the ongoing implementation of a reform effort.

Contacts with International Research Community. The HCRT has established a number of contacts with individual researchers through their participation in conferences and through their review of literature provided by the IEQ Project. In addition to the ongoing contacts with the HCRTs in Ghana and Mali, Guatemala's HCRT maintains regular contact with researchers in Texas, California, Pittsburgh and Washington, DC. Communication is principally by e-mail but also includes fax, phone and letter.

Goal #4: Maintain an ongoing history of the project to document the rationales for choices made, opportunities and constraints encountered, and the lessons learned.

Communication with the University of Pittsburgh. All documents produced by the HCRT are disseminated to the University of Pittsburgh in both Spanish and English.

Specialized Data Collection. The Guatemala HCRT Coordinator has reviewed and commented on several documents from the University of Pittsburgh dealing with information needs for documenting IEQ's ongoing history. Wherever possible, the HCRT gathers data on the process of meeting the IEQ Project goals. One example of this is the careful data collection on interactions and perceptions of participants in the recently held workshops on Phase I results. The HCRT will continue to work with the University of Pittsburgh to compile these data.

Challenges

While the major analyses of the Phase I data have been completed, the richness of the qualitative data permit specific analyses related to language use, the relationship between context and achievement, and the like. Given the limited resources, decisions must be made as to which of these analyses can be carried out considering the requirements of Phase II data collection and analysis. At present, it is envisioned that a study of language use as it related to achievement will be prepared for the USCEFA conference in Baltimore. Teachers' strikes and political instability during local elections in August have delayed the data collection slightly. Fieldwork has been extended into early October to compensate for these delays.

Six Month Goals

Goal #1: Understand how and why each country's classroom-based interventions influence pupil performance.

1. Complete Phase II data collection.

2. Complete Phase II data reduction and analysis.

3. Complete report on drop-outs.

4. Prepare draft report of Phase II results.

Goal #2: Develop a process whereby the findings from classroom research are used to improve the quality of the educational system.

1. Develop workshops for disseminating Phase II results based on the Phase I workshops with regional supervisors and teachers.

2. Incorporate the study of adaptations suggested by teachers in the Phase I workshops into the classroom research design.

Goal #3: Facilitate dialogue about the classroom environment among researchers and educators who seek to improve educational quality at local, regional, national, and international levels.

1. Participate in the USCEFA conference in Baltimore.

2. Participate in the Interamerican Psychological Association meeting in Puerto Rico.

3. Continue contacts made with U.S. and international researchers through mail, phone, fax, and e-mail.

Goal #4: Maintain an ongoing history of the project to document the rationales for choices made, opportunities and constraints encountered, and the lessons learned.

1. Collaborate with the University of Pittsburgh on documenting project history.

Guatemala Workplan for Year 4

Activities	1994			1995								
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Complete Phase II Data Collection												
Prepare Report on Workshops with Supervisors and Teachers												
Plan Phase III Research with NEU Developers												
Prepare Report on Dropouts												
Submit Proposal for IPA Conference in Puerto Rico												
Participate in USCEFA Conference												
Reduce and Analyze Phase II Data												
Train Researchers for Phase III Data Collection												
Collect Phase III Data												
Participate in CIES Conference												
Prepare Draft Phase II Report												
Plan Workshops on Phase II Results with Teachers and Supervisors												
Conduct Workshops												

Guatemala Workplan for Year 3

Activities	1995			1996								
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Collect Phase III Data												
Document Workshop Outcomes												
Reduce and Analyze Phase III Data												
Prepare Phase III Report												
Plan Workshops on Phase III Results												
Conduct Workshops on Phase III Results												
Prepare Country Case Studies												

MALI

Introduction

At the end of March 1994, IEQ goals in Mali for the following six months were regrouped under three main subdivisions: end of Phase I, transition to Phase II, and Phase II implementation. Specific activities included convening the Phase I Concluding Seminar, designing the Phase II workplan, hiring a Mali-based IEQ Coordinator, opening a Bamako office, and implementing Phase II.

This report will review issues associated with achieving the planned tasks and the specific contexts in which they were supposed to occur. Although not all of the six month goals were achieved, in the light of the IEQ Project's overall goals, many an accomplishment has taken place in Mali between March and September 1994.

Phase I activities in Mali started in the Spring of 1993. Through collaboration with two Malian educational institutions, the Institut Pédagogique National (IPN) and the Institut Supérieur de Formation et de Recherche Appliquée (ISFRA), IEQ studied the acquisition of French in the first and second years of primary school. IPN focused on what takes place in a classroom during French lessons, while ISFRA looked at extra-scholastic factors that affect a child's ability to learn and read French during the early grades of elementary school.

IEQ's role in Phase II has broadened somewhat to fit into Mali's overall education reform effort, the Ministry of Basic Education's *Nouvel Enseignement Fondamental* (NEF). Responding to developments on Mali's educational scene, the IEQ Project evolved from studying ways to improve the learning of French--both a discipline and a medium of instruction in Mali--in grades one and two to studying ways to improve language learning [see goal #2].

Goal #1: Understand how and why each country's classroom-based interventions influence pupil performance.

In April, IEQ Mali brought together local, sub-regional, regional and central educational actors, decision-makers, and partners in a national seminar to conclude the Phase I research activity and to present its research results on French language learning in primary school. There was large scale participation on the part of parents, teachers, and school principals. The discussions, based on personal experiences, focused on the child's condition, the learning environment, and teaching strategies for teachers.

For three days, participants looked at pupil performance in light of drop-out records and successes and failures on tests. Their discussions led them to tackle issues such as: school accessibility; pupils' nutritional and health conditions; cognitive, affective, and psychomotor predispositions; the quality of support inside and outside of school; the availability of materials and infrastructure conducive to learning; school, classroom and community environment; teaching methodologies; teacher training; and national education policy. Research results suggest that all of these factors influence children's performance in school.

School inspectors, parents and teachers commented that the exchange of perceptions, experience and observations brought something new to their appreciation of the complementary roles of the family, community, and school in educating the Malian child. Indeed, when the seminar closed, participants had identified and elaborated a number of pilot interventions that may improve pupils' learning of French in primary school.

The seminar provided guidelines for the Phase II design. Phase II plans included using quantitative and qualitative methods to measure and document the effects of the teacher training interventions on the academic achievement related to French language learning in the context of the child's total experience (as opposed to measuring performance on a test exclusively). This design will help capture a host of behaviors, changes, interaction patterns, achievements, attitudes, and classroom experiences.

Planning discussions for the research component of Phase II established a number of administrative and technical activities to achieve during the transition period. The workplan thus designed included plans for hiring an IEQ Mali Coordinator, opening an IEQ office in Bamako, designing teacher training and research workshops, scheduling and reviewing data collection procedures, and implementing Phase II.

The IEQ Mali team's delay in submitting the final workplan and workshop design to IIR prompted an extension of Dr. Muskin's technical assistance mission. The team initially perceived this extension as unnecessary. Ironically, after realizing the enormousness of the work that needed to be accomplished in order for the workshops to succeed, the team thanked the consultant for his help. As a matter of fact, the team took this opportunity to underscore the need for a single Bamako-based IEQ Coordinator who could ensure the smooth operation of the daily IEQ activities in Mali.

With Dr. Muskin's assistance and with practical and theoretical pedagogical assistance from Mr. Ntal-I'Mbirwa and Dr. Donato, the team put together a training package based on the new interventions identified at the seminar. Four teacher

training workshops were scheduled for Ségou, Kayes, Sikasso, and Mopti to introduce the new pedagogical and research techniques, thus launching the Phase II.

The Phase II research will have two components: language achievement and classroom culture. The *language achievement* research will compare baseline data on the language abilities of pilot school students with performance on these measures at the mid-point and the end of Phase II. Research on *classroom culture* will aim to document and analyze the context of instruction, how this context changes and improves over time, and how it compares to the classrooms studied during Phase I and to other non-intervention classes.

Goal #2: Develop a process whereby the findings from classroom research are used to improve the quality of the educational system.

The April Phase II Concluding Seminar registered a very large scale participation of parents, teachers, and school principals. Discussions were based on personal experiences and focused largely on the IEQ team's research findings. From the seminar's recommendations, IEQ Mali designed Phase II pilot interventions.

At the time of the Phase II implementation, the Ministry of Basic Education had started a nationwide reform in language learning, which calls for the valorization of maternal languages and thence the pursuit of functional bilingualism in the Malian educational system. The Ministry's main concern with regard to the reform is to integrate all educational initiatives. IEQ, after consultation with the Minister's cabinet and the NEF development team, broadened its scope from the improvement of French learning to that of language learning.

For the Mali research team, the Ministry's request for a broader focus on bilingualism fit into the overall IEQ framework. One of IEQ's guiding principles is the elaboration of a learning approach centered on the child as is. In other words, it is primeval to IEQ to build on the child's linguistic pre-acquirements in order to enhance its socio-cultural and cognitive development. As a matter of fact, the Mali research team had long before the reform envisioned a strategic role for the children's maternal languages in the learning of French. Furthermore, IEQ's suggested intervention techniques apply globally to all language learning, whether national or foreign.

The interventions focused specifically on the pedagogy of folktale and legends, the pedagogy of large groups, the manipulation of didactic materials, the strategic use of maternal languages, and the introduction of community study centers. All but the community study centers are classroom practices that exist already in the NEF's chosen teaching methodology--known as *Méthodologie Convergente*--coupled to other approaches aimed at developing the pupil's functional competence in a national or foreign language. In this perspective, the team felt there is a coherence between the

IEQ Project and other initiatives under the NEF that seek to introduce active pedagogy in language learning.

For eight days last August, 71 teachers, pedagogical advisors, inspectors and regional directors of the Ségou region met around trainers from IPN, ISFRA, the National Directorate for Functional Literacy and Applied Linguistics (DNAFLA), and the US-based IEQ team to discuss techniques of effective language learning. The HCRT facilitated workshop activities under a participatory approach that allowed trainees and trainers, including the "méthodologie convergente" consultants from IPN and DNAFLA, to contribute their input in the framing of teaching techniques.

Just like in Ségou, the teacher training sessions scheduled for Kayes, Sikasso, and Mopti in October/November will include teachers from schools that have been experimenting with the NEF's teaching methodology. Likewise, the research component will eventually include the "méthodologie convergente" schools in their pilot school samples.

Goal #3: Create opportunities for dialogue and partnerships among researchers and educators who are seeking to improve educational quality at local, regional, national, and international levels.

One of the objectives of the Phase II Concluding Seminar was to engage Mali's educational partners in a continuing and constructive dialogue on the academic and extra-academic factors that bear influence on the learning of French, which at the time was perceived as the key to any successful academic and professional bloom for Malian children.

IEQ not only accomplished a "grand premiere" in Mali by successfully involving two educational research institutions from different ministries in the same project, it further raised interest from education decision-makers. While initial reports claimed it was "unlikely that IPN and ISFRA will function as one team" [trip report #16], IEQ is looking forward to the signing of a joint agreement with the two institutions. The Mission recognizes this "harmonious and successful collaboration between IPN and ISFRA has been one of IEQ's biggest accomplishments in Mali."

The Minister of Secondary, Higher Education and Scientific Research and the Minister of Basic Education gave the opening and closing addresses of the seminar. They both stressed the congruence of the seminar's objectives with those of the government of Mali with regard to researching strategies to develop the educational system, and they promised to stay informed about IEQ's developments.

IEQ Mali intends to cultivate its nascent relationship with the NEF development team to contribute to the design of a better curriculum and in-service training that centers

on quality learning for the pupil. Members of the NEF have participated in IEQ's training sessions and in the Ségou workshops. Also, they are expected to be an integral part of the subsequent teacher training workshops in Kayes, Sikasso and Mopti.

The networking that started at the April Phase I Concluding Seminar continued during the workshop preparations in August and September. In his seminar opening address, the Minister Secondary, Higher Education and Scientific Research, Moustapha Dacko, praised the IEQ team for the institutional collaboration that has developed between IPN, ISFRA, USAID, and other institutions. In designing its Phase II workshops, IEQ Mali also responded to the wishes for decentralization within USAID/Mali and the Ministry of Basic Education. Teachers and local educational authorities are directly involved in the action research that aims to improve educational quality in Malian classrooms. The collaboration with the regional education directors has already proven itself from the important role it played in the success of the teacher training workshops at Ségou.

Goal #4: Maintain an ongoing history of the project to document the rationales for choices made, opportunities and constraints encountered, and lessons learned.

The work of the national seminar has been recorded in a final report, the *Rapport du Séminaire de Fin de la Phase I du PAQE* (see Attachment 3), which retraces the context and the accomplishments of that important gathering. Also documenting these discussions are Dr. Donato and Dr. Muskin's trip reports (see *Trip Report #26, 21 April-7 May 1994*).

As to the teacher training workshops, those of Ségou have been recorded in *Trip Report #30, 15 July-2 September 1994*, and the team has promised to submit the *Rapport des Ateliers de Ségou* as soon as it is completed. IEQ's Trip Report #30, among other things, documents the rationale of choices made during consultants' last visit to Mali, the circumstances that have delayed IEQ Mali activities for almost a month, and the IEQ Project's accomplishments.

Lessons Learned

IEQ in Mali has come a long way from the days when ISFRA and IPN agreed separately to work on the project. The relationship between IPN and ISFRA has now evolved into the collaborative pursuit of a common goal. Of course, personality clashes still break out here and there, but such occurrences appear as normal bumps on a rather harmonious journey.

The hiring of a Mali Coordinator and the opening of a Bamako office were supposed to be completed before the arrival of Dr. Donato and Mr. Alimasi who were to

conduct the training of trainers sessions. Since these were scheduled to occur concurrently with the workshops' preparation, they got jammed in the countrywide reform being conducted within the Ministry of Basic Education. Instructions from the Minister called for a freeze of IEQ activities until points of convergence between IEQ and NEF were established. The freeze included the hiring process and the organization of the first pilot teacher training workshops in Ségou. These latest developments shifted priorities from recruitment to meeting with the Minister's cabinet director and the NEF development team to ensure that the Ségou workshop took place.

Other lessons learned in Mali are in the areas of: collaborative planning and decision-making to ensure good systemic changes; decentralization and involvement of parents to ensure viability and sustainability; and flexibility in planning and implementation to ensure responsiveness to the dynamic educational process.

Six Month Goals

- IEQ Mali intends to complete in the near future the teacher training workshops in Kayes, Mopti, and Sikasso, set up the Bamako Coordinator's office, and review the data collection procedures and schedule.

- The Bamako-based Coordinator will be appointed by the Ministry of Basic Education from within the IEQ team.

- By January 1995, the Mali team will proceed with data collection on classroom interventions, and consultants will conduct site visits in order to review data collection and monitor effort to date.

- By March 1995, in conjunction with CIES conference, representatives of the Malian IEQ team will visit the University of Pittsburgh to work with Drs. Donato and Muskin on preliminary data analysis.

Mali Workplan Through March 1995

Activities		1994			1995	
	Oct	Nov	Dec	Jan	Feb	Mar
Complete training workshops in Kayes, Sikasso, and Mopti						
Appoint Coordinator and set up office						
Review data collection procedures and schedule						
Complete Phase I Concluding Seminar Video						
Complete article on Phase I participatory process and bibliography and submit Phase I research report						
Classroom Observation						
Field visit and data collection monitoring						
Participation in CIES conference and preliminary data analysis at Pittsburgh						

KNOWLEDGE BUILDING

Introduction

The subcontract with the University of Pittsburgh gives that institution special obligations for project knowledge building. The University is also responsible for producing biennial publications, a bibliography of sources related to teaching and learning interventions dealing with educational quality, and occasional papers (see *Annual Report, Vol. 1,* 1993, for details).

The main knowledge-building activities between April 1, 1994 and September 30, 1994, include:

- the continued search for an academic journal or journals to publish IEQ papers: the publication of a project paper, *Defining Educational Quality,* in *Educational Planning, 9*(3) (1994) (Attachment 4a); the revision for publication of a project paper, *Implementing Change in Educational Quality* (Attachment 4b); and the revision for publication of a project paper, *Choices in Conceptualizing Classroom-Anchored Research and Linking It to Policy/Practice to Improve Educational Quality in 'Developing' Countries* (Attachment 4c);

- revision of the plan for IEQ documentation, including the completion of a project paper, *Documentation of the Research-Policy/Practice Link in IEQ* (Attachment 4d);

- revision of a plan for cross-country research and analysis, including the completion of a discussion paper, *Cross-Country Comparisons, Documentation, and Knowledge Building in IEQ: Examining Policy-Practice-Research Cycles* (Attachment 4e); and the preparation of a plan for cross-country research and analyses, *Cross-Country Comparisons of the Policy-Practice-Research Cycles* (Attachment 4f);

- the preparation of a draft document, *Improving Educational Quality: A New Approach* (Attachment 4g);

- the revision and enlargement of a bibliography, *Selected Bibliography on Effective Schools and Educational Quality* (Attachment 4h);

- the development of a language policy document, *Rapport Technique sur la Question de Langue et le PAQE (Technical Report on the Question of Language and IEQ)* (Attachment 4i); and

- responses to various requests for information from HCRTs.

These efforts are further identified below within the context of the four major IEQ goals.

Goal #1: Understand how and why each country's classroom-based interventions influence pupil performance.

Classroom-level, research-based improvements which result in increased pupil performance are fundamental to improving educational quality in the IEQ collaborating countries. As part of its effort to support the field research, the University of Pittsburgh prepares briefs or background papers on the choice of methods in classroom-based research and on conceptualizing IEQ and its research approach. Pittsburgh identifieds, reviews and forwards relevant reference publications and exemplar research materials to the field. The University of Pittsburgh has also assisted in developing training programs for HCRTs.

Specific contributions during the period of this report include the production of two project or discussion papers and the revision and enlargement of a bibliography.

A New Approach. The University of Pittsburgh produced a draft document, *Improving Educational Quality: A New Approach,* at the request of IEQ management. This paper makes the case that a new paradigm of planning educational change is emerging which links research and analysis at the classroom and school levels to local and national educational decision-making processes. Thus, IEQ's design and implementation may be seen as pioneering efforts in furthering international educational research and planning. Hopefully, this paper, with input from the whole IEQ team, can inform the international community about the IEQ approach.

Bibliography. In relation to the University of Pittsburgh's knowledge-building task, researchers at Pitt have continually revised and updated the project's *Selected Bibliography on Effective Schools and Educational Quality.* This 800-item bibliography--containing most published English-language sources concerned with effective schools, school effects, and educational efforts to improve educational quality--has served as a resource for project monographs, papers, and draft documents.

Language Learning. Language learning has emerged as an extremely important area for inquiry and educational quality improvement in IEQ. However, fundamental questions remain concerning the comparative efficacy of foreign language instruction, transitional bilingual education, and national language instruction. Recognizing these issues, the University of Pittsburgh produced a brief document, *Rapport Technique sur la Question de Langue et le PAQE (Technical Report on the Question of Language and IEQ).*

This document discusses IEQ's approach to language learning and the role of French in functional bilingualism in the Malian context.

Goal #2: Develop a process whereby the findings from classroom research are used to improve the quality of the educational system.

The accomplishment of Goal #2 requires the translation of research knowledge into classroom practice and assumes knowledge of individual, organizational, and environmental conditions necessary to foster such change. In support of Goal #2, the University of Pittsburgh prepared two papers on the design for cross-country research.

Cross-Country Comparisons. The IEQ Project operates in three different countries with very different educational conditions, but in each of the countries, IEQ's over-arching goal is to improve educational quality. As such, IEQ provides significant opportunities for comparative analysis. Although many of the cross-country comparisons will await information acquired at the latter stages of the project, some comparative research can be attempted within the next few months. In order to realize later comparative studies, Pittsburgh produced a discussion paper concerned with cross-country comparisons, *Cross-Country Comparisons, Documentation, and Knowledge Building in IEQ: Examining Policy-Practice-Research Cycles.* This paper suggested that cross-country comparison, documentation, and knowledge building are interrelated and, therefore, should be combined and integrated. The discussion paper further proposed that the policy-practice-research cycle should serve as the unit of analysis for cross-country comparisons. Continuing in these explorations, the University of Pittsburgh also produced a plan for cross-country comparisons within IEQ, *Cross-Country Comparisons of the Policy-Practice-Research Cycles.* This paper suggested that each IEQ country site will have at least two policy-practice-research cycles which can be compared across time within a given country as well as across countries. Finally, this paper proposed a number of sample research questions related to the policy-practice-research cycle.

Goal #3: Facilitate dialogue about the classroom environment among researchers and educators who seek to improve educational quality at local, regional, national, and international levels.

Specific knowledge-building activities during the period of this report include the search for publication sources for IEQ papers.

Search for Publication Sources. The University of Pittsburgh continued exploring several publication sources for knowledge developed by IEQ in order to further distribute information on the project's development, processes, and results. Pittsburgh has communicated with the editor of the *Forum* and has forwarded a

request to the editors of the *International Journal of Educational Research* (*IJER*) for a special 1996 issue for analyzing the results and influence of IEQ research and experience. The *IJER* editors expressed interest but asked for more a more detailed description of the research underway.

Pittsburgh submitted for publication a revised, condensed version of *Choices in Conceptualizing Classroom-Anchored Research and Linking it to Policy/Practice to Improve Educational Quality in 'Developing' Countries*, which focusses on different approaches for framing research questions and related strategies for linking research to policy/practice, to the *International Journal of Educational Development* (*IJED*). IEQ is currently waiting for a response from *IJED* to this submission.

Two project papers, *Defining Educational Quality* and *Implementing Change in Educational Quality*, have been submitted to the journal *Educational Planning*. *Defining Educational Quality* was published in *Vol. 9*(3), 1994; the second paper is under review.

Goal #4: Maintain an ongoing history of the project to document the rationales for choices made, opportunities and constraints encountered, and lessons learned.

Documentation, that is, the recording of project experience and the systematic monitoring of project development, remains a major challenge. Activities during years one and two included preparation for discussion of a draft outline of project documentation. Additionally, the University of Pittsburgh participated in the development of a standardized format for trip reports.

Documentation Plan. As the project grows and expands, project documentation grows more challenging. Following a draft outline of guiding questions and purposes for documentation activities and in-depth interviews/discussions with the HCRT in March, the University of Pittsburgh produced a discussion paper concerned with documenting the research-policy-practice link in IEQ, *Documentation of the Research-Policy/Practice Link in IEQ*. This paper proposed a new position on the notion of the linkages between research and practice. Rather than focusing strictly on how research findings are disseminated and how they inform the policy and practice, this paper suggested that we also consider how the policy and practice concerns of individuals and groups shape educational research.

Knowledge Building Workplan for Year 4

Activities	1994			1995								
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Initiate cross-country study: Research into practice												
Feedback on *IEQ: A New Approach*												
Review trip reports regarding documentation quality and cross-country research												
Rewrite of *IEQ: A New Approach*												
Review of status of project documentation												
Conference preparation and presentation, CIES												
Continue interaction with field on information needs												
Review knowledge building plan, develop prospectus for project products (Country Studies)												
Continue building comprehensive bibliography on Improving Educational Quality												
Prepare knowledge building for annual report, final report												
Explore commercial publication for IEQ papers												
Revised *Classroom Anchored Research...* paper under review for publication												
Respond to literature review requests												

Knowledge Building Workplan for Year 5

Activities	1995			1996								
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Prepare cross country comparisons of policy-practice-research cycles												
Prepare policy oriented report												
Workshops in Ghana, Guatemala and Mali on sustaining the classroom research-practice nexus												
Prepare strategy for publication of research results												
Conference preparations, presentations (i.e., CIES)												
Prepare knowledge building for final report												
Prepare prospectus for cross-country monograph												
Finalize comprehensive bibliography on Improving Educational Quality												
Explore commercial publication for IEQ products												

REQUIREMENTS CONTRACT

DELIVERY ORDER 1: AFRICA BUREAU

The following activities have been undertaken under the IEQ Requirements Contract Delivery Order 1:

Activity #1: A Database of Process Indicators

The purpose of this activity is to develop of a database of process indicators on USAID Africa Bureau countries that have basic education programs (to be referred to as AFR/ED countries). This database will be used to monitor program performance and progress in producing desired reforms through policies, programs or projects operated within AFR/ED countries, with special emphasis on efficiency, effectiveness, equity and sustainability.

1. As a part of a presentation on basic education programs in Africa at USAID, the buy-in team worked with USAID Missions to prepare updated profiles on the status of each of the country education programs with the help of the existing database. The update of the database and profiles will be carried out on an annual basis for the life of the project.

2. These profiles feed into the completion of a major analytical overview: ***Basic Education in Africa: USAID's Approach to Sustainable Reform in the 1990s.*** Work on that report has been a major activity over this reporting period, and it is now expected to be completed by November 1994. This report culminates in a comprehensive overview of USAID's use of non-project assistance (NPA) as a primary modality to foster policy dialogue and sustainable reform.

Activity #2: Indicators of Quality, Equity, Efficiency & Sustainability

The purpose of this activity is to develop and test new school-level indicators to be used for monitoring the performance, quality, and equity of basic education systems in Sub-Saharan Africa.

1. The definition and write up of the School Fundamental Quality Indicator (SFQI) system, which is being pioneered in Benin, was completed during a field visit in August. That work defines the outline for a technical module being developed as a part of the Donors to African Education (DAE) Working Group in Education Statistics (WGES), project: Improving National Education

Statistical Systems. With the support of Ash Hartwell and Gretchen Hummon, a presentation of the SFQI concept and an outline of the module will be presented by a team from Benin to the WGES on November 22-23 in Paris. Based on the feedback from that presentation, the buy-in team will work with the Beninese to develop the full module. The SFQI work has been defined as an Analytic Activity within the new SD/HRD strategic framework.

2. Planning activities have continued in preparation for a regional consultative meeting on new approaches to Pupil Assessment and instructional systems, to be held in Mombasa from 5-9 December. Preparations for this activity, which is managed through a Task Order with the SARA Project, include country visits, preparation of work plans, and consultations with regional African institutions (ERNWACA, ERNESA, DAE Working Groups).

3. As a part of the preparation for the Ethiopia basic education project design, Diane VanBelle-Prouty and Gretchen Hummon worked with Ethiopian counterparts to carry out a study on teacher motivation and incentives during June, July and August and prepared a report that was utilized in the design. Although this study examines the need for more traditional incentive and motivation structures, it explores ways to introduce mechanisms that foster professional networks and school-based inputs that focus on instructional support systems and staff development. This study is the first of a comparative series that will examine how these kinds of inputs can be implemented in other countries.

4. Gretchen Hummon provided computer expertise in the presentation of data on girls' and rural children's demand for basis education in Ethiopia. Data collected from the three month study was displayed in graphic form for both the final report and presentation of the study given at USAID/W.

5. Ash Hartwell and Gretchen Hummon completed the design of a prototype presentation of the DAE data-set on education statistics and finances for African education during the 1980s. They completed negotiations for a contract with a computer programmer from Potomac Interactive Corporation to develop a software application which will be presented to the DAE in November for technical feedback. The program provides user-friendly interaction with the basic data, indicators and graphic presentations for countries and categories of countries.

6. Diane and Gretchen continue their support to the participants of the Swaziland workshop on qualitative research methodologies with a review of research proposals and assistance in initial data collection procedures and data analysis. Support in this activity is being provided collaboratively with the World Bank.

Activity #3: Follow-up Field Studies of Selected Programs

The purpose of this activity will be to select five specific objectives of USAID basic education programs for more in-depth study of the relationship between design, implementation, and impact. Three studies, described as the "equity study", the "effective schools study", and the "financial sustainability study", have been identified as potential avenues for analysis.

1. A major activity over this reporting period has been to finalize the strategic framework and analytic agenda for SD/HRD for the 1994-96 period. This work has been completed, and has now been sent out to all African Missions with education programs, and circulated within the Agency (Africa Bureau, Global Bureau, Bureau for Policy and Program Coordination). This document provides the framework and description of our analytic activities.

2. One analytic activity that has come to completion, and is now entering a second stage, is the analysis of the educational policy formation process in Africa. The study, ***Education Policy Formation in Africa: A Comparative Study of Five Countries,*** was completed in August. The buy-in team organized a half day meeting based on the study, taking advantage of the presence of the DAE's Executive Secretary. A follow-on activity for further case studies and analytical work in this area will be carried out in collaboration with DAE, as a part of SD/HRD's analytic agenda.

3. Joy Wolf has completed data collection and preliminary data analysis for the Equity Study, which consists of two case studies analyzing USAID's efforts to establish equity components in their education programs in Ghana and Malawi. The first draft is completed and a final draft is expected by the end of November. A third case study, which examines Namibia's experience, is presented as a stand alone study and provides an institutional analysis and chronology to the program development and reform process that occurred there. It is hoped that the equity study will be expanded to include the analysis of the reform dialogue and implementation of the reform process in other USAID education programs in Africa.

Activity #4: To establish links to other donor agencies, academic and research institutions in both Africa and the U.S.

The purpose of this activity is to target individuals/ institutions that influence both educational policy and initiatives in Africa and disseminate information that will inform the process of policy dialogue and program development.

1. The buy-in team participated in the preparation of a State of the Arts presentation for the Africa Bureau, DP, R&D and USAID administration outlining Africa's education programs. This provided a forum to discuss the use of NPA as a modality of investment. It also provided a mechanism to underscore the importance of investments in basic education.

2. Support to the DAE continues at both the Secretariat and working group level. Specific activities that have taken place include on-going collaboration with UNESCO on educational statistics and with UNICEF/Ghana on a donor's roundtable and teacher motivation study. The teacher motivation study will be presented at a Management of the Teaching Profession DAE working group to be held in Ghana in March 1995 as a prototype of a study format using both more traditional quantitative methodologies in addition to qualitative approaches. The buy-in team will provide continued support for both qualitative data collection and analysis in this study.

3. Diane attended the first in a series of meetings with the International Labor Organization (ILO) to explore possible collaboration in support of Teacher Management and Professional issues in Africa. A follow-up meeting is scheduled for the first part of the year. Collaboration in this area focusses not only on how teacher professional issues can be addressed but additionally how to improve statistical reporting about teachers that corresponds to the international classification of labor organizations.

Upcoming Events

1. The buy-in team will present the newly developed analytical agenda for the next fiscal year to the board for approval and will begin working on the outlined activities approved by the board.

2. Work on a follow-up conference to the workshop on Basic Education programs will begin.

3. The buy-in team will develop and put into action dissemination plans for the Curriculum study, Equity study and Policy Case studies.

4. The buy-in team will host a two-day workshop on policy dialogue and will outline follow-up activities to the policy case studies.

5. Follow-up support to the Ghana DAE teacher management study will be provided; the buy-in team will present the completed study in late spring.

6. A fully-functional prototype of a user-friendly computer program presenting African educational statistics will be completed, presented to the DAE, and modified based upon recommendations from the donors involved.

DELIVERY ORDER 2: SOUTH AFRICA

Introduction

The Improving Educational Quality Project/South Africa contract was signed in October 1993 and is now entering its second phase. In Phase I, the project served grantees drawn from the South African Basic Education Reconstruction (SABER) Project. The grantees' aim is to improve the quality of education for disadvantaged South Africans through the development and implementation of innovative training and models, plus the development of policies leading to a unified education system. In this period, the number of grantees participating in IEQ grew from the eleven original grantees to fifteen. In Phase II, thirteen grantees from the Education Support and Training (ESAT) Project have joined this list.

The general objective of the IEQ Project is to conduct impact evaluations of the grantees' products and services and to strengthen their personnel and systems' capacities in monitoring and assessment. All the work which the project undertakes relates both directly and indirectly to the above objectives and thus covers ongoing work as well as specific tasks:

Work of an Ongoing Nature

Short Term Technical Assistance. In providing short term technical assistance and support to grantees, the IEQ South Africa Project: reviews, assesses and provides guidance on the development of grantee monitoring systems; guides the ongoing and proposed evaluation studies of the individual grantees; assists in identifying and designing grantee research programs on educational quality concerns such as improving learning gains, enhancing teaching skills, assessing principal management training, and so on; and facilitates the development of linkages between the different evaluation, monitoring and research activities of grantees.

IEQ assistance may take the form of: direct involvement in the grantee evaluation; participation in a reference group which guides an evaluation or research study; identification of appropriate material and consultant resources; or occasional review of evaluation or research documents in which IEQ staff provide written and/or oral feedback.

IEQ Project Publication Series. The IEQ Publication series intends to publish studies conducted by IEQ staff and the SABER grantees which are of broader interest to both the grantee community and the greater educational research community.

The objectives of the series are to: highlight interesting applications of research methods and procedures; share novel findings in evaluation and research; create dialogues within and outside of the grantee community around important issues emerging from current education studies in South Africa; and offer stimulating research ideas which organizations could apply to policy, planning or further research. The publications will focus on very specific issues, be completed within a short time frame and receive widespread dissemination within South Africa and the IEQ network. Many of the publications will stem directly from the research agenda of the IEQ Project.

Sources for ideas will be grantees, findings emerging from review of evaluation data and site visits, advisory task forces etc.

Maintenance of the IEQ Resource Library. The IEQ Resource Library was established in Phase I. The purpose was to collect and organize the latest research and publications, national and international, on education quality/effective schools in a resource room. In Phase II, this process will be continued.

The product will be a selection of resources which will be accessed primarily by and for the grantees.

Specific Tasks

An example of this is the impact assessment studies. These contribute to the ongoing work the project is involved in by providing instances where short term technical assistance is appropriate, but the objective here is more clearly defined and follows a logical process of development. The process would include the following:

- Initial introductory site visits to introduce the IEQ Project, establishing ties between the two organizations, determining organizational needs, and collecting information about the grantee's project monitoring and assessment system.

- Using the gathered information to establish the grantees' training and technical assistance needs as well as determining the manner of continuing interaction between the two organizations.

- Attendance by grantee staff at IEQ training courses on educational evaluation and research on areas where grantee staff have identified a lack of knowledge.

- Participation by grantee staff in an IEQ Study Tour to the US.

- Designing the impact assessment studies.

- Implementing the impact assessment studies.

In South Africa, the IEQ Project has the following four specific goals:

- Goal #1: Conduct impact assessments of SABER grantees' products and services that influence instruction and learning at the school and classroom levels.

- Goal #2: Strengthen SABER grantees' capacity to establish and maintain monitoring and evaluation systems for individual projects.

- Goal #3: Strengthen SABER grantee staff expertise in educational research and evaluation methodology.

- Goal #4: Facilitate professional linkages between SABER grantees and the educational research and development community outside of South Africa.

Each of the tasks IEQ undertakes attempts to give credence to these four goals and provides a means for continuing interaction between IEQ and the grantees. With the inclusion of the ESAT grantees into the IEQ portfolio (albeit on different levels of interaction), a few of the tasks which have already been undertaken in Phase I will now be undertaken with the new grantees in Phase II.

Goal #1: Conduct impact assessments of SABER grantees' products and services that influence instruction and learning at the school and classroom levels.

IEQ undertook visits to all grantees to assess the status of each organization's evaluation, research and monitoring systems, and the IEQ staff began reviewing, assessing and summarizing the data collected.

IEQ also provided technical assistance in designing and conducting impact assessment studies of particular programs within each organization. The grantee organizations who were primarily involved in this were drawn from organizations working in the pre-school (educare) sector. A US-based consultant, Dr. Pat Campbell, together with IEQ staff, was involved in the initial design of the impact assessments. On a study tour to the US in September 1994, grantee representatives worked with IIR consultants to finalize these designs. These designs were put into effect on the participant's return to the South Africa.

In specific programs, staff were involved in the following:

- An evaluation of the Handsprings Trust for Puppetry in Education/Primary Science Programme collaboration. Handsprings is a program which

implements science education through comic strips, videos and support materials in primary school classrooms in collaboration with PSP and TOPS.

- An evaluation of the maths Centre for Primary Teachers student centered curriculum in Soweto primary schools.

- An evaluation of ELTIC's innovative multi-lingual curriculum in Soweto primary schools.

- An evaluation of ITEC's Lower Primary Project, a competency based in-service teacher education program, where IEQ assisted in the design and development of instrumentation for the evaluation of the INSET Programme.

Goal #2: Strengthen SABER grantees' capacity to establish and maintain monitoring and evaluation systems for individual projects.

IEQ commissioned a study by OLSET to assess the status of management information systems in each grantee organization. This report is being reviewed to determine specific ways in which the IEQ Project could support grantees in meeting the physical infrastructure and staffing requirements to maintain, manage, and assess records of performance and communicate with grantees and education interest groups within and outside of South Africa.

IEQ staff visited grantees to provide on-site support on how to build on and improve existing information systems available in their organization.

Goal #3: Strengthen SABER grantee staff expertise in educational research and evaluation methodology.

IEQ staff have designed and implemented several activities to strengthen grantee staff expertise in research and evaluation.

In June 1994, the project held a workshop on the design and implementation of program monitoring systems with a US-based consultant, Dr. Pat Campbell. Representatives from several grantee organizations attended the workshop and also expressed their needs for developing data analysis skills. This has led IEQ to plan a series of workshops during Phase II to cover different aspects of skills required for data evaluation and analysis.

As part of this effort, the IEQ staff has identified, compiled, and distributed training opportunities for grantee staff. The IEQ staff maintains a resource file which lists all available training and evaluation opportunities and regularly disseminates information about conferences, seminars and workshops.

The IEQ staff has led the involvement of grantee staff in grantee evaluation studies to ensure a transfer of skills. IEQ has also supported grantee staff to evaluations conducted among other grantees to provide hands on training and development.

Goal #4: Facilitate professional linkages between SABER grantees and the educational research and development community outside of South Africa.

The IEQ Project has undertaken the following to develop linkages between grantees and other organizations.

- Establishment of the IEQ resource library housing current international research and evaluation studies. Information is disseminated to grantees on a regular basis, which links them to research developments in the international community.

- Response to grantee requests for linkages to international research organizations (UCLA, CSE, NCRE, CRESST, IIEP).

- "Effective Schools, Effective Classrooms Conference" to expose grantee staff to current national and international trends in education quality research.

- Attendance of IEQ staff at conferences and seminars to represent IEQ and to obtain information of value to the SABER grantees.

- Organization of a study tour comprising Educare grantees and IEQ staff to the US in September 1994. The participants met with people in the evaluation and monitoring field, attended the CRESST conference at UCLA, and worked on the design of the impact assessment studies.

Upcoming Activities

Introductory Visits to New Grantees

With the introduction of the new grantees to the project, the staff will begin a series of introductory visits to each organization. The purpose of the site visits is to gather comprehensive information about each of the ESAT grantee's project monitoring and assessment system. These site visits have already been undertaken with the initial group of SABER grantees in February 1994.

Possible uses of the information include:

- future training in evaluation and monitoring

- identification of technical assistance needs, information useful in designing the impact assessments
- identification of potential usefulness of existing grantee data that is independent of the impact assessment activity

The Second Annual IEQ Conference

The first Annual IEQ Conference was held in Cape Town in November 1993 and served to introduce the participating grantees to each other, to USAID officials, to IIR personnel, and to the aims and objectives of the IEQ Project in South Africa. In the intervening period, the IEQ project has increased the number of grantees which it serves by introducing the ESAT grantees to its portfolio. The aim of the second conference therefore is to introduce the extended group of grantees to each other and to IEQ. It will attempt also to reflect on activities over the past year, the impact of the programs, and the project's future plans.

Implementation of Impact Assessment Studies (Phase II)

This second study will involve the design of impact assessments for both the new group of grantees (ESAT) as well as those grantees who were not involved in the initial study. The intention is that this group would be involved in the Second IEQ Study Tour to the US in September 1995, where they would finalize the design and implement this on their return to South Africa (Phase III).

The purpose of this study is to design and implement comprehensive assessments of the impact of NGO programs in the classroom. This activity will prove useful for the grantees in that it will provide: information useful for planning and implementing replications; practice in developing/revising training programs; knowledge upon which to consider ivestment options (policy level); and marketing tools which could influence communities and the government. USAID will gain useful information about the evidence of effectiveness in basic education and information for planning future programs.

Evaluation Training Workshops 3-4

The first evaluation and training workshop was held in June 1994 for the first group of grantees. The course focused on the design, implementation and maintenance of a program monitoring system. The course identified several areas in which grantees felt the need for more training. Subsequent workshops are planned to supply this training and training in other areas that would benefit the grantees.

IEQ intends to hold a similar workshop for the new set of grantees in February 1994; the group will then progress together to stages 2, 3 and 4.

Research Agenda

IEQ's research agenda has the following aims: to examine, analyze or assess, through a systematic research program, a current problem or issue of value to educational practitioners, planners and policy makers within and outside of the SABER grantee community. The results of theses studies will be published as part of the IEQ Publication Series. IEQ will address the following topics:

The Profile of Six Year Olds. This research study will develop methods to determine the profiles of six year olds to provide baseline data for longitudinal research on pupil performance. The study will attempt to provide a picture of the average South African six year old.

The study will begin in February 1995 and will involve the services of IEQ staff, and a South African consultant and a US based consultant.

The Transition Study. This study will look at the child's transition from pre-school to government schools by examining children's characteristics and status as they relate to Educare experience--what happens to these children (socially, cognitively, etc.) in lower primary school; for example, the factors explaining success and failure in the early grades in relation to pre-primary training.

Potential usefulness of research findings include: providing some understanding of the social, psychological and cognitive transferability of Educare to the formal school system; using the evidence to consider application of Educare strategies in primary school curriculum; suggesting topics for teacher training in both pre-primary and primary school education; providing information for policy makers for planning investment choices; and evidence to affirm work of educare.

It is envisaged that the study would begin in March 1995 and would involve IEQ Staff members, an independent South African consultant and a US based consultant.

The Study of Exemplary Schools. (Tentative). This study will examine the qualities of successful schools in the South African context. It will involve undertaking a short term, small scale study outside the SABER grantee school (in resource poor environments not engaged in "targeted, innovative" activities that attempts to operationalize "quality"). Are classroom practices being implemented? Where did they come from? The study will focus on specific behaviors that the staff and pupils believe is making a difference in the quality of eduction being delivered/received.

The study is envisaged to begin in May 1995 and would involve the interaction of IEQ staff members as well as an independent South African consultant.

Conferences

The Ghana/CRIQPEG Conference. One IEQ staff member and 2 grantees will attend the Third Annual Conference on Improving Quality of Primary Education in Ghana in October 1994. The purpose of attending this conference is to initiate and sustain a dialogue between South Africans and Ghanaians on the assessment of second language learning and materials a tool for improving the quality of education in developing countries. This conference will also allow the IEQ staff to develop links with the IEQ staff in Ghana.

The USCEFA Conference in Baltimore, Maryland. Plans are underway for one IEQ staff member and 5 grantee representatives to attend the United States Coalition for Education for All Conference in Baltimore in December 1994. This conference will enable South Africa's educational leaders to meet and begin a dialogue with educators from all around the world to explore the expanding parameters of systemic education reform. The conference will also give South African educators an opportunity to present their experiences in the field of education in South Africa to an international audience. Finally, the South Africans can participate in the conference's goal of promoting critical partnerships, coordination, and synergy in creating effective educational systems.

The Pan African Colloquium on Education, Cape Town. The Pan African Colloquium on Educational Innovation in Post-colonial Africa, is being held at the University of Cape Town from 12-15 December 1994. Its objective is to enable African educators and other social scientists to develop a coherent and independent non-government position on education policy formulation and implementation in African countries.

The CIES Conference in Boston, Massachusetts. IEQ South Africa will send a delegation to the March 1995 CIES Conference in Boston. This conference will allow South African participants to meet and begin a dialogue with educators from all around the world; allow them to present their research and evaluation studies to an international audience of comparative educators; and expose them to comparative and international research trends and developments including theoretical and methodological advances in the field.

The AERA Conference. (Tentative). Participation in the AERA Conference will: provide opportunities for grantee staff to present their advanced research and evaluation studies to colleagues from the US and elsewhere; enable South African educational leaders to meet and begin a dialogue with educators from all around the world; and expose grantee staff to recent findings in program evaluation and classroom based research.

South Africa Workplan for Year 4

Activities	1994			1995								
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Develop implementation plan for Phase II												
Introductory site visits to ESAT grantees												
Implementation of Impact Assessment Studies												
Attendance at USCEFA Conference												
Second Annual IEQ Conference												
First Evaluation Training Workshop												
Second Evaluation Training Workshop												
Begin study on Profile of Six Year Olds												
Attendance at CIES Conference												
Attendance at AERA Conference												
Begin Transition Study												
Third Evaluation Training Workshop												
Begin Design of Impact Assessment Studies, Group 2												
Begin Study of Exemplary Schools												
Fourth Evaluation Training Workshop												
Second Annual IEQ Study Tour												
Fourth Evaluation Training Workshop												

Attachment 1*a*

Sample Pupil Performance Tests

CENTRE FOR RESEARCH ON IMPROVING QUALITY OF PRIMARY EDUCATION IN GHANA
University of Cape Coast
Cape Coast, Ghana

PUPIL PERFORMANCE ASSESSMENT
Administration Manual[1]

LEVEL 5

IMPROVING EDUCATIONAL QUALITY PROJECT
Insitute for International Research[2]

---

[1] This manual was prepared by Abigail Harris, Graduate School of Education, Fordham University, 113 W. 60th Street, New York, NY 10023 USA.

[2]The Improving Educational Quality Project (IEQ) is funded by the Office of Education, Bureau for Research and Development, United States Agency for International Development (USAID) under Contract No. DPE-5836-C-00-1042-00.

CENTRE FOR RESEARCH ON IMPROVING QUALITY OF PRIMARY EDUCATION IN GHANA

PUPIL PERFORMANCE ASSESSMENT
Administration Manual

LEVEL 5

Page

Preparing to test..... 1

Oral Language Tasks..... 4
- Materials Needed.....
- Directions for Administering.....
- Directions for Scoring.....
- Directions for Recording the child's scores.....

Writing Tasks..... 5-7
- Materials Needed.....5
- Directions for Administering.....5
- Directions for Scoring.....6
- Directions for Recording the child's scores.....7

Reading Tasks..... 8-16

Concepts About Print
- Materials Needed.....8
- Directions for Administering.....8
- Directions for Scoring.....9
- Directions for Recording the child's scores.....9

Letter Names/Sounds
- Materials Needed.....10
- Directions for Administering.....10
- Directions for Scoring.....10
- Directions for Recording the child's scores.....10

Most Used Words
- Materials Needed.....11
- Directions for Administering.....11-12
- Directions for Scoring.....11-12
- Directions for Recording the child's scores.....11-12

Reading Passages
- Materials Needed.....13
- Directions for Administering.....13
- Directions for Scoring.....14
- Directions for Recording the child's scores.....16

Storing of Data..... 17

Forms
- Pupil Performance Class Summary Sheet
- Concepts About Print Data Record Sheet
- Letters/Sounds Data Record Sheet (Parts I & II)
- Most Used Words Data Record Sheet (Parts I & II)
- Reading Passages-Individual Record Forms

Preparing to Test

Before leaving Cape Coast: Be sure you have an administration manual for each level, sufficient assessment forms for recording data, a stapler with extra staples, extra pencils, clipboards, timers, and sufficient P2-P5 English textbooks (note that P5 assessment uses 1 passage each from P2-P5 texts; P4 uses P2-P4 texts, P3 uses P2-P3 texts; how many extra texts you will need depends on how many team members are testing individual pupils at any one time). Also, if you are uncertain about the availability of a desk or table that can be used for testing, you may wish to take along some materials that can be used to construct a writing surface. A list of materials needed is provided on the next page.

Teacher: Explain to the teacher that you are investigating how children learn English. Children learn at different rates and you are trying to determine the range of skill levels in P2-P5 classrooms. To do this you will be working with each child individually. You will be assessing oral and written English skills. Ask the teacher to tell the pupils that their help is needed to help researchers and teachers learn more about how children learn. Ask the teachers to reassure the children about the testing.

Obtain from the teacher a list of the names of children in the class. If there are children with the same name, be sure you have a strategy for distinguishing between them (for example, you could collect birthdates, parent names, or some other unique background info on all children).

Copy the list of children's names on the Pupil Performance Class Summary Sheet, the Concepts About Print Data Record Sheet, the Letters/Sounds Data Record Sheet (Parts I and II), and the Most Used Words Data Record Sheet (Parts I and II). Be sure that child #1 on the Pupil Performance Class Summary Sheet is also child #1 on each of the data record forms; child #2 on the Pupil Performance Class Summary Sheet is always child #2 on each of the data record forms, and so on. The children do not need to be tested in this order but listing the children on all forms in the same order is critical. Also, be very careful to use the same, full name on each form.

Testing Location: Identify a quiet location that has enough light and few distractions. Set up the situation so that the child is facing away from visual distractions.

Child: Escort the child out of the classroom. Thank the child for helping you. Use strategies for establishing rapport with the child.

List of Materials for Each School

(Assumes class size of approximately 30)

_____ 1 Level 2 Administration Manual
_____ 1 Level 3 Administration Manual
_____ 1 Level 4 Administration Manual
_____ 1 Level 5 Administration Manual
_____ 8 Pupil Performance Class Summary Sheets (2 per class)
_____ 8 Concepts About Print Data Record Sheets (2 per class)
_____ 12 Letters/Sounds Data Record Sheets-Part I (3 per class)
_____ 12 Letters/Sounds Data Record Sheets-Part II (3 per class)
_____ 4 Letters Lists for use with Letters/Sounds Task
_____ 6 Most Used Words Data Record Sheets for Each Level (P2-P5)(3 per level for Part I-Reading and 3 per level for Part II-Aided Reading)
_____ 1 Most Used Words List for Each Level
_____ 120 copies of P2 Reading Passage Individual Record Sheet
_____ 90 copies of P3 Reading Passage Individual Record Sheet
_____ 60 copies of P4 Reading Passage Individual Record Sheet
_____ 30 copies of P5 Reading Passage Individual Record Sheet
_____ 4 copies of P2 English Pupil's Book
_____ 3 copies of P3 English Pupil's Book
_____ 2 copies of P4 English Pupil's Book
_____ 1 copy of P5 English Pupil's Book
_____ ? Oral Language Data Record Sheets

_____ lined paper (at least one sheet per pupil)
_____ extra pencils
_____ timers
_____ clipboards
_____ staples
_____ stapler
_____ writing surface
_____ Straight edge for helping the child to focus on one line (e.g., this could be a rectagular piece of plain cardboard or heavy paper)

Oral Language

[insert directions for oral language task(s)]

Materials Needed:

Directions for Administering:

Directions for Scoring:

Directions for Recording the child's scores:

Writing

Materials Needed:
*pencil
*lined paper
*writing surface
*administration directions
*timer
*Pupil Performance Class Summary Sheet

Directions for Administering:
Provide the child with a piece of lined paper. Use a writing surface that is as good or better than the child uses during class.

Say to the child:

I want to see how many English words you can write. Can you write your name?

If the child doesn't understand the request, it may be repeated in the mother tongue. [start the timer as soon as the child begins writing]

NO=>If the child responds "no," ask the child if he/she knows any single letters or two letter words:

Do you know how to write is? to? I? a? Write any words you know.

NO=>If the child still says "no," print the first letter in the child's name on the paper and tell the child to copy the letter:

Look at this letter. Please copy this letter.

If the child is able to do this, print all of the child's name and ask the child to copy it:

Look at this word. Please copy this word?

If the child can copy his/her name, provide another simple word to copy (e.g., "is") and ask the child to tell you what it says. If the child responds correctly, repeat the request for the child to write (independently) other words. [If the child is able to write words after the copying exercise, assume that the child didn't understand the original request and count the number of words correctly written.]

YES=>If the child says "yes," say:

Write your name for me.

When the child finishes say:

Good. Now think of all the words you know how to write and write them all down for me.

When the child stops writing, or when he/she needs prompting, suggest words that she/he might know how to write:

Do you know how to write I or a? Do you know how to write is or to?

Use words that the child would have encountered in the text and prompt with questions such as the following:

Do you know how to write any children's names? **Can you write the names of people in your family?** **Do you know how to write things you do?** **Do you know how to write the names of any animals?** **Do you know how to write things to eat?** **Do you know...**

Continue for ten minutes or until the child's writing vocabulary is exhausted.

When the child is finished, say:

Now please read the words you have written to me.

Use this process to be sure you can read what the child has written. If you are unsure of a spelling, ask the child to tell you what has been written.

Directions for Scoring Writing

Each word completed accurately is marked as correct. If the child accidently writes a word that is correct but reads it as another word or does not know what it is, that word is scored as an error. Words written in mirror image are scored as correct only if the child actually wrote them in the correct sequence. Groups of words such as look, looks, looked, looking, hat, hats, etc. are allowed as separate words. Repeated words are only counted once. Misspelled words are not counted. Words with reversals (letters written backwards are counted if the child reads the word correctly). Words that run together on the page are scored as correct if the child is able to read them correctly. The child's score for this task is the total number of correctly written words (including the child's name).

Directions for Recording the child's scores:

Three levels of writing are scored. Scores are recorded on the Pupil Performance Class Summary Sheet. Find the child's name and identifying information on this form.

If the child is able to write words, count up the number of correctly written words and write this number in the **Writing Words** column. Be sure to count the child's.

If the child can write his/her name, put a "+" in the **Name** column, and put a "+" in the **Copy Letters** column.

If the child is unable to write his/her name (without help), but can copy at least one legible letter, put a "0" in the **Writing Words** column, a "0" in the **Name** column, and a "+" in the **Copy Letters** column.

If the child is unable to write his/her name or to copy any letters legibly, put a "0" in all three writing columns.

Reading: Concepts About Print

(adapted from: Clay, Marie M. (1985). The early detection of reading difficulties (3rd ed.) (pp 28-29). Portsmouth, NH: Heinemann Publishers.

Materials Needed:
*P5 English Pupil's Book
*Concepts About Print Data Record Sheet
*Pupil Performance Class Summary Sheet
*pencil

Directions for Administering:

Say:

We are going to read a story. I want you to help me.

Pass the book to the child holding the book vertically by outside edge, spine towards the child.

ITEM 1: Say:

Show me the front of the book.

Score: 1 point for the correct response.

ITEM 2: Point to the first story (page 5) and Say:

I will read this story about Mr Frog and the birds. You help me. Show me where to start reading. Where do I begin to read?

Score: 1 point for print, 0 for picture

ITEM 3: Say:

Show me where to start.

Score: 1 point for pointing to the top left (pointing at "Unit" "Mr Frog" or "Many years ago" are all scored as correct)

ITEM 4: Say:

Which way do I go?

Score: 1 point for pointing or saying left to right

ITEM 5: Say:

Where do I go after that?

Score: 1 point for return sweep to left.
(Score items 3-5 as correct if all movements are demonstrated in one response.)

ITEM 6: Say:

Point to it while I read. (Read slowly but fluently; stop reading on page 7 after you say **Mr and Mrs Sparrow did not see their friend again. Poor Mr Frog.**)

Score: 1 point for exact matching for most of the story

ITEM 7: Say:

Show me the first part of the story.
Show me the last part of the story.

Score: 1 point if BOTH are correct in any sense, i.e., applied to the whole text or a line, a word or a letter.

ITEM 8: Say:

Where do I look to find out what page I am on?
Turn to page 9.

Score: 1 point if BOTH are correct, i.e., the child points to the page number or says the actual page number <u>and</u> the child is able to turn to page 9.

ITEM 9: Be sure the book is opened to page 9. Say:

How do I know what Unit I am on? What Unit is this?
Turn to the next Unit. Turn to Unit 3.

Score 1 point if BOTH the child is able to point to the word Unit or the child says "2" <u>and</u> the child is able to turn to Unit 3.

ITEM 10: Say:

Show me one letter and tell me its name.
Show me one word and tell me what word it is.

Score 1 point if the child is able to identify and name BOTH a letter and a word.

<u>Directions for Scoring</u>: Each of the 10 items is scored 1 point if the child responds correctly and 0 if the child does not respond correctly.

<u>Directions for Recording the child's scores</u>: Find the child's name and identifying information on the Concepts About Print Data Record Sheet. Record either a 1 or 0 for each of the 10 items as the items are administered. Count up the total number of points (0-10) and record this number on the Pupil Performance Class Summary Sheet.

Reading: Letters/Sounds

Materials Needed:
*letter list (not in alphabetical order) list of lower case and upper case (capital) letters (be sure that the letters match the font or typeface that is found in the Ghanaian textbook)
*Letters/Sounds Data Record Sheet-Part I (lower case letters)
*Letters/Sounds Data Record Sheet-Part II (upper case letters)
*pencil
*Pupil Performance Class Summary Sheet

Provide the child with the list of letters and say to the child:

What do you call these? Can you find some that you know? Pointing to each letter ask: **What is this one?**

If the child does not respond, use one or more of these questions:

Do you know its name? What sound does it make? Do you know a word that starts like that?

If the child hesitates, begin by pointing to the first letter in the child's name. Then move on to other letters.

Directions for Scoring:
Score the letter as correct if ANY of the following is provided by the child:
*an alphabet name
*a sound that is acceptable for that letter
*a response which says "It begins like..." giving a word for which the letter is the initial letter.

Score 1 point for each letter that the child is able to identify by any of these strategies. [Letter identification is very sensitive to instructional procedures. Some letters may be identified by the sound they make while other letters may be identified by their alphabetic name. The aim is to assess a child's ability to distinguish letters one from another on any basis that works.]

Directions for Recording the child's scores: Find the child's name and identifying information on Parts I and II of the Letters/Sounds Data Record Sheets. Record a 1 by correctly identified letters. Mark a 0 by incorrectly or unidentified letters/sounds. For each child, count up the number of points (0-52) and record this number on the Pupil Performance Class Summary Sheet.

Reading: Most Used Words

Materials Needed:
*P5 Most Used Words List (be sure that the words are printed in typeface/font that is the same as the Ghanaian English textbooks)
*Most Used Word List Data Record Sheets (Part I-Reading and Part II-Aided Reading)
*Pupil Performance Class Summary Sheet
*pencil (for examiner)

Part I: Reading

Directions for Administering:
Provide the pupil with a copy of the P5 "Most Used Words" list. Say:

Now I would like you to read some words for me. They are words from your text book. Look and say each of these words.

If the child hesitates, ask the child,

Are there any words on the list that you know? Tell me the words you know. Say the words you know.

The directions may be given in the mother tongue if necessary. Repeat the request to encourage the child to continue.

Directions for Scoring: A child receives credit for reading the words regardless of the order in which the words are read. If the words are read in a random order, the child must point to each word as he/she reads it. A word is counted as correctly read if the pupil reads the word incorrectly at first but then self corrects.

Directions for Recording the child's scores: Find the child's name and identifying information on the Most Used Words Data Record Sheet: Part I-Reading. Record a 1 next to each of the words that the child reads correctly; record a 0 next to misread or unknown words. Count the total number of words that the pupil is able to read correctly and record this number on the Most Used Words Data Record Sheet: Part I-Reading. Then calculate the percent correct (number correct/total number correct/total number of words on the number on the Pupil Performance Class Summary Sheet.

Part II: Aided Reading-Most Used Words

Directions for Administering:
Once you have identified the words that a child can read and the words that the child cannot read or read incorrectly, say:

Now I am going to read some words aloud. I want you to find the word on the list and point to it.

To make sure the child understands what you want, begin with a word on the list that the child was able to read. Randomly move around on the list asking each of the words.

Directions for Scoring: A child receives credit for words that are located correctly. A word is counted as correctly located if the pupil points to the correct word or points to an incorrect word and then independently self corrects.

Directions for Recording the child's scores: Find the child's name and identifying information on the Most Used Words Data Record Sheet-Part II. [Make sure that "Aided" is checked on the upper right side of the form.] Record a 1 next to each of the words that the child locates correctly; record a 0 next to unknown or incorrectly identified words. Count the total number of words that the pupil is able to locate correctly and record this number on the Most Used Words Data Record Sheet: Part II-Aided Reading. Then calculate the percent correct (number correct/total number of words on the list) and record this number on the Pupil Performance Class Summary Sheet.

Reading Passage

Materials Needed:
*English Pupil's Books for P2, P3, P4, and P5
*Individual Record Sheets (Numbered copy of the passages for P2, P3, P4, and P5; 1 copy per pupil of each; used by the examiner for recording the known and unknown words)
*Pencil or pen (for the examiner)
*Timer
*Clipboard
*Straight edge for helping the child to focus on one line (e.g., this could be a rectagular piece of plain cardboard or heavy paper)
*Pupil Performance Class Summary Sheet

Directions for Administering:

BEGIN WITH THE P2 PASSAGE AND THEN REPEAT THE ADMINISTRATION PROCEDURES FOR THE P3, P4, AND P5 PASSAGES. P4 PUPILS WILL HAVE READING SCORES FOR P2, P3, P4, AND P5 PASSAGES!

1. Open the textbook to the selected passage. Hand the opened textbook to the pupil. Provide the pupil with the straight edge and demonstrate how it could be used. Using the straight edge is optional.

2. Place the Individual Record Sheet for the passage in front of you but shielded so the pupil cannot see what you record. A clipboard is useful for this purpose.

3. Say these specific directions to the pupil for each passage:

When I say 'begin,' start reading aloud at the top of this page. Read across the page

(DEMONSTRATE BY POINTING TO THE PLACE WHERE YOU WANT THE PUPIL TO BEGIN).

Try to read each word. If you come to a word you don't know, I'll tell it to you. Be sure to do your best reading. Do you understand what I want you to do?

4. If you are uncertain as to whether the pupil understands what is expected, the directions may be repeated in the mother tongue.

5. Say 'begin' and start your timer when the pupil says the first word. If the pupil fails to say the first word of the passage after 3 seconds, tell them the word and mark it as incorrect, then start your stopwatch.

IF THE CHILD STOPS READING BEFORE THE END OF THE PASSAGE, TELL THE CHILD TO

KEEP READING

Show the child where you mean if necessary.

6. Follow along on your copy. Put a slash (/) through words read incorrectly (see scoring procedures).

7. At the end of 1 minute, place a bracket (]) after the last word. Allow the pupil to finish the passage.

   When the child has finished the last sentence on the numbered copy, say,

Please stop. Thank you.

8. If at the end of one minute a pupil has read less than 4 words correctly and the child is struggling, stop the child, place a straight edge under the first line and say,

Now I want you to look at the rest of this line. Can you read something from this line? Do you see any words you know? Look and say the words you know.

   After the child responds, move the straight edge to the next line and repeat this prompt. Continue for each line in the story.

   On the Individual Record Sheet circle the words that the child is able to read (the child must point to the word and say what it is). If the child knows a word that is repeated in the line, ask if the child sees that word anywhere else.

Directions for Scoring:
This task is scored by counting the number of correctly read words. Below are rules for determining if a word has been read correctly. [These rules are adapted from Tilly, W. D., & Carlson, S. (1992). Administration and scoring. In M. R. Shinn, N. Knutson, and W.D. Tilly (Eds.). Curriculum Based Assessment: Training Modules (3rd ed.) (pp. 8-12). Eugene, OR: University of Oregon.]

Rule 1: Correctly read words are pronounced correctly. A word must be read correctly given the context of the sentence.

Example: The word "read" must be pronounced "reed" when presented in the context of: "He will read the book." Not as "He will red the book."

Example: The word "lead" must be pronounced "led" when presented in the context of: "She picked up the lead pipe." Not as "She picked up a leed pipe."

Rule 2: Self-corrected words are counted as correct. Words misread initially but corrected within 3 seconds are counted as correctly read.

Example: "The river was cold." read as: The river was could...(2 seconds)...cold. [4 correctly read words]

Rule 3: Repeated words are counted as correct. Words said over again correctly are ignored.

Example: "Ama ran swiftly" read as "Ama ran...Ama ran swiftly." [3 correctly read words]

Rule 4: Dialect. Variations in pronunciation that are explainable by local language norms are not errors.

Rule 5: Inserted words are ignored. When a pupil adds extra words, they are not counted as correct words nor as reading errors.

Example: "Yaw was happy." read as "Yaw was very happy." [3 words correctly read]

Rule 6: Mispronounced or substituted words are counted as incorrect.

Example: "Yaw wanted a new hat." read as "Yaw want a new hat." [4 correctly read words]

Rule 7: Omitted words are counted as errors.

Example: "Kofi climbed the tall tree." read as "Kofi climbed the tree." [4 correctly read words]

Rule 8: Hesitations: When a pupil hesitates or fails to correctly pronounce a word within 3 seconds, the pupil is told the word and an error is scored.

Example: "Dede saw an elephant." read as "Dede saw an ...(3 seconds)" or "Dede saw an ell-ee...(3 seconds)" At this point the examiner says, "elephant" [3 correctly read words]

Rule 9: Reversals: When a pupil transposes two or more words, those words not read in the correct order are errors.

Example: "Mensa ran quickly." read as "Mensa quickly ran." [1 correctly read word]

Rule 10: Numbers written as numerals are counted as words and must be read correctly within the context of the passage.

Example: "Mensa had 13 balls." read as "Mensa had thirteen balls." [4 correctly read words]; not as "Mensa had one three balls." [3 correctly read words]

Rule 11: Abbreviations are counted as words, and must be read correctly within the context of the sentence.

Example: "Mr. Poku went to the farm." should be read as "Mister Poku went to the farm." [6 words]

For more examples of these rules see the complete manual.

Directions for Recording the child's scores: Record the child's name and identifying information on the P2, P3, P4, AND P5 Individual Record Sheets (the numbered copy of each of the reading passages). Count up the total number of words read or attempted within one minute [use the numbers at the end of each line as a guide]. Then count the number of errors and the number of words read correctly [number of errors + number of correctly read words = total words read/attempted]. Record these numbers in the box that has been provided on the Individual Record Sheet. Record the number of words read correctly in one minute on the Pupil Performance Class Summary Sheet.

Then count the number of words read correctly for the whole passage. Even if the child didn't finish the passage (i.e., if the passage was too hard and the child read fewer than 4 words correctly in one minute) the Total Words Read for the whole passage is still reported as the total number of words in the passage [i.e., the number following the last line of the passage]. Also, words not attempted are scored as errors. Count up the number of errors. The number of errors plus the number of words that were read correctly should be the same as the total number of words in the passage.

Then calculate the percentage correct for the entire passage (percentage correct=words read correctly/total number of words in the passage). Record this number in the Individual Record Sheet box and on the Pupil Performance Class Summary Sheet.

Storing the Data

Once you have completed testing one child and have recorded all of the scores on the Pupil Performance Class Summary Sheet, staple together the paper used for the writing tasks and the Individual Record Sheets for the reading passages. Make sure that the pupil's name is clearly written on all pages. Organize the papers by class and store the materials in a secure location.

CENTRE FOR RESEARCH ON IMPROVING QUALITY OF PRIMARY EDUCATION IN GHANA
University of Cape Coast
Cape Coast, Ghana

ORAL LANGUAGE PROFICIENCY TESTS[1]

LEVEL 5

IMPROVING EDUCATIONAL QUALITY PROJECT[2]

---

[1] *This instrument was prepared by the Research Team of the Centre for Research on Improving Quality of Primary Education in Ghana (CRIQPEG) and edited by Aida L. Pasigna of the Institute for International Research, Inc. (IIR).*

[2]*The Improving Educational Quality (IEQ) Project is funded by the Office of Education, Bureau for Research and Development, United States Agency for International Development (USAID) under Contract No. DPE-5836-C-00-1042-00.*

ADMINISTRATION MANUAL
FOR THE
ORAL LANGUAGE PROFICIENCY TESTS

Read this Manual carefully before you go to the schools. This Manual tells you how to prepare for the testing, how to administer the tests, how to score pupil responses, and how to record pupil scores.

A. How to Prepare for Testing

1. Make sure you have all the test materials. Obtain all the books and other materials required by the test before you go to the schools.

   Here are the things you should have for each class that you test:

LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
Test booklets (one per pupil) Administration Manual Data Record Sheets P2 Pupil's Book Table or desk to write on Chair	Test booklets (one per pupil) Administration Manual Data Record Sheets P3 Pupil's Book Table or desk to write on Chair Pen Pencil Pile of three or more books	Test booklets (one per pupil) Administration Manual Data Record Sheets P4 Pupil's Book Table or desk to write on Chair Three stones Stick and ruler	Test booklets (one per pupil) Administration Manual Data Record Sheets P5 Pupil's Book Table or desk to write on Chair

2. Be familiar with the Oral Language Proficiency Tests. The test booklet has three parts: Functional Items (Part A), Listening Comprehension (Part B), and Oral Expression (Part C). Familiarize yourself with all the test parts and test items. Be sure to the whole test before you do any testing.

72

The test booklet for Level 2 has items only for Level 2.
The test booklet for Level 3 has items for Levels 2 and 3.
The test booklet for Level 4 has items for Levels 2, 3, and 4.
The test booklet for Level 5 has items for Levels 2, 3, 4, and 5.
This is because you will test the pupils on items intended for their present grade level and on items intended for the lower grade levels (except Level 1). That is, P3 pupils would be asked to respond to test items for P2 and P3; P4 pupils would be asked to respond to test items for P2, P3, and P4; etc.

Before you go to the schools, make sure you have enough copies for the classes assigned to you--one test booklet for each pupil to be tested. You may want to bring five extra booklets for each class, just in case you need them. Also make sure that all the test booklets are complete (i.e., have all the parts and pages).

3. Politely ask the teacher for assistance. Explain to the teacher that you are investigating how children learn. To do this you will be working with each child individually. You will be assessing oral proficiency in English. Ask the teacher to tell the pupils that you and the other researchers need their help to learn more about how children learn. Ask the teachers to reassure the children and tell them that they can help by trying their best to answer the questions they will be asked and to follow instructions.

   Ask the teacher for a list of the names of the children in the class. Copy the list of children's name (full names) on the Data Record Sheets for Part A, Part B, and Part C of the Oral Proficiency Test for that class. Write the names of all the girls first, in alphabetical order, followed by the names of all the boys, also in alphabetical order. Be sure to write the full names of the pupils and their corresponding numbers in the same chronological sequence for all parts of the test. That is, Pupil No. 1 in one part of the test should be consistently listed as Pupil No. 1 in all the other lists. This will make it easy to keep track of the performance of each pupil in all parts of the test.

4. Set up the testing area. Find a quiet place where you can set up a small table or desk with a writing surface and a chair. Be sure you have enough privacy and a

minimum of distractions so that the children you will be testing will be able to relax.

5. Put the child at ease. Escort each pupil to be tested out of the classroom and back after the test. Be pleasant and encouraging. Speak clearly and distinctly. Remember that the child has to answer a lot of questions asked by somebody other than his/her teacher.

B. How to Administer the Oral Proficiency Tests

1. Write the information about the pupil on the test booklet. In the blank spaces provided on the first page of the test booklet, write the child's name, school, and class.

2. Keep track of the time the child needed to complete the test. On the blank spaces provided, write the time that you started the test and the time it was completed--i.e., the child has finished answering the last question in Part C of the test. This will allow you to calculate the number of minutes it took to complete the test. (You may use a stopwatch instead, if you have one.)

3. Follow the test directions for each part of the test. Do and say exactly what you are directed to do and say. Everything that you are to do is printed in all caps (capital letters) or uppercase letters. Everything that you are to say to the pupil is printed in capital and small letters (upper- and lowercase letters).

4. <u>For Parts A and C, give examples of "full answers"</u> so that it is clear to the student exactly how you want him/her to respond. Below are the suggested examples.

PART A. FUNCTIONAL ITEMS

DIRECTIONS: SAY THIS TO THE PUPIL:

> I am going to ask you some questions in English. Please give me the full answer in English. For example, if I ask you, "What day is today?" Your full answer will be, "Today is <u>Monday</u>." Do you understand?

BE SURE TO SAY THE NAME OF THE DAY OF TESTING IF IT IS OTHER THAN MONDAY. EXPLAIN THE DIRECTIONS AGAIN IN THE LOCAL LANGUAGE TO MAKE SURE THAT THE PUPIL UNDERSTANDS WHAT YOU WANT HIM/HER TO DO. HOWEVER, YOU SHOULD ASK THE QUESTION ONLY IN ENGLISH AND ACCEPT ONLY ENGLISH RESPONSES. DURING THE TEST, IF THE PUPIL FORGETS AND GIVES A SHORT ANSWER, YOU MAY REMIND HIM/HER THAT YOU WANT THE FULL (COMPLETE) ANSWER.

PART C. ORAL EXPRESSION

DIRECTIONS: SAY THIS TO THE PUPIL:

> I am going to ask you some questions in English. Please give me the full answer in English. For example, if I ask you, "Where are we today?" Your full answer will be, "We're in school today." or "We are in school today." Do you understand?

EXPLAIN THE DIRECTIONS AGAIN IN THE LOCAL LANGUAGE TO MAKE SURE THAT THE PUPIL UNDERSTANDS WHAT YOU WANT HIM/HER TO DO. HOWEVER, YOU SHOULD ASK THE QUESTION ONLY IN ENGLISH AND ACCEPT ONLY ENGLISH RESPONSES. DURING THE TEST, IF THE PUPIL FORGETS AND GIVES A SHORT ANSWER, YOU MAY REMIND HIM/HER THAT YOU WANT THE FULL (COMPLETE) ANSWER.

75

C. How to Score Pupil Responses

1. Part A and Part C. The functional test items (Part A) and oral expression items (Part C) require full answers (complete sentences) from the child. Several possible answers are printed in italics after each item with a corresponding mark to indicate the level of mastery represented by each type of response. The marks and the level of mastery indicated by each one are as follows:

3 = Full Mastery
2 = Partial Mastery
1 = Borderline
0 = Non-mastery

If the child's response is correct and is given in a complete sentence, this represents full mastery; you should then circle "3." If the answer is not complete, use your best judgment in deciding which of the three other marks best represent the child's response and circle that number. Listen carefully to the child and give him/her the benefit of the doubt. If you understand what he/she is saying, and you think if resembles the correct answer, even if it is not complete, the child should be given a "2" or a "1." Remember that our emphasis is on comprehension and communication--not on flawless ('perfect') pronunciation or intonation.

LANGUAGE PROFICIENCY TEST FOR PRIMARY FIVE LISTENING COMPREHENSION AND ORAL EXPRESSION

NAME OF PUPIL_____SEX_____

SCHOOL_____DATE_____

TIME STARTED_____TIME COMPLETED_____# OF MIN. TEST COMPLETED_____

A. FUNCTIONAL TEST ITEMS

PART A. DIRECTIONS: SAY THIS TO THE PUPIL:

I am going to ask you some questions in English. Please give me the full answer in English. For example, if I ask you, "What day is today?" your full answer will be, "Today is Monday." Do you understand?

BE SURE TO SAY THE NAME OF THE DAY OF TESTING IF IT IS OTHER THAN MONDAY. EXPLAIN THE DIRECTIONS AGAIN IN THE LOCAL LANGUAGE TO MAKE SURE THAT THE PUPIL UNDERSTANDS WHAT YOU WANT HIM/HER TO DO. HOWEVER, YOU SHOULD ASK THE QUESTION ONLY IN ENGLISH AND ACCEPT ONLY ENGLISH RESPONSES. DURING THE TEST, IF THE PUPIL FORGETS AND GIVES A SHORT ANSWER, YOU MAY REMIND HIM/HER THAT YOU WANT THE FULL (COMPLETE) ANSWER.

CRITERIA:		MARKS
1. GREET THE PUPIL. SAY: **Good morning/afternoon**		
Pupil Says:	*"Good morning" OR "Good afternoon"*	*3*
	"Good moring" OR "Goot morning"	*2*
	"Morning" OR "Afternoon"	*1*
	No response or completely wrong answer	*0*
2. ASK: **How are you today?**		
Pupil Says:	*"I am fine, thank you" OR similar acceptable response*	*3*
	"I fine / I all right" .....etc.	*2*
	"Fine, Well, All right"	*1*
	No response or completely wrong answer	*0*
3. ASK: **What's your name?**		
Pupil Says:	*"My name is....." OR "I'm....."*	*3*
	"My name....."	*2*
	"Kofi Mensah"	*1*
	No response or completely wrong answer	*0*
4. ASK: **How old are you?**		
Pupil Says:	*"I'm ..... years old"*	*3*
	"I'm.....(number of years)	*2*
	"Eleven years old"	*1*
	"Eleven"	*1*
	No response or completely wrong answer	*0*

5. ASK: **What is your teacher's name?/Who is your teacher?**
Pupil Says "My teacher's name is Mr./Mrs./Miss..... 3
"My teacher ....." 2
"Miss Eshun" 1
No response/completely wrong answer.....0

6. ASK: **What class are you in?**
Pupil Says "I'm in class five" 3
" Class five" 2
"Five" 1
No response/completely wrong answer.....0

7. ASK: **What is the name of your school?**
Pupil Says "I'm in ..... primary school 3
"Babinso primary" 2
"Babinso" 1
No response/ completely wrong answer.....0

B. LISTENING COMPREHENSION ITEMS (*Primary Two*)

DIRECTIONS: SAY THIS TO THE PUPIL: "I am going to ask you in English to do some things. Listen carefully and do what I ask you to do". (You may explain this again in the local language if necessary)

8. OPEN THE P2 BOOK AND SHOW THE PICTURES ON PAGE 2 TO THE PUPIL.
SAY: **Point to the girl.**
Pupil points to the girl.....1
Otherwise 0

9. SHOW THE PICTURES ON PAGE 9 TO THE PUPIL.
SAY: **Point to the dog.**
Pupil points to the dog. 1
Otherwise. 0

10. SAY: **Close your eyes.**
Pupil closes his/her.....1
Otherwise.....0

11 SHOW THE PICTURES ON PAGE 12 TO THE PUPIL.
SAY: **Point to a snake.**
Pupil points to the snake.....1
Otherwise.....0

12 TURN TO PAGE 20.

SAY: **Point to the tailor sewing in the picture.**

Pupil points to the tailor.....1
Otherwise 0

13. REFER TO THE PICTURE ON PAGE 20.

AY: **Point to the baker.**

Pupil points to the baker 1
Otherwise.....0

14. SHOW THE PICTURES ON PAGE 44 TO THE PUPIL.

SAY: **Point to the broom under the table.**

Pupil points to the broom under the table.....1
Otherwise.....0

15 SAY: **Come and stand beside me.**

Pupil comes to stand beside you.....1
`Otherwise 0

B. LISTENING COMPREHENSION ITEMS (*Primary Three*)

DIRECTIONS: SAY THIS TO PUPIL: 'I am going to ask you in English to do some things. Listen carefully and do what I ask you to do'. (You may explain this again in the local language, if necessary).

16. PROVIDE A PEN. SAY: **Put the pen on the chair.**

Pupil Puts the pen on the chair ---------- 1
Does not obviously understand the command - 0

17. PROVIDE A PENCIL. SAY: **Put the Pencil under the table.**

Pupil Puts the pencil under the table ---------- 1
Does not obviously understand the command ---------- 0

18. POINT TO A PILE OF BOOKS. SAY: **Pick up two books.**

Pupil Picks up two books - 1
Obviously does not understand the command ----------0

19. SAY: **Point to the back of the chair.**

Pupil points to the back of the chair ----------1
Obviously does not understand the command ----------0

20. SHOW PICTURE ON PAGE 5. SAY: **Point to a mosque.**
Pupil Points to the picture of the mosque ----------*1*
Points to something else/obviously does not understand the command: -------*0*

21. SHOW PICTURE ON PAGE 38. SAY:**Point to a cocoa pod/tree.**
Pupil Points to cocoa pods ----------*1*
Points to something else/obviously does not understand the command: ------*0*

22. SHOW PICTURE ON PAGE 48. SAY: **Point to the bicycle.**
Pupil Points to the bicycle ----------*1*
Points to something else/obviously does not understand ----------*0*

23. SHOW PICTURE ON PAGE 49. SAY: **Point to the bandage.**
Pupil Points to the bandage ----------*1*
Points to something else/obviously does not understand - - - - - - - - - - - - - *0*

B LISTENING COMPREHENSION ITEMS (*Primary Four*)

INSTRUCTION:
A) For each of items 24 and 27 award 1 mark if the child makes the effort but is unable to cary out the instructions fully. Award zero for all other actions not related to the instructions.

B) For each of items 25,26, and 27 award 1 mark if the child performs the action correctly. Otherwise award zero.

DIRECTIONS: **"I am going to ask you in English to do some things. Listen carefully and do what I ask you to do".** (You may explain this again in the local language, if necessary).

24. (Provide a table). **Push the table.**

25. (Place three stones on a table). **Place two of the stones on the floor.**

26. (Show the pictures on page 36) **Point to a wrist watch.**

27. (Provide a stick and a ruler). **Measure the stick with the ruler.**

28. (Give the child a copy of the P4 English textbook).
Open to page 13 of the book and point to a pot.

B. LISTENING COMPREHENSION ITEMS (*PRIMARY FIVE*)

INSTRUCTION: GIVE EACH ORAL DIRECTION TO THE PUPIL. TICK "1" FOR A CORRECT RESPONSE. TICK "0" FOR AN INCORRECT OR NO RESPONSE.

SAY THIS TO THE PUPIL: **"I am going to ask you in English to do some things. Listen carefully and do what I ask you to do"** (You may explain this again in the local language, if necessary)

29. SHOW THE PICTURE ON PAGE 9 TO PUPIL
    SAY: **Show me the doctor in the picture.**
    Pupil shows the doctor in the picture *1*
    No response/wrong response/ otherwise *0*

30. SAY: **Point to where the sun rises from**
    Pupil points to the east *1*
    No response/wrong response/otherwise *0*

31. SHOW PICTURE ON PAGE 9 TO PUPIL
    SAY: **Show me the skirt in the picture**
    Pupil points to the skirt *1*
    No response/wrong response/otherwise *0*

32. REFER PUPIL TO THE PICTURE ON PAGE 69 AND ASK THE FOLLOWING QUESTIONS.
    SAY: **Point to the animal that gives us beef.**
    Pupil points to the cow *1*
    No response/wrong response/ Otherwise *0*

33. SAY: **Raise your right hand.**
    Pupil raises his/her right hand *1*
    No response/wrong response/ Otherwise *0*

34. SAY:.**Step backward.**
    Pupil steps backward *1*
    No response/wrong response/Otherwise *0*

C. ORAL EXPRESSION (Primary Two)

DIRECTIONS: SAY THIS TO THE PUPIL:

I am going to ask you some questions in English. Please give me the full answer in English. For example, if I ask you, "What day is today?" your full answer will be, "Today is Monday." Do you understand?

BE SURE TO SAY THE NAME OF THE DAY OF TESTING IF IT IS OTHER THAN MONDAY. EXPLAIN THE DIRECTIONS AGAIN IN THE LOCAL LANGUAGE TO MAKE SURE THAT THE PUPIL UNDERSTANDS WHAT YOU WANT HIM/HER TO DO. HOWEVER, YOU SHOULD ASK THE QUESTION ONLY IN ENGLISH AND ACCEPT ONLY ENGLISH RESPONSES. DURING THE TEST, IF THE PUPIL FORGETS AND GIVES A SHORT ANSWER, YOU MAY REMIND HIM/HER THAT YOU WANT THE FULL (COMPLETE) ANSWER.

35. HOLD UP THE P2 BOOK.
SAY: **What is this?**
Pupil Says: *"This is/It's/It is a book"* 3
"A book" 2
"Book" 1
Is unable to answer 0

36. POINT TO ONE OF THE TABLES IN THE PICTURE ON PAGE 3.
ASK: **What is this?**
Pupil Says: *"This is a table"* 3
"A table" 2
"Table" 1
No response/wrong answer 0

37. ASK: **Do goats lay eggs?**
Pupil Says: *"No, goats do not lay eggs"* 3
"They don't lay eggs" 2
"No" 1
No response/wrong answer 0

38. SHOW THE PICTURE OF THE BOY IN THE MARKET ON PAGE 6.
ASK: **Where is the boy?**
Pupil Says: *"He is in the market"* 3
"In the market" 2
"Market" 1
No response/completely wrong answer 0

39. SHOW THE PICTURE OF THE GOATS INSIDE THE FENCE ON PAGE 10.
ASK: **Where are the goats?**
Pupil Says: *"They are inside the fence" OR "The goats are inside the fence"* 3
"Inside the fence" OR "the fence" 2
"Fence" 1
No response/wrong answer 0

40. TURN TO THE PICTURE ON PAGE 13.
ASK:**What is the monkey doing?**
Pupil Says: "The monkey/It is.Its swinging/hanging' 3
"Monkey swinging/hanging" 2

"Swinging/hanging" 1
No response/wrong answer 0

41. REFER TO THE PUPIL ON PAGE 13.
ASK: **What is the horse doing in the picture?**
Pupil Says: "The horse/ It is trotting/walking " 3
"horse trotting/walking" 2
"trotting/walking" 1
No response/wrong answer 0

42. POINT TO THE FIRST PICTURE AT THE BOTTOM OF PAGE 17
ASK:**What is the boy doing?**
Pupil Says: "He/Kwesi is running in the rain" OR "he is running".....3
"He is running" 2
"Running in rain" 1
No response/wrong answer 0

43. TURN TO PAGE 20
ASK: **What is the woman in the picture doing?**
Pupil Says: "The woman/she is baking bread" OR
"The woman/she is holding a stick" 3
"Baking bread" or "Holding a stick" 2
"Bread/Stick" 1
No response/wrong answer 0

44. SHOW THE PICTURE OF THE GIRL ON PAGE4 CLEANING HER TEETH
ASK: **What is she doing?**
Pupil Says: "The girl/she is cleaning her teeth/holding a stick 3
"Cleaning her teeth/holding a stick" 2
"Smiling/laughing" 1
No response/wrong answer 0

C. ORAL EXPRESSION ITEMS (*Primary Three*)

DIRECTIONS: SAY THIS TO PUPIL: 'I am going to ask you some questions in English. Please give your full answer in English'. (You may explain this in the local language, if necessary).

45. SHOW PICTURE ON PAGE 49.
ASK: **Where do nurses work?**
Pupil Says *"Nurses work in hospitals/clinics" or*
"Nurses work at the hospital/clinic" ----------3
"Nurses work in hospital/clinic" or "At the hospital/clinic"------2
'Hospital/Clinic" ----------1
Says (nothing) ---------- 0

46. SHOW THE PICTURE ON PAGE 2.
ASK: **What colour is the cat? (Showing picture)**
Pupil Says: "The colour of the cat is black" or "The cat is black" --------3
"Colour of cat is black" ----------2
"Black" ----------1
(nothing)/wrong answer----------0

47. SHOW MIDDLE PICTURE ON PAGE 8.
ASK: **what is the boy doing?**
Pupil Says: The boy is sweeping" ----------3
"(the) boys is sweeping/sweep" ----------2
"sweeping" ----------1
(nothing) /wrong answer----------0

48 SHOW PICTURE ON PAGE 48 OF THE BOY RIDING A BICYCLE.
ASK: **What is the boy doing?**
Pupil Says: "He is riding a bicycle" ----------3
"He is riding bicycle" or "He is ride bicycle" or
"Riding a bicycle" ----------2
"Riding" ----------1
nothing /wrong answer----------0

49. SHOW PICTURE ON PAGE 48. POINT TO THE TWO BOYS.
ASK:**What are they doing?**
Pupil Says: "They are waving to their friend" ----------3
"Waving to their friend' ----------2
"Waving" ----------1
nothing /wrong answer----------0

50. SHOW THE PICTURE ON PAGE 49 POINT TO THE NURSE.
ASK: **What is the nurse doing?**
Pupil Says: "The nurse/She is dressing/bandaging the boy's wounds" -----3
"Dressing/Bandaging the boy's wounds" ----------2
"Bandaging/Dressing" ----------1
Nothing /wrong answer----------0

51. SHOW PICTURE ON PAGE 52.

ASK: **Where are the children going?**

Pupil Says: "The children/they are going to the hospital/house/building" ---3

"The children/they are go to (the) hospital/etc" OR

"To the hospital/etc" OR "The hospital/etc" ----------2

"Hospital/etc" ----------1

Nothing"/wrong answer----------0

52. ASK: **What is the colour of the cross painted on the ambulance?**

Pupil Says: "The colour of the cross on the ambulance is red" ----------3

"Colour is red" ----------2

"Red" ----------1

Nothing /wrong answer----------0

SHOW PICTURE ON PAGE 54

53. ASK: **What is the nurse doing?**

Pupil Says: "The nurse is ringing the bell" ----------3

"Ringing the bell" ----------2

"ringing" ----------1

Nothing /wrong answer----------0

54. SHOW PICTURE FRAMES ON PAGE 63

ASK: **What are the children doing in the 4th picture?**

Pupil Says: "The children are studying" ----------3

"The children are study" ----------2

"Studying" ----------1

Nothing /wrong answer ----------0

55. ASK: **What are the children doing in the 6th picture?**

Pupil Says: "The children are eating" ----------3

"The children are eat" ----------2

"Eating" ----------1

Nothing /wrong answer----------0

56. POINT TO THE RAT ON PAGE 64:

ASK: **What is the rat doing?**

Pupil Says: "The rat is eating"----------3

"The rat is eat" ----------2

"Eating" ---------- -1

Nothing /wrong answer---------- 0

85

57. SHOW PICTURE ON PAGE 71

ASK: **What are the women doing?**

Pupil Says: "The women are washing clothes" ----------3

"Washing clothes" or "The women are washing/wash clothes"-----2

"Washing" ----------1

Nothing /wrong answer----------0

58. SHOW PICTURE ON PAGE 85. POINT TO THE GIRL ON THE LEFT.

ASK: **What is this girl carrying?**

Pupil Says: "The girl/she is carying loaves of bread/some bread/bread" -3

"loaves of bread/some bread" ----------2

"bread" ----------1

Says nothing /wrong answer----------0

59. ASK: **What work does a fisherman do?**

Pupil Says: "A fisherman catches fis/fishes" ----------3

"A fisherman catch fish/fishes" or "catches fish/fishes" ------2

"Fishing" ----------1

Says nothing /wrong answer ----------0

60. ASK: **What vegetable do you like best?.**

Pupil Says: "The vegetable I like best is ---(name of vegetable) ---------- 3

"name of vegetable" ---------- 1

Says nothing /wrong answer----------0

C. ORAL EXPRESSION ITEMS (*Primary four*)

DIRECTIONS: SAY TO THE PUPIL ' **I am going to ask you some questions in English. Please, give your full answer in English'** (You may explain this again in the local language, if necessary)

61. TURN TO PAGE 28 AND POINT TO AN UMBRELLA. SAY: **What is this?**

Pupil says:*It's an umbrella* 3

An umbrella 2

Umbrella 1

Wrong/No answer 0

62. SAY: **Does a crab have eyes?**

Pupil says: *Yes, a crab has eyes/Yes, it has* 3
Yes, a crab have eyes 2
Yes 1
Wron/No answer 0

- 9 -

63. SAY: **What is the name of your hometown?**

Pupil says: *The name of my hometown is Ada/My hometown is Ada* 3
My hometown Ada 2
Ada 1
Wrong/No answer 0

64. SAY: **Do you live near the sea?**

Pupil says: *Yes, I live near the sea/No, I don't live near the sea* 3
Yes, I live the sea/Near the sea/No, I don't live the sea.....2
Yes/No 1
Wrong/No answer 0

65. SAY: **What do we use to buy things?**

Pupil says: *We use money to buy things/ We use money* 3
We use money buy things 2
Money 1
Wrong.No answer 0

66. SAY: **Where do crabs live?**

Pupil says: *Crabs live in holes/rivers/streams* 3
In holes/rivers/streams 2
Holes/rivers/streams.....1
Wrong/No answer 0

67. POINT TO THE POLICEMAN ON PAGE 76. SAY **Who is this?**

Pupil says: *He's/that's a Policeman* 3
A Policeman 2
Policeman 1
Wrong/No answer 0

68. SAY: **Can you ride a horse?**

Pupil says: *Yes, I can ride a horse/No, I can't ride a horse*.....3
Yes, I can ride horse/No, I can't ride horse 2
Yes/No.....1
Wrong/No answer 0

69. POINT TO THE FIRST PICTURE ON PAGE 36.

SAY: **What time is it?**

Pupil says: *The time is 8 O'clock/It's 8 O'clock* 3

The time 8 O'clo.....2

Wrong/No answer 0

70. SAY: **Mention two things you do at school every morning?**

Pupil says: *I sweep my plot/portion and sing the National Anthem every morning at school./ I sweep my plot/portion and sing the National Anthem* 3

Sweeping and Singing 2

Sweeping/Singing 1

Wrong/No answer 0

71. SHOW THE PICTURE ON PAGE 63.

SAY: **What is the man doing?**

Pupil says: *The man is feeding the fowls/hens, cocks and chicks* 3

The man feeding the fowls.....2

Feeding 1

Wrong/No answer 0

72. SHOW THE PICTURE ON PAGE 43 AND POINT TO THE MAN IN THE MIDDLE .

SAY: **What is he doing?**

Pupil says: *He is talking to his friend/He's talking to somebody* 3

He's talking/sitting 2

Talking/sitting 1

Wrong/No answer 0

73. SAY: **What do you do when you are thirsty?**

Pupil says: *I drink water when I'm thirsty/I drink water (Accept any correct liquid in place of water)* 3

I drink water I thirsty .....2.

Drink water/Drink 1

Wrong/No answer 0

C. ORAL EXPRESSION ITEMS (*Primary 5*)

INSTRUCTION: Ask Each Pupil the Questions Listed below. Full answers carry 3 marks. Partially correct answers carry 2 marks and one-word answers carry 1 mark. (Tick the appropriate mark

SAY THIS TO THE PUPIL: **"I am going to ask you some questions in Englsih. Please give your full answer in English"** (You may explain this again in the local language, if necessary).

74. ASK: **When you are ill what do you take to get well again?**
Pupil Says: "I take medicine when we I 'm ill to get well again 3
" I take medicine".....2
"Medicine" 1
No response/wrong response/Otherwise.....0

75. ASK: **Where do we post a letter?**
Pupil Says: "We post a letter at the Post Office" 3
"We post letter Post Office" 2
"Post Office" 1
No response/wrong response/Otherwise 0

76.SAY: **Mention two things we use water for in the home.**
Pupil Says: "We use water to wash and bathe" (any two appropriate uses)...3
"Wash and bathe" 2
"Wash" (any one) 1
No response/wrong response/Otherwise..... 0

77. ASK: **Why do we come to school?**
Pupil Says: "We come to school to learn" 3
"We come learn" 2
"Learn" 1

78. ASK:**When you are leaving somebody, what do you say to the person?**
Pupil Says: "I say, Good bye" 3
"Good bye" 2
"Bye" 1
No response/wrong response/Otherwise.....0

79. ASK: **When you want to travel by sea what do you use?**
Pupil Says: "When you want to travel by sea you use
a ship/boat/canoe 3
"ship/boat/canoe" 1
No response/wrong response/Otherwise.....0

80. ASK: **When do you eat breakfast?**

Pupil Says: "I eat breakfast in the morning" 3
"Breakfast in the morning" 2
"In the morning" 2
"Morning" 1
No response/wrong response/Otherwise 0

81. ASK:**Why is cocoa important to Ghana?**

Pupil Says:"Cocoa is important because it gives us a lot of revenue/foreign exchange" 3
"It gives us money" 2
"Money" 1
No response/wrong response/Otherwise 0

82. REFER PUPIL TO THE PICTURE ON PAGE 44.
ASK:**What is the man doing?**

Pupil Says: "The man is weaving" 3
"He is weaving" 3
"Is weaving" 2
"Weaving" 1
No response/wrong response/Otherwise 0

83. SHOW PUPIL THE PICTURE ON PAGE 48 AND ASK THE FOLLOWING QUESTIONS (63 & 64)
ASK: **What are the two boys in the picture doing?**

Pupil Says: "the two boys are weeding" 3
"They are weeding" 2
"Weeding" 1
No response/wrong response/Otherwise.....0

84. ASK: **What name is given to people who run a race?**

Pupil Says: "People who run a race are called athletes" 3
"Athletes" 1
No response/wrong response/Otherwise 0

Attachment 1*b*

Sample Data Reduction Tables

Date March 94

Total Summary
Reading

	Level 2--Percent Mastery			Level 3--Percent Mastery			Level 4--Percent Mastery			Level 5--Percent Mastery		
	Non	Partial	Full	Non	Partial	Full	Non	Partial	Full	Non	Partial	Full
Letter Recognition	41	36	23	19	27	55	10	28	62	1	14	85
Concepts About Print	30	42	28	9	34	58	11	39	50	9	21	71
Aided Reading	88	8	3	60	22	19	51	17	32	37	23	40
Reading Most Used Words	96	4	0	70	16	14	59	20	21	43	23	34
Reading Passage from P2 Text	86	13	1	73	20	7	65	20	16	41	28	32
P2 Passage Comprehension	91	7	2	85	11	4	79	14	7	73	17	10
Reading Passage from P3 Text				69	19	12	61	22	17	43	24	34
P3 Passage Comprehension				92	7	1	83	11	5	83	13	5
Reading Passage from P4 Text							66	18	16	48	17	35
P4 Passage Comprehension							90	5	5	87	7	7
Reading Passage from P5 Text										51	25	24
P5 Passage Comprehension										85	11	4

Non-Mastery = Less than 30% correct
Partial Mastery = Between 30% and 69% correct
Full Mastery = More than 70% correct

N = 1039

Total Summary
Writing

Date March 94

Percent of Pupils Tested Who Were Able to Perform the Task to Meet at Least Minimum Standards

	Level 2	Level 3	Level 4	Level 5
Copying Letters	79	93	99	100
Write Name	48	60	79	95
Write Words-None	45	27	9	4
Write Words-1or more	56	72	91	96
Write Words-6 or more	25	42	52	79
Write Words-16 or more	7	15	20	47

Date March 94

Total Summary
Oral English Proficiency

	Level 2--Percent Mastery			Level 3--Percent Mastery			Level 4--Percent Mastery			Level 5--Percent Mastery		
	Non	Partial	Full	Non	Partial	Full	Non	Partial	Full	Non	Partial	Full
Functional Items	36	52	13	79	18	3	11	49	39	9	37	54
Listening Comprehension	27	35	38	26	32	42	45	35	20	19	63	18
Oral Expression	90	10	0	86	13	1	93	4	2	91	8	1

Attachment 1*c*

Observation Guidelines and Interview Schedules

Category Definitions

1. Context (if the Context changes during the 5 minute interval, use the code that describes the Context that is used for the largest amount of time during the 5 minute interval):

A = The observed child is part of a small group (approximately 3-8 children), the teacher is present in the group.
B = The observed child is part of a small group, the teacher is not present in the group.
C = The observed child is part of a large group (could be the whole class) that is led by the teacher.
D = The observed child is part of a large group (could be the whole class); children have assigned to work without teacher participation.
E = Transition time (passing out or collecting books, teacher writing assignment on chalkboard, class change-over time)
F = Opening/dismissal
G = Recess or Physical Education or Break time

2. Content (if the Content changes during the 5 minute interval, use the code that describes the Content that is used for the largest amount of time during the 5 minute interval)

E = English
M = Maths
SS= Social Studies
Sc= Science
O = Other _____ (in the space provided, write what other content is covered)

3. Exposure to Print

Child has textbook: The observed child has an appropriate (English, Maths) textbook on his/her desk.

Child uses textbook: The observed child opens the textbook and uses it appropriately. Example: turning to the correct Unit or reading a story silently or aloud.

Child shares textbook: The observed child has available a textbook that is to be shared with one or more other children.

Child uses shared textbook: The observed child uses appropriately a textbook that is shared with one or more children.

Child has exercise book: The observed child has an exercise book on his/her desk.

Child uses exercise book: The observed child uses an exercise book appropriately.

Child has other print: The observed child has other printed materials such as flash cards or a textbook from a different subject area on his or her desk.

Child uses other print: The observed child uses the printed materials.

Print on chalkboard: There are words or letters on the chalkboard.

New print on chalkboard: During the 5 minute interval the teacher or a child writes new words or letters on the chalkboard.

Visual aids visible: Not including the chalkboard, there are posters or other visual aids that are visible to the observed child.

Visual aids used: During the 5 minute interval, the observed child is exposed to visual aids being used.

4. Oral Lanuage-Speaking

Child speaks Eng to teacher: The observed child individually speaks English to the teacher. The speaking is not part of a choral response.

Child speaks Eng to other child: The observed child speaks English to another child in the class. (It could be part of the lesson or for some other reason such as requesting something).

Child + Class choral English: The observed child speaks English as part of a choral response.

Child speaks Gha to Teacher: The observed child speaks a Ghanaian language to the teacher.

Child speaks Gha to other child: The observed child speaks a Ghanaian language to another child.

Child + Class choral Gha: The observed child speaks a Ghanaian language as part of a choral response.

5. Oral Language-Listening (The speaking could be singing, and it does not need to be part of the actual lesson.)

during the 5 minutes the observed child meets the definition of the category. Thus, if at any time during the 5 minutes the observed child opens the textbook and turns to a story or Unit, the child would get a check for "Child has textbook" and "Child uses textbook." If at the same time, the teacher is writing letters or words on the chalkboard, all 4 observed children would get checks for "Print on chalkboard" and "New Print on chalkboard." Note that for each 5 minute period you will need to consider all of the categories for all 4 children being observed.

8. Immediately following the timed observations, complete the Classroom Observation form.

9. Tally the timed observation data before leaving the school.

Context: For each child, count up the number of 5 minute intervals for each Context code that was used. In the space provided unter TOTALS on page 2 of the Pupil Observation Form, indicate the number of intervals for each Context. For example, if 7 intervals were "C" (whole class led by the teacher) and 3 intervals were "D" (whole class without teacher participation), you would record "7C 3D".

Content: For each child, count up the number of 5 minute intervals for each Content code that was used. In the space provided unter TOTALS on page 2 of the Pupil Observation Form, indicate the number of intervals for each Content area. In most instances it will be the same for all 10 intervals: "10E".

Coding Categories: For each child, you will count up the total number of 5 minute intervals that the child was observed. Unless an observed child left the room during the observation, this number should be the same for all four children. Write this number in the columns labeled "G1T" "G2T" B1T" and "B2T". Then, for each child, you will count up the number of five minute intervals that a coding category was checked. These numbers are to be recorded under TOTALS on page 2 of the Pupil Observation Form in the columns labeled "G1" "G2" "B1" and "B2". (NOTE: This number is never greater than the number of intervals the child was observed because each category can only be checked one time per 5 minute interval.)

Pupil Observation Guidelines

1. Prior to leaving for the school, make sure you have the following items:

* watch or time piece
* Pupil Observation and Classroom Observation forms
* the list of pupils in the class who were tested with their ID#'s
* the names of the pupils to be observed and the names of alternates
* paper for seating plan

2. When you arrive at the school, confirm with the teacher the times you will be observing. You will want to observe an English lesson and a lesson in some other subject areas (with the exception of Ghanaian languages).

3. Draw a seating plan for the classroom and ask the teacher (or a pupil suggested by the teacher) to work with you to fill in the names of all pupils in the classroom. Use the list of pupils who were tested to identify those children with Pupil Performance data.

4. Locate the pupils you will be observing. NOTE: Do not tell the teacher or the pupils which specific pupils you will be observing. You want them to be as "natural" as possible. If the teacher or pupils know who is being observed, they may behave differently.

5. If one of the pupils you are to observe is absent, use the alternate for that child. Thus, if the high performing girl is absent, observe the alternate high performing girl. If both children are absent (the high performing girl and her alternate), you will need to select another high performing girl from the list of children who were tested. Be sure to use the correct pupil ID numbers on the Pupil Observation forms. (The ID# should be the same as the one used on the Pupil Performance Summary sheet.)

6. Begin by doing the timed Pupil Observation. Enter the classroom before the lesson begins. Be sure you are certain of which children you are to observe. Note the starting time and complete the time information at the top of the form. Observe for 50 minutes or until the children have left the classroom. If at the end of the lesson some children remain for extra help or to complete their work, note the Context change and continue recording until the 50 minutes is over. If the teacher changes to a different content area (from English to Life Skills), note this on the form and continue to observe.

7. Be sure to refer to the definitions for each of the coding categories. A category is checked if at any time

TEACHER RATING OF PUPILS' PROFICIENCY IN ENGLISH LANGUAGE

SCHOOL ..... NO. ON ROLL IN CLASS .....
CLASS ..... AVERAGE AGE OF PUPILS .....

INSTRUCTIONS: (a) Use the following grading scale to rate your pupils on the NINE items on the attached sheet. Write each pupils' ratings in the corresponding columns provided below.

5 OUTSTANDING
4 ABOVE AVERAGE
3 AVERAGE
2 BELOW AVERAGE
1 POOR

(b) Write only the grade number against the name of each pupil in the appropriate column.

	READING SKILLS			TOTAL	WRITING SKILLS			TOTAL	ORAL SKILLS			TOTAL
NAME OF PUPIL	A	B	C		D	E	F		G	H	I	

PRIMARY THREE

READING SKILLS

ITEM A: Ability to pronounce words and discriminate between words and sounds correctly.

B: Ability to read aloud sentences and short passages with correct pronunciation, stress and intonation.

C: Ability to read short passages silently and answer questions based on the passage read.

WRITING SKILLS

ITEM D: Ability to draw patterns correctly from chalkboard and textbooks.

E: Ability to write words and short sentences from chalkboard and textbooks.

F: Ability to write own sentences and correct answers to questions.

ORAL SKILLS

ITEM G: Ability to answer questions correctly.

H: Ability to ask questions in class.

I: Ability to converse with classmates.

PRIMARY FOUR

READING SKILLS

ITEM A: Ability to pronounce words correctly.

B: Ability to read aloud given passages at a moderate speed with correct pronunciation, stresses and intonation.

C: Ability to read silently given passages at a moderate speed and answer correctly questions based on them.

WRITING SKILLS

ITEM D: Ability to write words and sentences dictated by teacher correctly.

E: Ability to do written exercises from textbook and chalkboard.

F: Ability to write short composition with little assistance from the teacher.

ORAL SKILLS

ITEM G: Ability to ask or answer questions in class.

H: Ability to converse with classmates.

I: Ability to describe events or tell short stories.

TEACHER RATING OF PUPILS' PROFICIENCY IN ENGLISH LANGUAGE

SCHOOL ..... NO. ON ROLL IN CLASS .....
CLASS ..... AVERAGE AGE OF PUPILS .....

INSTRUCTIONS: (a) Use the following grading scale to rate your pupils on the NINE items on the attached sheet. Write each pupils' ratings in the corresponding columns provided below.

5 OUTSTANDING
4 ABOVE AVERAGE
3 AVERAGE
2 BELOW AVERAGE
1 POOR

(b) Write only the grade number against the name of each pupil in the appropriate column.

	READING SKILLS			TOTAL	WRITING SKILLS			TOTAL	ORAL SKILLS			TOTAL
NAME OF PUPIL	A	B	C		D	E	F		G	H	I	

TEACHER RATING OF PUPILS' PROFICIENCY IN ENGLISH LANGUAGE

SCHOOL ..... NO. ON ROLL IN CLASS .....
CLASS ..... AVERAGE AGE OF PUPILS .....

INSTRUCTIONS: (a) Use the following grading scale to rate your pupils on the NINE items on the attached sheet. Write each pupils' ratings in the corresponding columns provided below.

5 OUTSTANDING
4 ABOVE AVERAGE
3 AVERAGE
2 BELOW AVERAGE
1 POOR

(b) Write only the grade number against the name of each pupil in the appropriate column.

	READING SKILLS			TOTAL	WRITING SKILLS			TOTAL	ORAL SKILLS			TOTAL
NAME OF PUPIL	A	B	C		D	E	F		G	H	I	

PRIMARY FIVE

READING SKILLS

ITEM A: Ability to pronounce words correctly.

B: Ability to read aloud given passages at a moderate speed with correct pronunciation, stresses and intonation.

C: Ability to read silently given passages at a moderate speed and answer correctly questions based on them.

WRITING SKILLS

ITEM D: Ability to write words and sentences dictated by teacher correctly.

E: Ability to do written exercises from textbook and chalkboard.

F: Ability to write short composition without assistance from the teacher.

ORAL SKILLS

ITEM G: Ability to ask or answer questions in class.

H: Ability to converse with classmates.

I: Ability to describe events or tell short stories.

TEACHER RATING OF PUPILS' PROFICIENCY IN ENGLISH LANGUAGE

SCHOOL ..... NO. ON ROLL IN CLASS .....
CLASS ..... AVERAGE AGE OF PUPILS .....

INSTRUCTIONS: (a) Use the following grading scale to rate your pupils on the NINE items on the attached sheet. Write each pupils' ratings in the corresponding columns provided below.

5 OUTSTANDING
4 ABOVE AVERAGE
3 AVERAGE
2 BELOW AVERAGE
1 POOR

(b) Write only the grade number against the name of each pupil in the appropriate column.

	READING SKILLS			TOTAL	WRITING SKILLS			TOTAL	ORAL SKILLS			TOTAL
NAME OF PUPIL	A	B	C		D	E	F		G	H	I	

PRIMARY TWO

READING SKILLS

ITEM A: Ability to pronounce words correctly.

B: Ability to read aloud short sentences from chalkboard and textbooks.

C: Ability to read silently and answer questions based on what is read.

WRITING SKILLS

ITEM D: Ability to copy patterns correctly from chalkboard and textbooks.

E: Ability to copy words and short sentences correctly from chalkboard and textbook.

F: Fill in blanks to complete sentences correctly.

ORAL SKILLS

ITEM G: Ability to answer questions correctly.

H: Ability to ask questions.

I: Ability to converse with classmates.

CENTRE FOR RESEARCH ON IMPROVING QUALITY OF PRIMARY EDUCATION IN GHANA, FACULTY OF EDUCATION UNIVERSITY OF CAPE COAST

INTERVIEW GUIDE FOR CIRCUIT SUPERVISORS

NAME OF DISTRICT .....
IDENTITY OF CIRCUIT (NO. OR LETTER) .....
NO. OF PRIMARY SCHOOLS IN THE CIRCUIT .....
.....

1. Have the schools in your circuit been supplied with sufficient number of English Reading materials? Yes..... No .....

2. Has the supply been regular? Yes..... No.....

3. Have you been organizing workshops/in-service training on the teaching and learning of English Language for the teachers? Yes..... No.....

4. When was the last workshop for English organized for your teachers?
   .....
   .....
   .....

5. How have you been ensuring that the teaching and learning of English Language in the schools under you are effective?
   .....
   .....
   .....
   .....
   .....

6. What is the existing policy on the supply and use of textbooks in the schools? .....
   .....
   .....
   .....
   .....

7. In your own view, how does the policy on supply and use of textbooks in schools affect teaching and learning of English language?
   .....
   .....
   .....
   .....

8. Any other comment? .....
   .....
   .....

15. What steps are taken by you to ensure that your teachers are conversant with current effective methods of teaching English language?

.....
.....
.....
.....

16. When was the last course on the teaching of English organized for your teachers? .....
.....
.....

17. Who organized the course?

.....

18. Is there any official policy on the use of English language in Primary Schools? Yes ..... No .....

19. In brief, what is this policy?

.....
.....
.....
.....

20. How has the policy affected the standard of English language in your school?

.....
.....
.....

21. (a) Has your school any rules governing the use of English in the school? Yes ..... No .....

(b) What are they? (state briefly)

.....
.....
.....
.....

22. How do you ensure that the rules are followed by the
(a) teachers

.....
.....
.....

(b) pupils

.....

.....

.....

23. Any other comments?

.....

.....

.....

CENTRE FOR RESEARCH ON IMPROVING QUALITY OF PRIMARY EDUCATION IN GHANA, FACULTY OF EDUCATION UNIVERSITY OF CAPE COAST.

INTERVIEW GUIDE FOR HEADTEACHERS

I. NAME OF SCHOOL .....
II. DISTRICT .....
III. CIRCUIT IDENTITY .....
IV. QUALIFICATION OF HEADTEACHER .....
V. TEACHING EXPERIENCE .....RANK (IN G.E.S) .....
VI. EXPERIENCE AS HEADTEACHER .....
VII. HEADSHIP EXPERIENCE IN THE CURRENT SCHOOL
(IF DIFFERENT FROM VI ABOVE) .....

---

1. Are the periods allowed on the official Time Table for the teaching of English language adequate for all classes? Yes..... No .....

2. How many hours are given to the teaching of English language in the following classes per week?

   a. Class II ..... b. Class III .....
   c. Class IV ..... d. Class V .....

3. (a) Are teachers allowed to allocate specific periods for the teaching of the various aspects of English language in their classes? (eg. reading, Oral Work, Written Work) Yes ..... No .....

   (b) If yes, do all your teachers allocate specific periods to the teaching of the various aspects of English language? (ie. Reading, Oral English, Written Language) Yes ..... No .....

   (c) If no, how do they use the official time allotted to cover all the aspects of English language skills?
   .....
   .....
   .....

4. Do the teachers stick to these official hours?
   Yes ..... No .....

5. How do you ensure that the English language periods are used effectively for the teaching of English?
   .....
   .....
   .....

6. Do all classes have adequate supply of English course books?
   a. Pupils' Readers Yes ..... No .....
   b. Pupils' Copy books Yes ..... No .....
   c. Teacher's Copy Yes ..... No .....

7. Are the English Course Books supplied regularly by the Ministry of Education/G.E.S.?
   Yes ..... No .....

8. Is there a periodic replacement of lost or torn-out books by the Ministry of Education/G.E.S
   Yes ..... No .....

9. If no, give reasons .....
   .....
   .....

10. Who is responsible for replacement of lost or torn-out books?
    .....

11. (a) Do you have storage facilities for keeping books in all classes?
    Yes ..... No .....

    (b) If no, how do you keep books in the school?
    .....
    .....

12. Has the school a library? Yes .....

13. What activities are organized in your school to promote:
    (a) English reading habits
    .....
    .....
    .....
    (b) Oral English .....
    .....
    .....
    .....
    (c) English language writing skills .....
    .....
    .....
    .....

14. Does the school have supplementary materials?

    Yes ..... No .....

Establishing Inter-Observer Reliability

Pupil Observation Form

1. Two observers should observe simultaneously. One of the observers can be the CRIQPEG team member who is working with the teacher. The other observer should rotate amongst the other 3 team members.

2. After preparing one seating chart, the two observers should agree as to which pupils will be observed. They should also set their watches to the same time, and start observing at the same time. Also, for both observers, the 5 minute intervals should be the same.

3. Each observer completes pages 1 and 2 of the Pupil Observation Form independently (including the totals). Following the observation, the two observers should compare their Forms.

4. To compute percent agreement, the two observers should focus on the G1, G2, B1, and B2 columns in the TOTALS section of the form. Using only these columns, they should count up the number of times the total for each of the 26 categories for each observed pupil is different and the number of times the total is in agreement. The number of disagreements + agreements should total 104. There should be no more than 20 instances of "disagreement".

5. Discrepancies should be discussed. Any concerns or questions should be discussed with the team leader. If a discrepancy cannot be resolved, the coding done by the team member who is NOT working with the teacher should be recorded.

Classroom Observation Form

1. The observer who is NOT working with the teacher should complete this form.

2. This form is only completed for observations of English lessons.

3. The observer who is working with the teacher may wish to complete a separate copy of the form as well. The information from this form may be useful in providing feedback to the teacher.

Teacher speaks English: The observed child is exposed to the teacher speaking English.

Other children choral Eng: The observed child is in the room when other children in the class use choral English.

Other child speaks Eng: The observed child is in the room when another child in the class speaks English.

Tcher speaks Ghana lang: The observed child is exposed to the teacher speaking a Ghanaian language.

Other children choral Gha: The observed child is in the room when other children in the class use choral Ghanaian.

Other child speaks Eng: The observed child is in the room when another child in the class speaks a Ghanaian language.

Directions for Creating a Seating Chart

1. Draw the outline of the room. Label the location of the door, the chalkboard, and any windows.

2. Draw and label major features of the room (teacher's desk, cubbard, etc.).

3. Draw the tables and desks. Use a line for each desk.

4. Indicate the children with a B for each boy and a G for each girl.

5. Once you have labeled all of the boys and girls, ask the teacher to help you locate the children who were tested. Start with #1 and ask the teacher where the child sits. Write a 1 next to the B or G on your chart. Then ask about child #2, and so on. You will locate all of the children who were tested. Note any children who are absent on the side or back of the seating chart. Also note how many boys and girls were present in the classroom.

6. Clearly label the chart with the following information:

School name
Teacher's name
Level (P2, P3, P4, P5)
Date
Observers names

USE SAMPLE CHART AS A GUIDE

Date: _____

School_____

Class:_____

Pupil Observation Form

Page 2

Total Time:_____

Observor :_____

2ndObservor:_____

5 minute intervals	___:___ - ___:___				___:___ - ___:___				___:___ - ___:___				___:___ - ___:___				TOTALS							
	G1	G2	B1	B2	G1	G2	B1	B2	G1	G2	B1	B2	G1	G2	B1	B2	G1	G1T	G2	G2T	B1	B1T	B2	B2T
Context																								
Content																								
Exposure to Print																								
Child has textbook																								
Child uses textbook																								
Child shares textbook																								
Child uses shared textbook																								
Child has exercise book																								
Child uses exercise book																								
Child has other print																								
Child uses other print																								
Print on chalkboard																								
New print on ckalkboard																								
Visual aids visible																								
Visual aids used																								
Oral Language-Speaking																								
Child speaks Eng to Teacher																								
Child speaks Eng to other child																								
Child + Class choral Eng																								
Child speaks Gha to Teacher																								
Child speaks Gha to other child																								
Child + Class choral Gha																								
Oral Language-Listening																								
Teacher speaks English																								
Other children choral Eng																								
Other child speaks Eng																								
Tchr speaks Ghana lang																								
Other children choral Gha																								
Other child speaks Gha																								

Context

A=Small gp teacher present

B=Small gp-teacher not present

C=Large gp/whole class-led by teacher

D=Large gp/Whole class-assigned work without teacher participation

E=Transition time

F=Opening/Dismissal

G=Recess/PE

Date: _____

School_____

Class:_____

Pupil Observation Form

Start time:_____

End time:_____

Observor:_____

5 minute intervals	: - :				: - :				: - :				: - :				: - :				: - :			
	G1	G2	B1	B2	G1	G2	B1	B2	G1	G2	B1	B2	G1	G2	B1	B2	G1	G2	B1	B2	G1	G2	B1	B2
Context																								
Content																								
Exposure to Print																								
Child has textbook																								
Child uses textbook																								
Child shares textbook																								
Child uses shared textbook																								
Child has exercise book																								
Child uses exercise book																								
Child has other print																								
Child uses other print																								
Print on chalkboard																								
New print on ckalkboard																								
Visual aids visible																								
Visual aids used																								
Oral Language-Speaking																								
Child speaks Eng to Teacher																								
Child speaks Eng to other child																								
Child + Class choral Eng																								
Child speaks Gha to Teacher																								
Child speaks Gha to other child																								
Child + Class choral Gha																								
Oral Language-Listening																								
Teacher speaks English																								
Other children choral Eng																								
Other child speaks Eng																								
Tchr speaks Ghana lang																								
Other children choral Gha																								
Other child speaks Gha																								

Context
A=Small gp teacher present
B=Small gp-teacher not present
C=Large gp/whole class-led by teacher
D=Large gp/Whole class-assigned work without teacher participation

Content
E=English
M=Maths
SS=Social Studies
Sc=Science

Pupil ID#
Girl 1: _____
Girl 2: _____

observed) to stop misbehaving. The child doesn't respond audibly.

10:05-10:10
Context=Whole class/led by teacher
Content=English
G1 returns with the textbooks. The teacher thanks G1. G1 replies "Yes Teacher." The teacher in English directs two boys to hand out the textbooks. One boy asks a question in Ghanaian. The teacher responds in Ghanaian. The teacher tells the class in English to turn to page 7. G1, G2, and B1 each have a textbook and comply. B2 shares a textbook and complies.

10:10-10:15
Context=Whole class/led by teacher
Content=English
G1, G2, and B1 have and use textbook. B2 shares and uses a shared textbook.
The teacher writes on the chalkboard.
The teacher calls on several children including B1 and G1. The teacher also uses choral English.
All 4 observed children hear other children speaking English and choral English.

10:15-10:20
Context=Dismissal
Content=English
G1, G2, and B1 have but do not use the textbook. B2 shares but does not use the textbook.
There is no new print on the chalkboard but the old remains.
The teacher directs the class in English to close their books and the prepare for dismissal for lunch break. She repeats the request in Ghanaian.
As the children leave they speak Ghanaian to one another. G1 and G2 don't appear to be talking. B1 and B2 speak Ghanaian.
All children leaave the classroom during this interval.

TOTALS:
The space for Context totals is too small. Fit it in as best you can. Note that the total (G1T, G2T, B1T, and B2T) are the same if all 4 children stay in the classroom for the whole observation.

Also note that some categories tend to be the same for all children. For example, "Print on chalkboard". This is also true for the "Oral Language Listening" categories. The point of these is to assess how much English and Ghanaian the child is exposed to or hears. Thus if someone in the class speaks English, and the other children in the class hear the English, these categories would be relevant.

On the sample form, "x" has been used to mark a coding category as "checked", whereas "0" and lines have been used to indicate categories that should not be "checked".

Sample Pupil Observation

9:35-9:40
Context=Whole class/teacher led lesson.
Content=English
Teacher tells children in English to copy what is on the chalkboard in their exercise books. G1, G2, and B1 comply. B2 doesn't have an exercise book. The teacher asks the children if they know what to do and all the children respond in choral English, "Yes teacher."

9:40-9:45
Context=Whole class/teacher not participating
Content=English
For most of the 5 minutes the teacher sits at a desk.
G1, G2, and B1 write in their exercise books.
A child (not one being observed) asks the teacher a question in English. The teacher clarifies the task in English and asks the class to respond in choral English.

9:45-9:50
Context=Whole class/teacher not participating
Content=English
For most of the 5 minutes the teacher sits at a desk.
G1, G2, and B1 continue to use their exercise books.

9:50-9:55
Context=Whole class/teacher not participating
Content=English
For most of the 5 minutes the teacher sits at a desk.
The teacher asks B2 in English where is his book. B2 responds in Ghanaian.
The teacher asks G1 to go collect the textbooks. In English, G1 asks where they are. The teacher responds in English. G1 leaves the classroom near the end of the 5 minutes.

Notice that when G1 speaks English, G2, B1, and B2 are exposed (listen) to English. Similarly, when B2 speaks Ghanaian, G1, G2, and B1 are exposed (listen) to Ghanaian.

9:55-10:00
Context=For the children who are in the classroom, Whole class/teacher not participating; since G1 is not in the classroom, the context for her = 0
[NOTE: This is a NEW code!]
G2 and B1 continue working in the exercise books.
Teacher tells children in English to keep working.

10:00-10:05
Context=For the children who are in the classroom, Whole class/teacher not participating; since G1 is still not in the classroom, the context for her = 0
For most of the 5 minutes the teacher continues to sit at a desk.
The teacher uses Ghanaian language to tell a child (not one being

SAMPLE

Pupil Observation Form

Date: 25 May
School: School Name
Class: P6

Start time: 9:35
End time: 10:20
Observor: A Harris

5 minute intervals	9:35 - 9:40				9:40 - 9:45				9:45 - 9:50				9:50 - 9:55				9:55 - 10:00				10: - 10:05			
	G1	G2	B1	B2	G1	G2	B1	B2	G1	G2	B1	B2	G1	G2	B1	B2	G1	G2	B1	B2	G1	G2	B1	B2
Context	C	C	C	C	D	D	D	D	D	D	D	D	D	D	D	D	O	D	D	D	O	D	D	D
Content	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	E	E	E		E	E	E
Exposure to Print																								
Child has textbook	O																							
Child uses textbook	O																							
Child shares textbook	O																							
Child uses shared textbook	O																							
Child has exercise book	X	X	X	O	X	X	X	O	X	X	X	O	X	X	X	O		X	X	O		X	X	O
Child uses exercise book	X	X	X	O	X	X	X	O	X	X	X	O	X	X	X	O		X	X	O		X	X	O
Child has other print	O																							
Child uses other print	O																							
Print on chalkboard	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X		X	X	X
New print on ckalkboard	O																							
Visual aids visible	O																							
Visual aids used	O																							
Oral Language-Speaking																								
Child speaks Eng to Teacher	O												X	O	O	O								
Child speaks Eng to other child	O																							
Child + Class choral Eng	X	X	X	X	X	X	X	X																
Child speaks Gha to Teacher	O															X								
Child speaks Gha to other child	O																							
Child + Class choral Gha	O																							
Oral Language-Listening																								
Teacher speaks English	X	X	X	X	X	X	X	X	O				X	X	X	X		X	X	X		X	X	X
Other children choral Eng	X	X	X	X	X	X	X	X	O															
Other child speaks Eng	O				X	X	X	X	O				O	X	X	X								
Tchr speaks Ghana lang	O																					X	X	X
Other children choral Gha	O																							
Other child speaks Gha	O												X	X	X	O								

Context
A=Small gp teacher present
B=Small gp-teacher not present
C=Large gp/whole class-led by teacher
D=Large gp/Whole class-assigned work without teacher participation
E=Transition time
F=Opening/Dismissal

O = child leaves classroom

Content
E=English
M=Maths
SS=Social Studies
Sc=Science
O=Other dismissal

BEST AVAILABLE COPY

Pupil ID#
Girl 1: 8
Girl 2: 14
Boy 1: 2
Boy 2: 10

BEST AVAILABLE COPY

Date: 25 May 94
School: Sample School
Class: P5

Pupil Observation Form
Page 2

Total Time: 45 min
Observor: A. Harris
2ndObservor: B Okyere

5 minute intervals	10:05-10:10				10:10-10:15				10:15-10:20				: - :				TOTALS							
	G1	G2	B1	B2	G1	G2	B1	B2	G1	G2	B1	B2	G1	G2	B1	B2	G1	G1T	G2	G2T	B1	B1T	B2	B2T
Context	C	C	C	C	C	C	C	C	F	F	F	F					3C 3D	2O 1F	5D	3C 1F	5D	3C 1F	5D	3C 1F
Content	E	E	E	E	E	E	E	E	O	O	O	O					6E	1O	8E	1O	8E	1O	8E	1O
Exposure to Print																								
Child has textbook	X	X	X	O	X	X	X	O	X	X	X	O					3	7	3	9	3	9	0	9
Child uses textbook	X	X	X	O	X	X	X	O									2	7	2	9	2	9	0	9
Child shares textbook				X				X				X					0	7	0	9	0	9	3	9
Child uses shared textbook				X				X									0	7	0	9	0	9	2	9
Child has exercise book	X	X	X	O	X	X	X	O	X	X	X	O					7	7	9	9	9	9	0	9
Child uses exercise book																	4	7	6	9	6	9	0	9
Child has other print																	0	7	0	9	0	9	0	9
Child uses other print																	0	7	0	9	0	9	0	9
Print on chalkboard	X	X	X	X	X	X	X	X	X	X	X	X					7	7	9	9	9	9	9	9
New print on ckalkboard					X	X	X	X									1	7	1	9	1	9	1	9
Visual aids visible																	0	7	0	9	0	9	0	9
Visual aids used																	0	7	0	9	0	9	0	9
Oral Language-Speaking																								
Child speaks Eng to Teacher	X				X	O	X	O									3	7	0	9	1	9	0	9
Child speaks Eng to other child																	0	7	0	9	0	9	0	9
Child + Class choral Eng					X	X	X	X	X	X	X	X					4	7	4	9	4	9	4	9
Child speaks Gha to Teacher																	0	7	0	9	0	9	1	9
Child speaks Gha to other child									O	O	X	X					0	7	0	9	1	9	1	9
Child + Class choral Gha																	0	7	0	9	0	9	0	9
Oral Language-Listening																								
Teacher speaks English	X	X	X	X	X	X	X	X	X	X	X	X					6	7	8	9	8	9	8	9
Other children choral Eng					X	X	X	X									3	7	3	9	3	9	3	9
Other child speaks Eng	O	X	X	X	X	X	X	X									2	7	4	9	4	9	4	9
Tchr speaks Ghana lang	X	X	X	X					X	X	X	X					2	7	3	9	3	9	3	9
Other children choral Gha																	0	7	0	9	0	9	0	9
Other child speaks Gha	X	X	X	X					X	X	X	X					3	7	3	9	3	9	2	9

Context
A=Small gp teacher present
B=Small gp-teacher not present
C=Large gp/whole class-led by teacher
D=Large gp/Whole class-assigned work without teacher participation
E=Transition time
F=Opening/Dismissal

School:_____ Date: _____
Level: _____ Time: _____
Teacher:_____ Observer: _____
Content: _____ Observation #: _____

II.d. List any functional English expressions that were part of the classroom routine.

III.a. Instructional strategies. Describe the lesson.

III.b. What strategies did the teacher use to assess oral language? (check all that apply)

_____ called on individual pupils to repeat phrase/word/sound
_____ choral response with signal to repeat phrase/word/sound
_____ called on individual pupils to give brief (e.g., yes/no) response
_____ choral response to give brief (yes/no) response
_____ called on individual pupils to give free expression response
_____ other: _____
_____ none

III.c. What strategies did the teacher use to assess reading? (check all that apply)

____ ask children to read aloud individually
____ choral reading on signal
____ ask comprehension questions
____ other_____
____ none

School:_____ Date: _____
Level: _____ Time: _____
Teacher:_____ Observer: _____
Content: _____ Observation #: _____

Pupil and Classroom Observation Form

I. a. Describe any printed material visible to pupils in the classroom. What is on the walls? ...on the chalkboard?

I.b. Are there any other visual aids or pictures (calendar, clock, etc.)? yes ____ no____ What?

I.c. Describe any changes that occur during the time that you are in the school. (Does the teacher add posters or change what is on the chalkboard?)

II.a.Language Usage: What percentage (approximately) of what the teacher says is in English, in Ghanaian, or in a mix of Ghanaian and English?

Teacher:	English	Ghanaian	Mix
A. During English class	_____	_____	_____
B. During change-over times	_____	_____	_____
C. During other subjects	_____	_____	_____
D. Outside of class at school	_____	_____	_____

II.b.Language Usage: What percentage (approximately) of what the children say is in English, in Ghanaian, or in a mix of Ghanaian and English?

Children:	English	Ghanaian	Mix
A. During English class	_____	_____	_____
B. During change-over times	_____	_____	_____
C. During other subjects	_____	_____	_____
D. Outside of class at school	_____	_____	_____

II.c. Can you identify any patterns for when teachers or children use one language or another (exa.: when teachers discipline or praise children, instruction versus class management, when children talk to other children, etc.)?

CENTRE FOR RESEARCH ON IMPROVING QUALITY OF PRIMARY EDUCATION IN GHANA, FACULTY OF EDUCATION UNIVERSITY OF CAPE COAST

INTERVIEW GUIDE FOR TEACHERS

DIRECTION: Allow the respondents to react as freely as possible to the following items, and record accordingly.

SECTION A: ENGLISH READING

1. a. What method(s) do you use in teaching English reading?

   b. Describe the steps.

   .....
   .....
   .....
   .....

2. Give reasons for your choice of method(s). .....
   .....
   .....
   .....

3. Have you encountered any difficulties in using any of these methods?
   Yes..... No.....

4. If yes, what are these difficulties? .....
   .....
   .....
   .....

5. Have you considered other ways of teaching reading effectively?
   Yes..... No.....

6. If yes, what are the steps? .....
   .....
   .....
   .....
   .....

7. Why do you consider these methods effective? .....
   .....
   .....
   .....
   .....
   .....

School:_____ Date: _____
Level: _____ Time: _____
Teacher:_____ Observer: _____
Content: _____ Observation #: _____

III.d. What did the teacher do when a child gave the wrong response or did not respond at all? (check all that apply)

____ call on another child
____ provide feedback
____ provide remediation-modeling the complete sequence
____ provide remediation-analysis (breaking the task down)
____ criticize the child
____ encourage the child to try again
____ ignore the error
____ other _____

III.e. Was the lesson adapted for low performing pupils?
_____ yes _____ no If yes, how?

III.f. Was the lesson adapted or was there enrichment for quick learners? _____ yes _____ no If so, how?

IV.a. Note if there was any particular incident that seemed informative. Also note if the day or class was irregular for some reason.

IV.b. Anecdodal comments?

Attachment 1*d*

Quartelry Report (January-March 1994)

125

REPORT ON THE ACTIVITIES OF THE CENTRE FOR RESEARCH ON IMPROVING THE QUALITY OF PRIMARY EDUCATION IN GHANA (CRIQPEG) UNIVERSITY OF CAPE COAST---SECOND QUARTER (JANUARY, 1994 TO MARCH, 1994)

DR. BEATRICE A. OKYERE
COORDINATOR
CRIQPEG

126

REPORT ON THE ACTIVITIES OF THE CENTRE FOR RESEARCH ON IMPROVING THE QUALITY OF PRIMARY EDUCATION IN GHANA(CRIQPEG) UNIVERSITY OF CAPE COAST---SECOND QUARTER(JANUARY,1994 TO MARCH, 1994)

INTRODUCTION

The Second phase of the Improving Educational Quality Project in Ghana began with the preparation and pilot testing of curriculum-based assessment instruments for Reading, Writing, and Oral Proficiency in the English Language, Teacher Rating scale, Classroom Observation schedule, and semi-structured Interview Schedules for Teachers, Pupils, Headteachers, Parents/Guardians and Circuit Supervisors. During the period between January and April the baseline data-collection was carried out using the above-mentioned data-collection instruments. Below is the full report on the data-collection activities during the period.

SAMPLE OF SCHOOLS

Fourteen primary Schools were selected for the second phase study, eight from the Central Region and six from the Western Region. The Central Region Schools included the six schools observed during the Phase One study. Each of the seven CRIQPEG research teams was responsible for the data collection in two schools. Data was collected from grades two through five in each school. Seven of the schools in the Central Region where intervention would be tried out and as a result be more involved in the research were designated "intensive

involvement" schools while the remaining seven were designated "non-intensive" schools.

The team leaders and members paid initial visits to the schools during which they introduced themselves and provided feedback on the Phase One study. Discussions were also held to arrive at a consensus on the focus for the Phase Two study. The baseline data collection then began with the pupil performance assessment using the Curriculum-based assessment instruments for Oral Proficiency, Reading and Writing. The research teams visited the schools two days in a week and spent the rest of the week on teaching and other assignments at the University.

CURRICULUM-BASED ASSESSMENT

The classroom teachers were asked to group their students into three categories representing good readers, average readers and poor readers in each of the four grades. For the intensive schools, a maximum of twenty-five pupils were randomly selected for the assessment while not more than fifteen were randomly selected for the non-intensive schools from each of the grades using the stratified random sampling technique, to ensure that students in the three reading ability groups were represented in the sample.

The students selected were assessed individually in Oral Proficiency, Reading and Writing. The Oral Proficiency test included listening

and speaking items. The reading test was on letter recognition, concept about print, reading most used words, reading passages and reading comprehension and the writing test included copying of words and sentences, writing one's name and writing as many words as one could in ten minutes.

TEACHER RATINGS

The classroom teachers involved were also asked to rate the students selected for the assessment using the rating scale prepared and pilot tested. Pupils were rated on nine items dealing with reading, writing and oral proficiency skills.

OBSERVATIONS

Observations were carried out in the four grades in all the fourteen schools after the assessment. Specifically, English Language lessons were observed in grades two through five while in addition the use of English language in the teaching of other subjects were observed in grades four and five. The observations focused mainly on how English Language was taught and used in the classrooms, the availability of English textbooks and how they were used by the teachers and pupils and finally, teacher-pupil and pupil-pupil interactions in the classrooms.

The observations were carried out in pairs, that is, two research team members paired up for the observations in the classrooms and compared their individual data after each day's observation to

ensure reliability of the data. At least 4 English lessons were observed and each classroom was visited 4 times during the data collection period to ensure that the data collected actually depicted how English Language was taught and used in the classrooms observed.

INTERVIEWS

The Headteachers, and the teachers involved in the study were all interviewed. However, a sample of 9 students from each of the 4 grades and their parents, as well as the circuit Supervisors and the Executives of the Parent-Teacher Associations for the various schools were interviewed using the interview guides.

The purpose of the interviews was to find out the views of the various categories of individuals involved about the opportunities and facilities available for the teaching and learning of English Language. From the Teachers and the Headteachers especially, explanations were sought concerning teaching strategies employed during the observations. On the whole, the interviews gave the researchers the opportunity to discuss and clarify issues on policies in place affecting the use of materials in the teaching and learning of the English Language. Interviewing the different categories of individuals enabled the researchers to cross-check and confirm the information provided by them(triangulation).

PREPARATION FOR DATA ANALYSIS

The analyses of the performance data began in early March under the supervision of Dr. Aida Pasigna of the Institute for International Research. Basically, the research teams summarised the data on record sheets for individuals, classrooms and schools. Also, the summaries of the data were entered into the computer ready for the analyses. The summaries of the pupil performance tests gave some indication of the overall performance of the pupils.

Dr. Pasigna, led the CRIQPEG team in brainstorming sessions to discuss the teaching and learning problems they have perceived, the possible causes of the problems and to identify some interventions that could be used in the seven intensive schools. The problems, causes and possible interventions prioritized are summarized below.

MAJOR PROBLEMS

Pupils.

1. Very poor in oral expression
2. Lack word attack skills
    - Letter/Sound
    - Word boundaries
    - Word recognition
3. Limited vocabulary
4. Lack writing skills
    - Mechanics

B. Teachers

1. Some teachers have problems with oral expression.
2. Ineffective teaching methods/techniques
3. Lack of variety in teaching methodology
4. Inefficient assessment
5. Inadequate planning/preparation

PERCEIVED CAUSES OF PROBLEMS

A. Pupils

1. Lack of individualized attention
2. Ineffective instruction
3. Inadequate assessment
4. Absenteeism (pupil and teacher)
5. Lack of practice in use of English in the classroom/school/home
6. Lack of practice in reading print(textbook)
7. Lack of instruction in writing (mechanics)
8. Lack of good model in spoken English
9. Insufficient time allotted in time table to English teaching
10. Lack of textbooks.

B. Teachers.

1. Underqualified teachers
    - o. Inadequate academic training
    - o. Inadequate professional training
2. Lack of motivation

3. Overcrowded classrooms
4. Lack of teaching aids
5. Lack of textbooks
6. Lack of supervision

Interventions that address learners and learning problems

1. Provide enough textbooks to project schools.
2. Allow students to take textbooks home.
3. Increase reading activities (oral and silent) from textbooks and other printed materials (e.g., old newspapers, magazines, etc.)
4. Train pupils in word attack strategies (e.g., use of phonics, context clues, structural and configuration clues, etc.) and in the use of simple learning aids (e.g., flashcards, posters) for drill/practice in reading.
5. Provide practice in mechanics of writing.

Interventions that directly address teachers and teaching/instructional problems.

1. Train teachers in methods/techniques of English teaching.
   * Oral English (listening comprehension, oral expression)
   * Reading
     - Prereading skills
     - Letter/sound recognition and production
     - Word recognition
     - Word boundaries

- Comprehension (literal, inferential)

* Mechanics of writing

2. Train teachers in 'diagnostic-prescriptive' approaches to teaching
   * How to spot (diagnose) learning problems.
     Continuous assessment
   * Provide teachers with sample teaching aids and sample materials that they can use for teaching/remediation and/or testing.
   * Train teachers how to prepare inexpensive teaching aids.
   * Urge teachers to speak in English to their pupils while in class/school.
   * Provide/Increase supervisory help to teachers.
   * Increase time allotted to English teaching.
   * Solicit the cooperation of parents and community members to help/encourage/tutor children at home/school
   * Organize inter-class and inter-school competitions in English. in collaboration with GES.

The observations and the interviews began in the third week of March and were completed during the second week of April. Complete analyses and report writing of the baseline data is in progress.

PROFESSIONAL DEVELOPMENT ACTIVITIES IN THE U.S.

Two members of the CRIQPEG team, the Co-ordinator (Dr. Beatrice Okyere) and a Research Team Leader (Mr. Amedahe) participated in a series of Professional Development activities in the U.S. from 15th to 31st March, 1994. The activities included a Comparative and International Education Society conference in San Diego from March 21-24, where the two CRIQPEG representatives took part in a six-member panel presentation on IEQ projects in Ghana, Guatemala, and Mali.

Dr. Okyere and Mr. Amedahe also participated in a four- day Workshop held at the University of Pittsburgh from 28th to 31st March. The workshop activities included a presentation on "Improving Educational Quality: Lessons from Ghana, Guatemala, and Mali". Sessions were also held on Data Collection and Analysis in Qualitative Research; Linking Research and Practice: Action Research in Classroom and University-Based Fducators; Language teaching, Learning, and Assessment, and visits to selected Pittsburgh schools to observe the teaching of English as a second Language. The two CRIQPEG representatives returned to Ghana on the 2nd of April, 1994.

PROFESSIONAL DEVELOPMENT ACTIVITIES IN THE U.S.

Two members of the CRIQPEG team, the Co-ordinator (Dr. Beatrice Okyere) and a Research Team Leader (Mr. Amedahe) participated in a series of Professional Development activities in the U.S. from 15th to 31st March, 1994. The activities included a Comparative and International Education Society conference in San Diego from March 21-24, where the two CRIQPEG representatives took part in a six-member panel presentation on IEQ projects in Ghana, Guatemala, and Mali.

Dr. Okyere and Mr. Amedahe also participated in a four- day Workshop held at the University of Pittsburgh from 28th to 31st March. The workshop activities included a presentation on "Improving Educational Quality: Lessons from Ghana, Guatemala, and Mali". Sessions were also held on Data Collection and Analysis in Qualitative Research; Linking Research and Practice: Action Research in Classroom and University-Based Educators; Language teaching, Learning, and Assessment, and visits to selected Pittsburgh schools to observe the teaching of English as a second Language. The two CRIQPEG representatives returned to Ghana on the 2nd of April, 1994.

Attachment 1*e*

Quarterly Report (April-June 1994)

REPORT ON THE ACTIVITIES OF THE CENTRE FOR RESEARCH ON IMPROVING THE QUALITY OF PRIMARY EDUCATION IN GHANA(CRIQPEG) UNIVERSITY OF CAPE COAST--- THIRD QUARTER(APRIL,1994 TO JUNE, 1994)

DR. BEATRICE A. OKYERE
COORDINATOR
CRIQPEG

REPORT ON THE ACTIVITIES OF THE CENTRE FOR RESEARCH ON IMPROVING QUALITY OF PRIMARY EDUCATION IN GHANA (CRIQPEG)UNIVERSITY OF CAPE COAST-- THIRD QUARTER(APRIL TO JUNE, 1994).

INTRODUCTION

During the months of April to June 1994, CRIQPEG activities included the continuation of baseline data-collection and initial data analyses; visits by two IEQ consultants from the US and four Ministry of Education officials from Swaziland; Professional Development seminar for CRIQPEG research team, circuit supervisors and headteachers; briefing sessions with GES and USAID officials on CRIQPEG activities and the results of the Pupil Performance Assessment, and the training of classroom teachers on initial interventions to be carried out in the seven intensive schools.

CONTINUATION OF BASELINE DATA-COLLECTION.

The classroom observations and the interviews with headteachers. teachers, circuit supervisors, pupils and PTA leaders were completed in the second week of April. On completion of the data collection, an initial analysis and report was prepared by each of the research teams and submitted at the end of the first week of May.

VISITS BY CONSULTANTS FROM THE USA

Drs. Aida Pasigna and Abigail Harris, IEQ Consultants from the U.S.A, visited CRIQPEG for three weeks during the month of May to participate in a number of activities. First, the consultants participated

in the briefing sessions held with USAID and Ghana Education Service officials including the Director-General, on current activities of CRIQPEG and particularly to share with them the results of the Pupil Performance Assessment, classroom observations and interviews carried out in the fourteen primary schools.

The consultants also helped with the preparations towards the professional development seminar and actually trained the research teams, circuit supervisors and headteachers on the initial intervention strategies that could be used in the seven intensive schools. Also, Dr. Abigail Harris had the opportunity to visit some of the schools during the training of the classroom teachers by the research teams on the interventions .

VISITS BY FOUR MINISTRY OF EDUCATION OFFICIALS FROM SWAZILAND

Four Ministry of Education officials from Swaziland visited CRIQPEG from the 18th to 21st May, 1994. These officials are in charge of the planning and the implementation of the continuous assessment project in Swaziland. The purpose of their visit was to familiarize themselves with CRIQPEG activities, especially the research strategies being used in the primary school classrooms and also exchange ideas with colleagues at the Centre. Their visit coincided with the three-day Professional Development Seminar, therefore they participated fully in the seminar and also visited a local school where they held discussions with the teachers on the school's continuous assessment practices.

Apart from that they had the opportunity to visit with the Vice-Chancellor and the Dean of the Faculty of Education, had a special evening with CRIQPEG Research Team Leaders during which informal discussions were held on their work in Swaziland. The Coordinator also had the opportunity to discuss with them a research proposal they were working on.

Despite their heavy schedule, they managed to have a little bit of relaxation by visiting two places of historic interest in the Central Region of Ghana, the Cape Coast and Elmina Castles.

PROFESSIONAL DEVELOPMENT SEMINAR

A three-day professional development seminar was organized for the Research Team Members, Circuit Supervisors, and Headteachers of the seven intensive schools. In attendance was Mr. Stan Dery a representative from USAID Accra. First, feedback on the results of the English Language Proficiency assessment, the classroom observations and the interviews were given by the Research Team Coordinator. Of particular interest was the levels at which the primary school pupils assessed were operating in their oral proficiency, reading and writing skills. Oral language and reading skills were identified to be the areas that required immediate remediation. Major part of the seminar was devoted to the discussions on intervention strategies that could be employed by the classroom teachers.

Three main goals were identified for this initial intervention in the schools. These were:

1. Constant practice in Oral English
2. Constant exposure to print
3. Making every child a successful learner.

Dr. Aida Pasigna discussed some instructional strategies and displayed instructional aids that could be used to achieve the three goals. Participants were also given the opportunity to prepare instructional materials for the classroom teachers involved in the research.

Apart from the sessions on the intervention strategies, participants were also introduced to the classroom and pupil observation forms that would be used for the data collection. On the whole, the Professional Development seminar was very successful. Even though the Circuit supervisors and the headteachers were invited to participate during the first day, they expressed their desire to attend the seminar during the second and third days as well.

MEETINGS WITH USAID AND GES OFFICIALS IN ACCRA

Before the professional development seminar, meetings were held with Dr. Habib Khan, Director of Education and Human resources, USAID/Accra, Dr. Jan Orlansky, Project director, PREP, and Mr. Stan Dery, an Educational Consultant with PREP, USAID, Accra and Mr. John Atta-Quayson, Acting Director-General of the Ghana Education Service on separate occasions by Drs. Aida Pasigna, Abigail Harris, IEQ

Consultants from the U.S.A. and Beatrice Okyere, the Coordinator for CRIQPEG.

The purpose of the meetings was to share with the officials the current research activities of CRIQPEG and especially the results of the English Language Proficiency assessment carried out as part of the baseline data collection.

TRAINING OF CLASSROOM TEACHERS

Following the professional development seminar organized for the CRIQPEG Research Teams, Headteachers, and Circuit Supervisors, the Teams together with the Circuit Supervisors and the Headteachers carried out a two day workshop in the seven intensive schools during which, the classroom teachers participating in the research were introduced to the initial intervention strategies identified to be used in the intensive schools. Each of the teachers received a jute bag and teaching aids, such as puppets, flash cards, and handouts with information on the teaching strategies etc.

Each of the seven CRIQPEG research teams was responsible for the training of the teachers in one school. Drs. Abigail Harris and Beatrice Okyere participated in the training workshops held for the teachers in the seven "intensive" schools.

INTERVENTION IN THE SEVEN INTENSIVE SCHOOLS

The implementation of the initial intervention strategies in the seven intensive schools began in June. As already indicated, the initial intervention was guided by three main goals. These are,

1. Constant practice in Oral Language,
2. Constant exposure to print,
3. Teaching to make every pupil a successful learner.

STRATEGIES FOR ACHIEVING THE GOALS

With the first goal, that is, CONSTANT PRACTICE IN ORAL ENGLISH, teachers involved with the research were encouraged to:

1. Provide constant practice in functional and conversational English
2. Use standard and predictable expressions and statements
3. Avoid translations
4. Use the direct approach and body language to get a message across
5. Aim for communication rather than just correct pronunciation
6. Aim for comprehension rather than mere "parroting" of sentence patterns
7. Make the practice activity fun and functional

For example, puppets were used as teaching aids to help children practice their oral English skills. Also, the use of dramatization and role play activities such as buying something at the market or going to the

144

clinic, or visiting a friend, were encouraged. Again, teachers were encouraged to ask their pupils to talk about pictures from the textbooks or from other sources such as the daily newspapers etc.

With the second goal, CONSTANT EXPOSURE TO PRINT, the first intervention strategy was to supply enough textbooks to the schools so that there was a ratio of one textbook to one pupil. The books were obtained through the assistance of USAID Accra. Teachers were then encouraged to:

1. Allow children to have constant and easy access to the textbooks especially during their free times (also take the books home after school). In addition they were encouraged to:
2. Use posters and other visual aids to remind children of lessons taught.
2. Build up children's vocabulary by beginning simply and slowly, and continuing to use familiar words and just adding one or two new words at a time.
4. Practice with word families (hat, sat, mat, ...)
5. Use matching activities especially for children who have not yet learned how to read.

To make these strategies more effective, labels were provided for common objects in the classrooms. In teaching the alphabet, teachers were provided with flash cards with the letters printed on them to enable the pupils practice learning the letters as well as to practice

forming simple words with the letters. Also the pupils were encouraged to obtain old newspapers and magazines and circle all the words they could read from them, and cut out words, phrases or sentences they recognized.
Flash cards with words were also used to practice building sentences or stories. A tachistoscope was used to help children learn about word families, etc.

With the third goal, TEACHING TO MAKE EVERY PUPIL A SUCCESSFUL LEARNER the emphasis was on Mastery Learning. The basic theory underlying mastery learning is that, given enough time and appropriate instruction, all students can learn an objective. Therefore, the third goal ensured that learning took place after initial instruction by providing appropriate remedial help to the pupils who had learning difficulty. The teachers' responsibility was to make sure that all the pupils learned by giving them the opportunity to attain their fullest potential. This meant that individual attention was given to all pupils to cater for their specific learning needs.

In addition to the strategies already mentioned, instructional manuals for the teaching of reading and instructional charts, depicting specific teaching strategies were provided and teaching procedures explained to aid teachers in the teaching of oral language, and reading skills to enable every pupil become a successful learner of the English Language.

CRIQPEG research teams visited the schools once every week after the training of the teachers. During the visits, the researchers together with the Circuit Supervisors and the Headteachers observed the teaching of English and the use of English in the teaching of other subjects in the four grade levels, namely grades two through five. Four pupils, specifically two high performing and two low performing in English were also observed during the visits.

The researchers met with the teachers, the headteacher, and the circuit Supervisor at the end of the day's teaching to provide feedback and discuss problems the teachers encountered in their teaching and suggested possible solutions to the problems.

Already, changes are taking place in almost all the seven participating schools. Both teachers and pupils have been observed to be using the English language more often in the classrooms. The teachers are employing the teaching strategies identified for the intervention. Also the classroom environment has been transformed from bare walls to the display of wall charts and the labels for objects in the classroom to achieve the three goals identified for the intervention. The intervention and the school visits will continue till the end of the school term in August.

Attachment 2*a*

Executive Summary: Guatemala Phase I Report

IEQ GUATEMALA: PHASE I

STUDY OF THE *NUEVA ESCUELA UNITARIA* PILOT PROGRAM

EXECUTIVE SUMMARY

Introduction

In Guatemala, IEQ is working with the Ministry of Education (MINEDUC) to study the implementation and impact of *Nueva Escuela Unitaria (NEU)*. The NEU program is designed for multigrade schools in rural areas of Guatemala. It is based on active learning principles that stress collaborative learning, peer teaching, use of self-instructional guides and the like. During the 1993 school year, which corresponded to the first full year of the development of the program, testing and classroom observations of first and second grade children were carried out at 10 experimental schools and 10 comparison schools. These schools formed a 10% sample of the pilot program that is being implemented in two regions, one with a predominantly indigenous population and the other with a non-indigenous or *Ladino* population. The remainder of this document summarizes the study design, the findings of the study, and implications based on the findings.

Design

The design was a pre-post study for second graders and a post-test only study for first graders. Experimental children attended schools implementing the *Nueva Escuela Unitaria* program in one of two regions of Guatemala. Comparison children attended traditional multigrade schools with similar characteristics. Children were tested on a battery of tests including reading, mathematics, creativity, and self-concept. Spanish language proficiency was also assessed in the region with a predominately indigenous population. In addition, a subsample of experimental and comparison children at each of the study schools were the subjects of intensive classroom observation for two, month-long periods during the school year. Twice during the school year, parents and teachers responded to questions related to their satisfaction with the curriculum being implemented in their schools. Two-tailed t-tests were used to assess difference in the test performance of experimental and comparison children. Contrasts were also made by gender and language. Observational data were coded

by the nature of the interaction engaged in by the target child and these interaction codes were summarized and correlated with the children's academic performance on the tests.

Major Findings

Children

Overall, higher academic achievement was found in the experimental schools carrying out the NEU program as it had been designed. However, in schools where the program had not been effectively implemented, children performed no differently on test results or differences favoring children in traditional schools were found.

In Region II, where the NEU program was fairly well implemented in four of the five experimental schools, the significant differences in test scores favored the NEU children on eleven of twelve comparisons where significant differences were found. These results were consistent for both schools in Alta Verapaz, a Mayan-speaking area and Baja Verapaz, a Spanish-speaking area.

In Region IV, however, the NEU program was well implemented in only two of the five experimental schools. In that region, there was little difference in academic achievement as only one of the four significant differences found between experimental and comparison children favored NEU.

Participation in small group activities was significantly related to academic achievement in experimental schools.

In both regions, significant correlations were found between participation in small groups and most measures of academic achievement. Where the program was well implemented, observations showed that a classroom environment that allowed students to engage in an assortment of participation contexts (e.g. small groups with teacher, small group without teacher, small groups with an appointed or elected student leader, dyads) was created. These successful NEU classrooms were observed to have decentralized and diversified discourse and interaction patterns to bring about greater cooperation and more meaningful involvement of individual children in instructional activities.

Where the NEU program is well implemented, it can contribute to increasing cross-sex interactions and to girls' achievement. However, where not implemented effectively, the program may not contribute to girls' achievement.

In Region II, eight of the nine significant differences found on the tests favored NEU girls. In Region IV, three of four significant differences favored girls in the comparison schools.

One of the hypotheses about an active, decentralized learning program, such as that of the NEU, is that it will allow children of different sexes greater access to each other and thereby help to break down traditional stereotypes. The relative frequencies of interactions

with same and opposite sex peers were calculated to investigate this contention. In Region II, girls in both first and second grade at each NEU school interacted with boys with greater frequency than girls in the corresponding comparison schools. In addition, girls in each NEU school interacted with boys with greater frequency than girls in all but one comparison school. This trend was not found in Region IV, however, where girls in both types of schools had similar interaction patterns.

Use of both Mayan and Spanish by children whose dominant language is Mayan is significantly related to achievement in NEU schools.

At the time of the pre-test, Mayan children participating in the NEU program were significantly less proficient in Spanish than the comparison children. However, by the post-test, NEU children performed as well as the comparison children on all Spanish reading measures.

Despite similar overall patterns of language use, the relationship of language use to academic performance differed greatly in NEU and comparison schools. The use of Spanish was significantly correlated with vocabulary, comprehension, overall reading and mathematics at the first grade level in NEU schools. Spanish comprehension was also correlated with the use of Q'eqchi', suggesting that the opportunity given by NEU to construct knowledge in the native language aids children in understanding the content presented in a second language, at early levels of second language acquisition. No significant relationships were found between language use and achievement among first graders in comparison schools.

Both malnourished and well-nourished children participating in NEU had higher academic achievement than comparison children in schools where the program was well implemented.

The relationship between nutrition level and academic achievement differs in the two regions studied. Region II malnourished children and relatively well nourished children in NEU consistently performed better on achievement measures than comparison children. This was not the case in Region IV.

The relationship between nutrition level and achievement in the NEU schools has as a mediating factor the context and the type of interaction that this new methodology provides. Where the teacher was observed to implement an active teaching style, the pupils with a low level of nutrition were compelled to participate in the classroom activities in spite of their low activity level and natural tendency toward isolation. This was not observed to occur where the NEU program was less well implemented nor in traditional schools.

Parents

Parents generally had highly favorable perceptions of the NEU program.

The NEU program already seems to have had an impact at the community level, since it was found that by the end of the school year the parents of NEU children perceived that there was a favorable change in the school in a significantly greater proportion than in the traditional schools. Furthermore, in the NEU schools the percentage of drop-outs was significantly lower when contrasted with the comparison schools.

These two findings are yet more relevant if it is considered that the parents of the NEU schools have an average education significantly lower than that of the parents in the comparison schools.

Implications

Carrying out strategies that allow children to interact with teachers and peers to construct meaning is essential to increased academic achievement.

Children in well implemented NEU classrooms were observed to generate knowledge with the assistance of their teachers in a decentralized manner. Children in these schools worked with teachers, peers, and materials to find answers. In less successful schools, the teacher usually initiated and evaluated the discourse related to knowledge acquisition. Thus, students were required to perform in ways that meet the expectation of the teachers. Students internalized knowledge through memorization but were not authorized to discover knowledge without tutorial direction, as occurred in well implemented NEU schools.

The decentralized constructivist approach of NEU has potential for aiding second language acquisition in rural schools serving indigenous populations.

Young children were observed to use both languages to further their comprehension of subject matter in the NEU schools. The freedom to work with and alter the content and context of classroom discourse appears to aid in acquisition of both vocabulary and comprehension in a second language.

In a large-scale pilot project, a single year of implementation is not sufficient to see changes in academic achievement at all schools.

Although all schools had the physical setting and materials of a NEU program, not all were observed to have mastered the instructional strategies suggested by the program. Although students were organized in small groups in less successful NEU schools, their tasks were often those of drill and memorization common to the traditional multigrade schools. Greater success had been achieved in one region of the pilot project than in the other, but both had schools that were not yet effectively implementing the decentralized instructional strategies called for by the program at the end of the first year of implementation.

Attachment 2*b*

Program for Guatemala Fifth National Conference on Educational Research

15:15 a 16:00 Coloquio **Perspectivas de la Investigación Educativa en el País. Relación entre Teoría y Práctica.**

- Dr. Oswaldo Salazar, Universidad Rafael Landívar
  Dr. Otto Gilbert, Universidad del Valle
- Lic. Guillermo Zúñiga, USIPE
- Licda. Edith Ríos de Maldonado, IIME–Universidad de San Carlos de Guatemala

Moderadora:
Licda. Carmen María Galo de Lara, ASIES

16:00 a 16:30 Receso

16:30 a 17:15 Presentación de Investigación. **Comunicación Didáctica en Primer Grado de Primaria.**
Licda. Carmen María Galo de Lara, Facultad de Humanidades, Universidad de San Carlos de Guatemala

17:15 a 18:15 Presentacion de Investigación:

- **Estudio sobre Opinión de Padres de Familia, Autoridades, Directores y Maestros acerca de Educación Bilingüe en Comunidades Rurales.**

- **Impacto de PRONEBI en las Escuelas Incompletas. Un Estudio Participativo.**

Equipo de Evaluacion del PRONEBI

Viernes 22 de abril de 1994

7:30 a 8:00 Inscripción y presentación del programa del dia

8:00 a 10:30 Mesa Redonda **Experiencias Innovadoras de Educacion en Areas Rurales. Principales Avances y Limitaciones.**

- Proyecto Eduque a la Niña, Licda. Otilia de Coti
- Proyecto de Desarrollo Santiago, Lic. Oscar Azmitia
- Proyecto de Desarrollo Qeqchi, Lic. Otoniel Gamboa
- PAIN, Licda. Violeta Martínez
- NUFED, Lic. Genaro Xoyon

Moderadora:
Licda. Eva de Méndez, ASIES

10:30 a 11:00 Receso

11:00 a 12:15 Presentación de Investigaciones. **La Situación del Analfabetismo en el País.** CONALFA

12:15 a 13:00 Presentación de Investigacion. **Cambios que Produce en la Comunidad Educativa la Aplicacion de la Adecuación Curricular**
Lic. Marco Tulio Morán, SIMAC

13:00 a 14:30 Receso

14:30 a 15:15 Presentación de Investigacion: **Uso del Tiempo en Niños 7-14 años.**
Lic. Raúl Zepeda, PRONICE

15:15: a 16:00 Presentación de Investigación **Metodología de Investigación Social con Propósitos Educativos: Un Centro de Capacitación para Jóvenes Trabajadores en la Costa Sur.**
Dra. Linda Asturias

16:00 a 17:00 Presentacion de Investigacion **Análisis de Situacion de la Educacion Maya en Guatemala** (Investigacion de UNICEF)
Dr. Alfredo Tay, Ministro de Educacion

17:00 Clausura

ASIES — ASOCIACIÓN DE INVESTIGACIÓN Y ESTUDIOS SOCIALES

CONALFA — INEDUC

UNESCO — Oficina Subregional de Educación de la UNESCO para Centro América y Panamá (ROSTCAP)

PROYECTOS UNESCO/ALEMANIA 507/RLA/10
FORTALECIMIENTO DE LA EDUCACION EN AREAS RURALES DEL ITSMO CENTROAMERICANO

V Encuentro Nacional de Investigación Educativa: Educación en Areas Rurales de Guatemala

20, 21 y 22 de abril de 1994

Auditorium
Universidad Rafael Landívar
Campus Central
Vista Hermosa III, zona 16

Información general.

El V Encuentro Nacional de Investigación Educativa se realizará en el Auditorium del Campus central de la Universidad Rafael Landívar de Guatemala, los días 20, 21 y 22 de abril del año en curso, con el auspicio de la Oficina Subregional de Educación de la UNESCO para Centroamérica y Panamá, en el marco del Proyecto UNESCO/Alemania 507/RLA/10 "Fortalecimiento de la Educación en Areas Rurales en el Istmo Centroamericano", como una actividad coordinada entre los Proyectos UNESCO/Alemania, el Centro de Documentación e Información Educativa de Guatemala de la Universidad Rafael Landívar de Guatemala y la Asociación de Investigación y Estudios Sociales.

Para la organización de la actividad se ha conformado una Comisión Interinstitucional con representantes del Ministerio de Educación, de la Universidad Rafael Landívar, de la Universidad del Valle de Guatemala, de la Asociación de Investigación y Estudios Sociales y de los Proyectos UNESCO/Alemania.

La Metodología a utilizar en el desarrollo del Encuentro incluye ponencias y conferencias, presentaciones de investigaciones institucionales y presentaciones grupales (panel–foro, mesa redonda y coloquio).

Objetivos del Encuentro

1. Promover el intercambio de experiencias e información entre dependencias del Ministerio de Educacion, universidades y otras organizaciones gubernamentales y no gubernamentales que realizan actividades de investigación educativa, con énfasis en el area rural

2. Analizar la situación de la investigacion educativa en el país y compartir criterios y experiencias para su fortalecimiento y para la difusion y mejor utilizacion de los resultados de las investigaciones

3. Reflexionar sobre las perspectivas de la educación en áreas rurales y contribuir a la sistematizacion de experiencias educativas innovadoras.

Participantes: técnicos, investigadores, docentes, estudiantes universitarios, representantes de organizaciones no gubernamentales y otras personas interesadas en los campos de investigación educativa y educación en áreas rurales. Admisión gratuita.

PROGRAMA

Miércoles 20 de abril 1994

14:00 a 14:30 Inscripcion y Registro de Participantes

14:30 a 15:00 Inauguración
Dr. Gabriel Medrano,
Rector Universidad Rafael Landivar
Presentacion del Programa del Encuentro
Lic. Roberto Moreno,
Especialista Regional
Proyectos UNESCO/Alemania–ASIES
Licda. Maria Luisa de Gomez,
CINDEG/URL

15:00 a 16:00 Ponencia: **Situación Actual de la Educación Rural en Guatemala. Logros y Proyecciones**
Lic. Manuel Salazar, Vice–Ministro de Educación

16:00 a 16:30 Receso

16:30 a 18:00 Panel–Foro **Perspectivas de la Educación Rural para el Año 2,000**
- Metodología de la Enseñanza
  Lic. Miguel Angel Chacon, SIMAC
- Formacion del Docente,
  Lic. Luis Antonio Menendez, USAC
- Curriculum como Factor de Cambio,
  Lic. Bayardo Mejia, URL
- Calidad de la Educacion,
  Licda. Maria Eugenia Ramirez, UVG

Moderador.
Lic. Roberto Moreno,
Proyectos UNESCO/Alemania

Jueves 21 de abril 1994

8:00 a 8:30 Inscripción y presentacion del programa del día

8:30 a 9:15 Presentación de Investigación: **Educación Familiar en Comunidades Indígenas.**
Licda. Carmen María Galo de Lara y Licda. Guisela Mayén, ASIES

9.15 a 10:00 Presentación de Investigacion: **Enseñanza del Castellano como Segunda Lengua.**
Licda. Veronica Merida de Barrientos
Instituto de Lingüistica,
Universidad Rafael Landivar

10.00 a 10:30 Receso

10:30 a 11:30 Conferencia: **Reflexiones sobre Enfoques Metodológicos de la Investigación Educativa para el Area Rural.**
Dr. Ray Chesterfield y Dra. Yetilu de Baesa, Juarez y Asociados

11.30 a 12:15 Presentacion de Investigacion. **Estudio sobre Niveles de Rendimiento Académico en Estudiantes atendidos por PRONEBI.** Equipo de Evaluacion del Programa Nacional de Educacion Bilingue

12 15 a 13:00 Presentación de Investigacion: **Educación Popular y Ejercicio Profesional Supervisado.**
Licda. Ana Margarita Castillo,
IIME–Universidad de San Carlos de Guatemala

13:00 a 14:30 Receso

14.30 a 15:15 Presentacion de Investigacion **Franja de Lengua y Cultura Maya.**
Lic. Manuel Salazar Ministerio de Educacion/Instituto de Linguistica, Universidad Rafael Landivar.

157

des Enseignements Secondaire,
Supérieur et de la Recherche Scientifique
Institut Pédagogique National
Institut Supérieur de Formation et
de Recherche Appliquée.

Un Peuple-Un But-Une Foi

RAPPORT GENERAL DU SEMINAIRE SUR L'APPRENTISSAGE DU FRANCAIS DANS LES CLASSES DES 1ère ET 2ème ANNEES DE L'ECOLE PRIMAIRE AU MALI

ORGANISE PAR
LE PROJET D'AMELIORATION DE LA QUALITE
DE L'EDUCATION (PAQE) AU MALI

(26-27-28 ET 29 AVRIL 1994).

156

SOMMAIRE

Avant propos

Sommaire

A) Rapport général du séminaire sur l'amélioration de la qualité de l'apprentissage du français dans les classes de 1ère et 2ème années de l'école fondamentale au Mali.

B) **Annexes**
1. Note de présentation générale du séminaire
2. Rapport de trois commissions 1-2-3
3. Allocution marquant la fin de la 1ère session du Séminaire
4. Programme du Séminaire
5. Consignes pour les commissions
6. Discours d'ouverture
7. Discours de clôture
8. Liste des participants
9. Liste des Invités

C) **Document de travail**
Analyse des données: Introduction
Rubrique I
Rubrique II
Rubrique III
Conclusion
Tableaux

INTRODUCTION

Du 26 au 29 Avril 1994, s'est tenu à Bamako au Centre Régional de Recherche en Energie Solaire (CRES), un séminaire sur les résultats du Projet d'Amélioration de la Qualité de l'Education au Mali (PAQE).

Le séminaire a été conjointement organisé par l'Institut Pédagogique National (IPN), l'Institut Supérieur de Formation et de Recherche Appliquée (ISFRA) et par l'Institut pour la Recherche Internationale (USA) et ses sous-contractants: Juarez et Associés et l'Institut des Etudes Internationales de l'Université de Pittsburgh.

Le séminaire a également enregistré la présence de deux professeurs de l'Université de Cape-Coast au Ghana qui travaillent actuellement dans le Programme d'Amélioration de la qualité de l'éducation dans leur pays (PAQE-Ghana).

I. Les objectifs du Programme d'Amélioration de la Qualité de l'Education (PAQE-MALI)

Les objectifs du PAQE-MALI visent à :

1. identifier dans un échantillon d'écoles primaires au Mali les conditions dans lesquelles les compétences en lectures, en écriture en compréhension et en expression dans la langue française sont atteintes;

2. Identifier les facteurs à l'école et en dehors de l'école qui influencent la maîtrise par l'élève malien de la lecture, l'écriture et l'acquisition du Français;

3. Proposer des interventions concrètes à exécuter comme projets pilotes pour améliorer la maîtrise des élèves maliens dans la lecture, l'écriture et le langage parlé en Français.

But du Séminaire

Le but du séminaire sur l'apprentissage du Français dans les première et deuxième années de l'école fondamentale au Mali est de stimuler une concertation stratégique entre les différents partenaires du système éducatif national -- les éducateurs, les parents, les administrateurs, les décideurs, les organismes externes, et les chercheurs -- afin d'assurer le développement chez les élèves maliens d'une base solide dans l'apprentissage du Français, une clé cruciale pour ouvrir toutes les portes éducatives par lesquelles l'enfant devra passer au cours de son épanouissement académique et professionnelle.

Objectifs du Séminaire

1. Engager les partenaires du système éducatif dans un dialogue analytique exhaustif sur les facteurs influençant l'apprentissage du Français dans les première et deuxième années de l'école malienne.

2. A partir de cette analyse collective, définir des interventions pilotes destinées à améliorer l'apprentissage du Français dans les deux premières classes.

3. Stimuler une concertation active entre les partenaires du système éducatif pour organiser et exécuter les différentes interventions pilotes.

II. Philosophie du Séminaire

Ce séminaire a un caractère particulier. Il ne sert à rien d'avoir des idées préconçues ou des questions toutes faites. Personne n'est venu avec une solution ferme et / ou définitive. Il s'agit ici pour nous de travailler coude à coude et à découvrir ensemble les vrais problèmes liés à l'apprentissage de la langue et trouver ensemble les solutions à ces questions. Par ailleurs nous dégagerons ensemble les stratégies de mise en application des interventions que nous aurons identifiées et jugées pertinentes. Ainsi nous lutterons avec une seule voix pour le bénéfice de l'élève malien.

III. Le déroulement des travaux

Le discours d'ouverture du séminaire a été prononcé par son Excellence, Monsieur Moustapha Dicko, Ministre des Enseignements Secondaire, Supérieur, et de la Recherche Scientifique en présence de son homologue de l'Education de Base, son excellence, Monsieur Adama Samassékou.

Le Ministre a, dans son discours, salué l'esprit de collaboration institutionnelle qui s'est tissé entre l'ISFRA, l'IPN et l'USAID à travers les institutions de recherche américaines et a exhorté les participants à réfléchir et à proposer des solutions pertinentes et concrètes en faveur de la promotion de la recherche- action , et l'amélioration du taux de scolarisation et de la qualité de l'éducation dans notre pays.

Dans les conclusions de son discours, il a mis l'accent sur la congruence des objectifs du séminaire international avec les priorités définies par le gouvernement du Mali à la recherche d'une stratégie de développement de son système éducatif.

Après le discours d'ouverture et le retrait des officiels, le séminaire a procédé à la mise en place de son bureau composé comme suit:

Président : Monsieur Hassimi Oumar Maïga, chercheur à l'ISFRA

Vice-Président : Dr. Joshua Muskin, Consultant à l'Université d'Etat de Floride aux Etas-Unis,

Rapporteur Général : Monsieur Mountaga Lam, chercheur à l'I.P.N

Rapporteur Général Adjoint : Mr Bouréma Sidi Cissé, consultant en Sciences de l'Education

La mise en place du bureau a été suivie par la lecture du programme du séminaire par son Président. Le programme a été adopté à l'unanimité par les participants.

De la présentation du programme du séminaire, le Président est passé à la présentation de ses objectifs, de son but et de sa philosophie pour ensuite passer la parole à Monsieur Sékou Diarra, chercheur à l'ISFRA et président du comité d'organisation. Monsieur Diarra a passé en revue les problèmes d'ordre logistique et organisationnel relatifs aux déplacements, per-diem, repas, et aux remboursements de frais de transports des participants.

La pause a été l'occasion pour lui de poursuivre ces clarifications d'ordre organisationnel avec les Directeurs Régionaux de l'éducation et les Inspecteurs de l'Enseignement Fondamental.

A la reprise des travaux, Messieurs Dramane Coulibaly (chercheur à l'IPN) et Sékou Diarra (ISFRA) ont respectivement procédé à la présentation de la genèse, des objectifs du Projet et de ses résultats préliminaires.

Monsieur Coulibaly a évoqué la genèse et les objectifs généraux du PAQE qui sont nés d'une prise de conscience, à partir de données scientifiques, du faible rendement des élèves des pays en voie de développement et du souci de renforcer la capacité de ces pays dans le domaine de l'amélioration de la qualité de leur système éducatif. Trois pays participent à l'exécution du Projet d'Amélioration de la Qualité de l'Education (PAQE) à savoir le Guatemala, le Ghana, et le Mali.

Selon Monsieur Coulibaly, les objectifs spécifiques du PAQE-MALI consistent à rechercher les moyens pratiques et réalistes susceptibles d'améliorer l'apprentissage du langage et de la lecture-écriture dans une langue étrangère à travers une meilleure compréhension de la manière dont cet apprentissage s'effectue dans les communautés, les écoles et dans les salles de classe en l'occurrence en 1e et 2e années de l'école primaire. En ce qui concerne le PAQE-MALI, Monsieur Coulibaly a retracé les péripéties et l'aboutissement heureux de la collaboration institutionnelle entre l'IPN et l'ISFRA.

Par rapport aux résultats préliminaires des recherches entreprises par les deux institutions, Monsieur Sékou Diarra a d'abord résumé les objectifs de l'étude pour ensuite livrer aux participants les résultats préliminaires de la recherche qui ont mis en exergue les facteurs identifiés par l'équipe PAQE comme déterminants dans l'apprentissage du langage, et de la lecture-écriture dans les classes de 1ère et 2ème années en République du Mali. Ces facteurs s'articulent autour des points suivants:

1. l'accessibilité de l'école aux acteurs et bénéficiaires de l'apprentissage,

2. la fréquentation des jardins d'enfants ou des écoles coraniques avant la scolarisation,

3. l'état nutritionnel et sanitaire des enfants,

4. les préacquis cognitifs, affectifs et psychomoteurs des enfants,

5. la qualité du soutien pédagogique à l'école et en dehors de l'école,

6. l'état physique de l'école et des salles de classes,

7. l'implication des communautés à la vie scolaire,

8. la disponibilité du matériel et des infrastructures dans l'environnement scolaire et extra-scolaire,

9. l'exploitation des valeurs culturelles du milieu dans l'apprentissage,

10. la maîtrise des méthodologies d'enseignement du langage par le dialogue et de la lecture-écriture,

11. la mise en oeuvre de la pédagogie des grands groupes,

12. la formation, le suivi et l'évaluation des maîtres chargés de cours dans les domaines de la pédagogie des grands ou petits groupes, des contes et légendes, des devinettes et proverbes du terroir, et dans l'utilisation et l'exploitation des manuels dont les contenus sont fonctionnels et axés sur des valeurs culturelles maliennes,

13. l'initiative accordée aux maîtres dans les méthodes d'enseignement,

14. les conditions de travail des administrateurs nationaux, régionaux et locaux de l'éducation ainsi que des maîtres chargés de cours.

Les deux exposés ont été l'occasion pour les participants de poser certaines questions de clarifications qui ont fait l'objet de réponses précises de la part du Présidium du séminaire.

Les questions ont eu trait aux points suivants:

- les critères d'identification des écoles performantes et non performantes:
- la limitation du champ de recherche au système formel d'éducation, le non formel étant occulté;
- la limitation des apprentissages en langage, et en lecture - écriture, le calcul étant ignoré, la remise en question des résultats de l'évaluation des acquisitions des élèves en 1992 qui ont servi de base à l'initiation du PAQE, compte tenu de la perturbation des classes au cours de cette année,
- l'interprétation des lacunes constatées chez les élèves de l'année ci-dessus citée. S'agit-il de problèmes de compréhension de consignes des épreuves de test de français ou de non acquisition des aptitudes évaluées chez les élèves.
- l'influence de la fréquentation de l'école coranique sur les apprentissages en

français;

- la collaboration de l'équipe PAQE-MALI avec l'équipe de Suivi-Evaluation de la division de la recherche et des Innovations Pédagogiques de l'IPN,

- l'apprentissage du français dans un contexte de valorisation des langues maternelles tant par le gouvernement que pour les populations;

- l'influence de la communauté en matière d'apprentissage d'une langue étrangère

D'autres facteurs méritant considération dans l'apprentissage du français ont été également évoqués tels que la pléthore des effectifs, l'état défectueux du mobilier scolaire, l'inaccessibilité de l'école, l'état nutritionnel et sanitaire des enfants, le faible niveau socio-économique et l'analphabétisme des parents surtout en milieu rural, la faible fréquentation scolaire, le faible niveau de formation et de compétences des maîtres, le non respect de la hiérarchie éducative dans un contexte de survie socio-économique pour tous et l'absence de goût et de pratique de la lecture, chez les acteurs et bénéficiaires de l'éducation etc...

Les travaux ont repris dans l'après-midi par la mise en place de trois ateliers relatifs aux domaines suivants:

Atelier 1 : Les conditions de l'enfant malien;

Atelier 2 : Le contexte dans lequel s'effectue l'apprentissage du langage et de la lecture-écriture;

Atelier 3 : Les stratégies susceptibles d'améliorer l'apprentissage du français en tant que langue étrangère.

Ces travaux se sont poursuivis l'après-midi avec la participation active de tous.

La journée a pris fin par une réunion de la commission de suivi du séminaire qui en a fait le bilan. Des sentiments de satisfaction, quant au déroulement des travaux de cette première journée, ont été exprimés par la commission. Au cours de cette réunion, des aménagements ont été apportés au calendrier du lendemain, Mercredi, le 27 Avril 1994.

La matinée de la journée du Mercredi a été consacrée à la poursuite des travaux en atelier. Une plénière est intervenue à 11h30 et s'est poursuivie jusqu'à 13h15. Cette plénière à été l'occasion pour les ateliers de faire la synthèse de leur travaux et pour l'ensemble des participants de critiquer les résultats préliminaires de ces travaux.

La plénière a invité les différents ateliers à poursuivre les réflexions sur les facteurs et les interventions susceptibles d'améliorer la qualité de l'éducation. Les travaux en atelier se sont poursuivis dans l'après-midi. En fin de journée, une ébauche de synthèse des travaux a été faite par la commission de suivi du séminaire.

IV. Recommandations du séminaire.

Au cours de la matinée de la troisième journée (Jeudi 28 Avril 1994) les travaux se sont poursuivis en atelier où les réflexions sur les facteurs et les interventions ont été approfondies. La plénière est intervenue par la suite. Celle ci a permis l'intégration des interventions suggérées par les trois ateliers. C'est ainsi qu'après l'exposé des Présidents et des Rapporteurs des trois ateliers et les questions posées par l'ensemble des participants, la commission de suivi a procédé à l'intégration des interventions proposées. A l'issue des travaux du groupe, certains facteurs sont apparus comme déterminant dans l'apprentissage dans les classes de 1ère et 2ème années. Il s'agit entre autres de:

- **la distance parcourue par l'enfant pour arriver à l'école;**
- **l'état de santé nutritionnel de l'enfant;**
- **le niveau de formation des maîtres dans certaines disciplines telles que l'utilisation adéquate du matériel didactique, la pédagogie des grands groupes et la pédagogie des contes;**
- **l'attitude des communautés vis à vis de l'école, etc.**

Par rapport à ces facteurs, les participants ont identifié des interventions pilotes qui, de l'avis général des séminaristes, permettront d'améliorer la qualité de l'éducation en général et la performance des élèves dans l'apprentissage du français à l'école primaire en particulier. Les principales interventions retenues sont :

- **la création des cantines autour desquelles doivent s'organiser l'amélioration de l'état sanitaire et nutritionnel des enfants**
- **la création de cercles d'études communautaires. Cette expérience permet aux élèves de retrouver un cadre communautaire favorable à la poursuite des activités pédagogiques.**
- **la formation des enseignants dans les domaines de l'exploitation du matériel didactique, de la pédagogie des grands groupes, de la pédagogie des contes et de l'exploitation des manuels et guides pédagogiques.**
- **l'identification et la prise en charge de moyens de transport adaptés dans les zones où la création de cantines s'avérerait inadaptée et non appropriée.**

A l'issue de cette intégration et des questions posées par l'assistance, le Dr. Joshua Muskin a apporté des réponses de clarification et d'apaisement orientées vers une concertation très prochaine des responsables et partenaires de l'éducation dans les zones

concernées avant le lancement de la phase II du projet.

Ces apaisements et clarifications ont mis l'accent sur la pertinence des méthodes et techniques d'étude du milieu et d'animation participative à la base et nécessaires à la réussite des interventions proposées pour la phase II.

La plénière s'est achevée par une distribution de questionnaires d'évaluation de la phase I aux participants du séminaire. Cette première session a été clôturée par un discours de remerciements des participants prononcé par Monsieur Hassimi Oumar Maïga, Président du séminaire. Ensuite Mr Mountaga Lam chercheur à l'IPN a présenté le rapport général du séminaire.

Les membres de la commission de suivi du séminaire se sont réunis dans l'après midi pour préparer la 4 ème journée initialement destinée aux concertations et aux discussions avec les:

1. Bailleurs de fonds,

2. Organismes non-gouvernementaux; et

3. Décideurs ministériels centraux.

En raison de troubles provoqués par les élèves et étudiants du Mali le Vendredi 29 Avril 1994, ces concertations n'ont pu avoir lieu. En lieu et place de ces concertations, les travaux en ateliers se sont poursuivis autour de la conception et de l'exécution de la phase II du projet.

Son Excellence, Monsieur Adama Samassékou, Ministre chargé de l'Education de Base en présence de son homologue, Monsieur Moustapha Dicko, chargé des Enseignements secondaire, supérieur,et de la Recherche scientifique a, dans l'après-midi, prononcé le discours de clôture du séminaire.

Dans son discours, le Ministre a mis l'accent sur la nécessité d'une prise en compte des langues nationales, d'un recentrage des activités du projet.

Le Rapporteur Général du Séminaire	Le rapporteur Général Adjoint
Monsieur Mountaga Lam	Mr Bouréma Sidi Cissé

ANNEXES

Note de présentation générale du PAQE - MALI.

a) De la genèse du projet de recherche

Le protocole d'accord du projet d'amélioration de la qualité de l'éducation dénommé PAQE - Mali a été signé en Avril 1993. Il est financé par le Bureau d'Education, de Recherche et de Développement de l'USAID. Il est dirigé par l'Institut pour la Recherche International en collaboration avec Juarez et Associés et l'Université de Pittsburgh. L'un des objectifs de base est de renforcer la capacité des pays en développement en travaillant avec les institutions locales de recherche. Dans le cas du Mali, le projet est exécuté simultanément par l'IPN et l'ISFRA.

Le but du "Projet d'Amélioration de la Qualité de l'Education" est de rechercher des moyens pratiques pour améliorer les résultats de l'apprentissage à travers une meilleure compréhension de la manière dont l'apprentissage se passe dans les écoles et les salles de classe. Les résultats des différentes expériences scolaires doivent être mis à la disposition des décideurs et praticiens intéressés par les réformes éducatives.

De plus, le PAQE -Mali complète les initiatives éducatives nationales déjà en cours. En somme le Projet d'Amélioration de la Qualité de l'Education se mène actuellement dans les pays en développement comme le Ghana, le Mali. le Guatemala et l'Afrique du Sud

b) De l'intégration des équipes ISFRA et IPN.

Au début du projet, l'ISFRA et l'IPN travaillaient séparément. La recherche de l'IPN mettait l'accent sur les facteurs d'apprentissage à l'école et l'ISFRA quant à lui mettai l'accent sur les caractéristiques de l'enfant malien d'age scolaire.

Il apparaissait alors que ces deux projets de recherche même si elles avaient le mérit de faire ressortir les aspects importants et spécifiques de l'apprentissage à l'école et en dehc r de l'école n'auraient la force nécessaire que lorsqu'ils seraient intégrés. Ains' l complémentarité et la solidarité du travail pouvait pleinement jouer son rôle.

En outre le cadre conceptuel même de la recherche nous rappelle que le modèle AL (Active Learning Capacity) rompt avec l'attitude qui consiste à mettre l'accent sur le facteurs scolaires au détriment de l'enfant.

Il considère ce dernier comme l'élément essentiel, un partenaire actif et un participant stimulé par un contexte scolaire motivant et un enseignant capable de jouer un rôle de facilitateur.

Selon le modèle ALC les caractéristiques de l'enfant constituent les facteurs clés qui influencent l'apprentissage scolaire, tandis que les facteurs scolaires jouent un rôle déterminant mais intermédiaire. En effet, les facteurs individuels de l'enfant sont liés d'une part à son environnement socio-économique et familial et d'autre part à son expérience éducative, ã ses aptitudes et habiletés individuelles. Ces facteurs sont considérés comme importants mais secondaires par rapport aux facteurs sanitaires, nutritionnels et culturels qui constituent les caractéristiques de l'enfant . Les facteurs scolaires sont liés aux infrastructures, aux programmes, aux méthodes pédagogiques, aux matériels didactiques et aux enseignants qui peuvent faciliter ou handicaper l'apprentissage.

Ainsi la nécessité de l'intégration des deux équipes n'est plus à démontrer. C'est alors qu'au cours des travaux d'atelier des deux équipes, pendant le mois de Décembre 1993, et avec le précieux concours de nos collaborateurs extérieurs, que les deux Projets de recherche initiaux se sont fondus pour produire une seule pièce de recherche, avec comme toile de fond l'amélioration de la qualité de l'éducation et singulièrement l'amélioration de la qualité d'apprentissage scolaire en lecture-écriture et en langage dans les classes de 1e et 2e Année de l'école Fondamentale au Mali.

RAPPORTS DES COMMISSIONS

GROUPE I : CONDITIONS DE L'ENFANT SCOLARISE

L'atelier I a mis en place le bureau suivant:

Président: Baba Diabé Doumbia DRE - Kayes

1er Rapporteur: Salia Ouattara IEF-Bandiagara

2ème Rapporteur: Tinimba Bagayoko APE-Bougouni

Trois facilitateurs ont travaillé avec l'atelier : Sékou Diarra ISFRA, Nambala Kanté ENSup, Abdoul Dramane Coulibaly IPN.

Après la présentation de chaque membre de l'atelier, les travaux ont démarré par la lecture du texte de base et des consignes. La commission a étudié le texte qui lui a été soumis et s'est prononcé après un débat fructueux par rapport à la pertinence des points retenus dans le document.

A) Analyse des facteurs discriminants

A l'unanimité, l'atelier a retenu la distance comme facteur discriminant. Les trois solutions trouvées par les chercheurs ont été retenues et enrichies. La multiplication des écoles, la création de cantine sont des éléments que l'atelier soutient pour améliorer la fréquentation scolaire. Par rapport à la première solution la création des infrastructures et le recrutement du personnel entraînent des charges supplémentaires. En ce qui concerne les cantines, après une série d'échanges d'expériences, il a été reconnu que leur fonctionnalité, demande l'engagement du corps enseignant, la mobilisation et la sensibilisation des parents d'élèves. Exemple: Cas de la cantine de Kori-Kori (IEF de Bandiagara). Actuellement cette cantine est fonctionnelle et les enfants prennent trois repas par jour. Les pensionnaires demeurent dans le domaine scolaire sous la surveillance du maître de semaine du lundi au vendredi. Chaque pensionnaire cotise 30 kg de mil, 500 F par an. La cantine est gérée par un comité de gestion et les cotisations sont fixées en assemblée générale. Le nombre de pensionnaires est de 150 . Contrairement au cas de Kori-Kori, certaines localités n'encouragent pas la cantine scolaire à cause du manque à gagner pour les populations du lieu d'implantation de l'école.

Le 3e élément de solution pour résoudre le problème de distance est la mise à la disposition des moyens de transport (bicyclettes, charrettes etc.). Cela contribuera de l'av s de l'atelier à élever le taux de fréquentations scolaire et favoriser l'apprentissage.

BEST AVAILABLE COPY

a. Des préacquis cognitifs:

L'atelier a reconduit les éléments trouvés par les chercheurs.

b. La préscolarisation:

L'atelier après un large débat trouve qu'un jardin d'enfants bien structuré et encadré par un personnel qualifié, prépare mieux l'enfant à l'école. Selon les maîtres chargés des classes d'initiation, les enfants des jardins d'enfants sont plus éveillés que ceux qui n'ont pas fréquenté le jardin en général. Ils se distinguent par leur résultats encourageants dans des matières telles que : le langage, le chant, la récitation, l'écriture etc.

L'atelier recommande la multiplication des jardins d'enfants compte tenu du fait que la fréquentation des jardins d'enfants favorise l'apprentissage du français.

c. La pratique langagière du francais au foyer:

Après des échanges, l'atelier trouve que cette pratique donne à l'enfant un avantage certain dans l'acquisition des connaissances notamment en langage. Mais il reconnaît que peu de parents font usage de cette pratique. Elle est presque inexistante dans le monde rural. Par contre les émissions radiophoniques et télévisées orientées vers les enfants méritent d'être encouragées.

d. L'acquisition à l'école coranique:

L'enseignement coranique met à la disposition de l'enfant certains éléments positifs:

- la mémorisation
- la discipline
- la réceptivité

B) Les facteurs non discriminants

Les facteurs se divisent en deux groupes: les facteurs non discriminants controversés et les facteurs non discriminants ne soulevant pas de questions particulières.

En ce qui concerne ces facteurs, l'atelier recommande que les chercheurs et les hommes de terrain (IEF-directeurs d'école-maîtres) convergent leurs efforts en vue de tendre vers des résultats plus fiables.

Cependant, l'atelier recommande en attendant d'avoir des résultats plus plausibles aux parents d'élèves d'orienter les enfants vers les jeux à caractère de résolution de problèmes et de manipulations.

BEST COPY

Le Président de Séance

Baba Diabé Doumbia
DRE / Kayes

Le Secrétaire de Séance.

Salia Ouattara
IEF / Bandiagara

GROUPE II : Contexte d'apprentissage

Objectifs:

a. Identifier les facteurs contextuels propres à l'école, à la classe, à la communauté et à la famille qui semblent influencer le plus l'apprentissage de la langue par les élèves des première et deuxième classes, et

b. formuler des interventions pour consolider et formaliser ce qui favorise l'apprentissage et pour éliminer ce qui le gêne.

Procédure:

Après lecture des objectifs et des consignes par le président un exposé des résultats de la recherche relative au contexte d'apprentissage a été fait aux participants qui ont été ensuite invités à répondre aux deux questions essentielles suivantes:

- Quels sont les résultats (facteurs) de la recherche conduite par le PAQE qui vous semblent pertinents ?
- Quelles sont vos propres expériences qui confirment ou infirment ces résultats ou conclusions préliminaires ?

Pratiquement le travail du groupe a consisté à adopter ou rejeter les résultats des chercheurs à la lumière de l'expérience des techniciens de terrain de l'atelier, et à apporter leurs contributions. Pour la réussite, les participants sont mis à l'aise en ce qui concerne leurs interventions : elles sont attendues et méritent l'attention soutenue des chercheurs. Les animateurs interviennent par des questions pertinentes qui suscitent des réponses des gens de terrain. C'est dans cette atmosphère que le groupe a analysé les facteurs propres à chacun des éléments du contexte d'apprentissage:

A/ CONTEXTE DE LA FAMILLE ET DE LA COMMUNAUTE

Impact du niveau d'instruction des parents : Un environnement d'intellectuels favorise l'apprentissage. Les parents instruits ont conscience de la nécessité d'apprendre et ménagent en conséquence un temps d'apprentissage.

Pour l'enfant de parents non instruits les dispositions naturelles et des modèles extérieurs à la famille peuvent expliquer sa volonté de réussite, ses performances.

Dans tous les cas l'intérêt que le parent porte au travail de l'enfant devient une autre source de motivation.

Impact de l'environnement : La détermination d'un espace d'apprentissage, son équipement en matériel pédagogique adéquat (table, tabouret, lumière) améliore les performances.

Impact de l'organisation de la communauté : Il doit être aussi positif que celui de la cellule familiale

Impact des tâches domestiques : Il faut les doser et les situer comme des apprentissages périphériques socialisant et réserver un temps plus conséquent pour les apprentissages. Les jeunes filles sont les plus exploitées et pour les rendre disponibles à l'étude il est indispensable d'alléger les tâches incombant à leur maman.

Impact des contes et légendes : Les contes et les légendes constituent le vécu de la société dont est issu l'enfant. Leur contenu n'est pas loin des préoccupations de la société ; cela explique pourquoi les enfants les réussissent facilement. Le groupe a jugé nécessaire l'exploitation pédagogique des contes, des jeux et des bandes dessinées.

Impact du statut socio-économique et culturel de la famille : La présence dans la famille de la radio, de la télévision, l'accès aux journaux, aux livres et aux cahiers sont de nature à stimuler l'apprentissage.

B/ CONTEXTE DE L'ECOLE

Impact de la distance : L'éloignement de l'école est source des retard, de redoublement et même d'abandon.

Impact de l'état physique de l'école : Une école délabrée non équipée en mobilier adéquat et matériel pédagogique est facteur de mauvaise performance. Par contre des salles de classe en bon état, équipées et décorées stimulent les apprentissages. La présence de latrines, une cour ombragée sont des facteurs stimulant.

Impact de la relation école/communauté : Quand la communauté accepte l'école les élèves sont performants parce que la communauté s'intéresse au travail des élèves, les encadre et participe à l'entretien de l'école.

Le Président de séance

Issaka Dioné
DRE Ségou

Le Secrétaire de séance

Ibrahim Mahamadine Maïga
Représentant DRE Mopti

GROUPE III : STRATEGIE D'APPRENTISSAGE

Après le contrôle des présences, le bureau suivant de l'atelier III a été mis en place:

Président: Mamadou Oumar Maïga - Chercheur ISFRA

Rapporteur: Moussa Sissoko - IEF Sikasso I

Les objectifs assignés à l'atelier sont ainsi formulés:

a. Identifier les stratégies, formelles comme informelles, employées par les enseignants qui semblent favoriser l'apprentissage de la langue par les élèves des 1ère et 2ème années.

b. Formuler des interventions pour consolider et formaliser les stratégies qui favorisent l'apprentissage et pour éliminer celles qui gênent.

Il a été décidé, à l'issue des échanges d'idées que l'atelier gagnerait en efficacité en travaillant en groupe unique.

a.1 Stratégies formelles favorisant l'apprentissage:

1. Le respect de la fiche de leçon en langage et en lecture - écriture.

2. La préparation mentale de la classe par le maître.

3. La préparation matérielle des leçons par le maître.

4. La nécessité de la maîtrise par le maître de la technique d'élaboration d'une fiche de leçon.

5. La concrétisation des leçons doit être soutenue par une utilisation opportune et judicieuse de ce matériel.

6. La variété des exemples illustrant les leçons.

7. La pratique d'une saine émulation en classe.

8. Le travail en groupes restreints bien structurés et autonomes suivant les techniques appropriées.

9. L'utilisation des méthodologies du langage par le dialogue et de la lecture - écriture préconisées par l'IPN.

10. La répétition individuelle et semi - collective (langage par le dialogue)

11. La correction des erreurs d'élèves par leurs pairs autant que possible.

12. L'utilisation des manuels en classe.

13. L'utilisation des techniques d'encouragement par les maîtres.

14. L'utilisation rationnelle de la langue nationale seulement en cas de blocage.

a.2 Stratégies non-formalisées.

1. L'enseignement occasionnel

2 . L'incitation des élèves à la lecture en dehors de la classe.

3. L'incitation des élèves à faire des exercices de lecture à domicile.

4. L'organisation de cours de rattrapage là où c'est possible.

a.3 Stratégies favorisant l'apprentissage de la langue française par ordre de priorité.

1. La maîtrise des méthodologies d'enseignement du langage par le dialogue et de la lecture - écriture.

2. La mise en oeuvre de la pédagogie des grands groupes.

3. Le suivi et l'évaluation des maîtres sur le terrain.

b. Interventions pour consolider et formaliser les stratégies favorables à l'apprentissage (par ordre de priorité)

b.1 Formation adéquate des maîtres de 1ère et 2e Années, des directeurs d'école, dans les méthodologies d'enseignement du langage par le dialogue, de la lecture - écriture et de la pédagogie des grands groupes.

a. Elaboration des modules de formation.

b. Organisation de sessions de formation.

b.2 Dotation des écoles en guides du maître, en manuels de lecture "Le Flamboyant", en supports visuels 1ère et 2e Années en ardoises et cahiers d'écriture.

b.3 Suivi et évaluation des maîtres sur le terrain.

ALLOCUTION MARQUANT LA FIN DE LA PREMIÈRE SESSION DU SEMINAIRE

Nous voilà maintenant au terme des travaux d'atelier qui ont regroupé trois commissions :

- la commission condition de l'enfant
- la commission contexte d'apprentissage
- la commission stratégies d'apprentissage

Du point de vue sommatif, l'on peut noter avec satisfaction le bon déroulement des travaux, la qualité des exposés et le caractère tranchant mais mesuré des discussions. Tout cela dénote de votre intérêt et de votre engagement face aux différentes situations des apprentissages et des stratégies y afférentes .

Vos discussions, suggestions et propositions d'interventions ont prouvé que la réflexion a été mûrie et approfondie car vous avez confirmé par là les thèses de la méthode ALC (Active Learning Capacity) en soulignant l'importance des conditions de l'enfant assortie de la prise en compte de sa culture. Vous avez caractérisé le contexte d'apprentissage en approfondissant les rapports école-communauté dans son sens le plus large.

Les stratégies d'apprentissage ont été abordées avec objectivité dans le contexte de la classe malienne en mettant l'accent sur les méthodes, techniques et procédés appropriés permettant l'épanouissement moral et mental de l'enfant. Là, vous avez compris que la personnalité de l'enfant est globale et que l'enrichissement et la variété des techniques étaient une nécessité. Ainsi, vous confirmez les thèses des spécialistes en management qui aiment dire que la moitié d'un pain, c'est productif, parce que c'est encore consommable ; mais la moitié d'un enfant, Messieurs, c'est un cadavre. Et cela, vous l'avez démontré tant à travers l'identification des facteurs liés à l'apprentissage que dans les interventions et actions proposées.

Mesdames, Messieurs, chers collègues et séminaristes, il ne reste plus qu'à vous féliciter pour votre soutien et votre collaboration sans faille aux travaux du présent séminaire.

Pour ceux qui ne seront pas présents à la séance du vendredi, je leur adresse au nom du séminaire mes sincères remerciements pour leur contribution de qualité.

Sur ce, je déclare clos les travaux d'atelier de cette première session.

Je vous remercie

Le Président du séminaire.

PROGRAMME DU SEMINAIRE DE LA PHASE I DU PAQE

Programme/Modalités:

Organisation de deux sessions complémentaires.

Trois Objectifs:

1. *Présenter les recherches*
2. *Programmer la Phase II*
3. *Impliquer directement les partenaires*

Première Session: Session de Travail (environ 50 participants)

Mardi 26 Avril

9h30-10h Accueil et inscription des participants

10h00-10h15 Ouverture: discours du Ministre des Enseignements Secondaire Supérieur et de la Recherche Scientifique en présence du Ministre de l'Education de Base (plénière)

10h15-11h Présentation du programme et des objectifs du séminaire (plénière)

11h-11h30 Pause-thé

11h30-13h00 Présentation de l'étude réalisée par l'équipe du PAQE (plénière)
a. la genèse et les objectifs
b. les résultats
c. questions, clarifications, et réactions initiales

13h00-14h00 Pause-déjeuner

14h00-17h00 Analyse critique des résultats et discussion des implications préliminaires de l'étude de l'équipe PAQE (en trois groupes)

Groupe 1 La Condition de l'Enfant Scolarisé
Groupe 2 Le Contexte de l'Apprentissage
Groupe 3 Les Stratégies d'Apprentissage

17h00-18h00 Le Comité d'Organisation fait le point

Mercredi 27 Avril

9h00-9h30 Point des travaux en groupes de la première journée (plénière)

9h30-11h00 Poursuite des discussions de la veille en groupes de travail

11h00-11h15 Pause-thé

11h15-1300 Rapport et discussion des résultats des travaux de petits groupes sur

l'analyse des résultats et des implications des recherches PAQE (plénière)

13h00-14h00 Pause-déjeuner

14h00-15h00 Continuation de la plénière de la matinée sur les résultats des travaux de petits groupes sur l'analyse des résultats et des implications des recherches PAQE

15h00-17h30 Discussions en petits groupes pour proposer des actions provenant des recherches de la Phase I à réaliser en Phase II: il s'agit des recherches complémentaires et des interventions à mener.

17h30-19h Travail en commission pour regrouper et intégrer les propositions des groupes de travail pour la Phase II

Jeudi 28 Avril

10h00-13h00 Présentation par la commission des résultats intégrés de la veille pour la discussion collective (plénière)

13h00-13h15 Clôture de la Première Session

Deuxième Session:

Session de Synthèse et de Concertation Elargie (environ 75 participants)

Vendredi 29 Avril.

9h00-10h00 Présentation sommaire de la première session de travail
- présentation rapide du PAQE
- résumé des discussions des trois jours précédents
- objectifs de la présente session
- présentation du programme de la présente session

10h00-11h30 Poursuite des discussions du programme proposé dans la première session entre les participants de la première session, en trois groupes:

11h30-12h30 Faire la synthèse des discussions sur le programme de la Phase II, pour élaborer des stratégies précises à opérationnaliser concernant les éléments suivants: (plénière)
- les hypothèses à tester
- les interventions à développer

16h00-16h30 Clôture: Lecture du rapport général du séminaire. Discours de clôture du Ministre de l'éducation de base.

Consignes pour les commissions

1. Désignation d'un président et d'un rapporteur

2. Lecture des objectifs et des consignes

3. Les objectifs de l'atelier
   a) Discuter les résultats contenus dans chaque atelier
   b) Discuter les hypothèses
   c) Analyser les interventions

4. Les consignes
   a. Respecter autant que possible les consignes de l'atelier

   b. Eviter de sortir du cadre des discussions

   c. Permettre à chaque participant d'aller au fond de sa pensée sans déborder du sujet.

   d. Gérer rationnellement le temps afin d'épuiser le sujet.

   e. Respecter les délais limites des discussions.

   f. Que le président se montre concis et clair dans la gestion des débats.

   g. Que les présidents d'atelier collaborent étroitement avec les facilitateurs, les membres de l'équipe PAQE.

QUESTIONS D'ORIENTATION DES DEBATS

1. Déterminer la pertinence du thème et résultats

2. Dégager la pertinence des hypothèses contenues dans le thème.

3. Faire ressortir la pertinence des interventions suggérées.

4. Suggérer une stratégie de mise en oeuvre des interventions.

5. Générer d'autre interventions possibles.

6. Déterminer l'ordre de priorité des interventions.

CONSIGNES POUR LA DE[redacted]ESSION

1. Eviter de sortir du cadre des discussions.
2. Gérer rationnellement le temps
3. Respecter les délais limites des discussions.

178

DISCOURS D'OUVERTURE

de Mr le Ministre des Enseignements Secondaire Supérieur et de la Recherche Scientifique à l'occasion du séminaire ISFRA - IPN relatif à la présentation du rapport provisoire de recherche sur l'Amélioration de la qualité de l'Education au Mali.

Monsieur les représentants de l'IIR (Institute for International Research)

Monsieur les représentants de l'USAID
Honorables invités
Mesdames et Messieurs les séminaristes

Permettez-moi tout d'abord de présenter mes sincères félicitations à l'IIR et à l'USAID pour leur contribution tant technique que financière à la réalisation de ce projet de recherche et à la tenue du présent séminaire. Qu'ils trouvent ici l'expression de ma profonde gratitude.

Le séminaire qui nous réuni aujourd'hui s'articule autour du Projet d'Amélioration de la Qualité de l'Education (PAQE) au Mali.

La justification de cette recherche conjointe ISFRA-IPN intitulée:

Analyse des données sur l'amélioration de la qualité de l'apprentissage scolaire: lecture, écriture et langage dans les classes de 1ère et de 2è années de l'école fondamentale au Mali n'est plus à démontrer. En effet la baisse et/ou la stagnation du taux de scolarisation au Mali, la forte déperdition scolaire assortie d'un taux de redoublement compris entre 27 % et 33 % en 1ère et 2è années constituent aujourd'hui des caractéristiques essentielles de notre système d'enseignement.

Ces données apparaissent ainsi comme les indicateurs les plus troublants de la qualité de l'éducation que le Mali s'évertue à améliorer depuis plusieurs décennies. Les solutions envisagées dans ce sens ont porté sur les constructions de salles de classe, l'équipement, la formation continue des maîtres et l'amélioration de l'administration scolaire. Les résultats obtenus ne sont pas encore concluants. Les questions qui se posent depuis le premier séminaire de l'éducation tenu en 1964 quant à la manière d'améliorer la qualité de l'éducation persistent.

On peut résumer l'essentiel de ces questions comme suit:

- pourquoi le taux de redoublement des enfants est si élevé pendant les deux premières années de l'école fondamentale ?
- pourquoi les enfants ne réussissent pas à atteindre les objectifs fixés dans les programmes scolaires ?
- pourquoi quittent-ils l'école après de nombreuses années sans pouvoir parler

français, la langue officielle à travers laquelle toutes les autres disciplines scolaires sont abordées ?

- comment faire pour que les enfants apprennent en classe pour mieux s'insérer dans les structures sociales et économiques du pays.

Ainsi, Mesdames, Messieurs, Honorables invités, l'amélioration de la qualité de l'éducation se pose en terme clairs comme une exigence. Pour répondre à cette exigence, le présent rapport provisoire de l'équipe PAQE-Mali pour lequel nous demandons votre contribution s'articule autour de trois grandes rubriques:

- les conditions de l'enfant,
- le contexte d'apprentissage, et
- les stratégies d'apprentissage illustrés par des tableaux et exemples précis qui seront commentés et discutés afin de déboucher sur des stratégies et interventions éventuelles.

Le présent rapport provisoire est donc un éclairage objectif sur les conditions de vie de nos enfants dans une situation d'apprentissage. Son objectif essentiel est de ne plus prendre l'enfant uniquement en situation d'apprentissage formel mais plutôt l'enfant dans son vécu antérieur en rapport avec la réalisation de ce vécu dans l'apprentissage de la lecture, l'écriture pendant les deux premières années à l'école.

Cette connaissance de l'enfant scolarisable permettra d'éviter certains écueils pédagogiques.

Je reste convaincu que ce forum de techniciens, chercheurs et décideurs permettra de frayer de nouvelles pistes heureuses pour l'amélioration de la qualité de l'éducation au Mali.

Enfin, Mesdames, Messieurs les séminaristes, tout en souhaitant plein succès à vos travaux, je déclare ouvert le Séminaire de Recherche sur l'Amélioration de la qualité de l'Education.

JE VOUS REMERCIE.

DISCOURS DE CLOTURE

DE MONSIEUR LE MINISTRE DE

L'EDUCATION DE BASE

AU

SEMINAIRE D'ANALYSE DES DONNEES SUR L'AMELIORATION DE LA QUALITE DE L'APPRENTISSAGE SCOLAIRE EN LECTURE, ECRITURE ET LANGAGE DANS LES CLASSES DE 1ère ET 2ème ANNEES DE L'ECOLE FONDAMENTALE DU MALI.

BAMAKO, LE 29 AVRIL 1994

Monsieur le Ministres des Enseignements Secondaire, Supérieur et de la Recherche Scientifique,

Messieurs les consultants de l'Institut pour la Recherche Internationale,

Messieurs les Représentants de l'USAID/MALI, Honorables invités,

Mesdames et Messieurs les Séminaristes,

Nous voilà au terme du séminaire de discussion des résultats des observation qualitatives du Projet d'Amélioration de la Qualité de l'Education (PAQUE). Il est opportun de rappeler que ce séminaire a été organisé grâce au soutien financier de l'Institut pour la Recherche Internationale (I.I.R.). Il me plaît, en cette occasion solennelle, de réitérer les sincères remerciements du Gouvernement malien et particulièrement ceux des Département chargés de l'Education.

Mesdames, Messieurs les Séminaristes,

Quatre jours durant, vous avez procédé à une analyse des facteurs qui influencent l'apprentissage du français dans les classes de 1ère et 2ème années de l'Enseignement Fondamental; vous avez défini des interventions pilotes destinées à améliorer l'apprentissage du français dans ces deux classes; vous avez, enfin, stimulé une concertation active entre les partenaires de l'école pour organiser et exécuter ces différentes interventions.

Au terme de débats francs et approfondis, vous avez abouti à d'importantes conclusions pour l'école malienne, à savoir:

- rapprocher l'école du lieu de résidence des élèves par la multiplication d'infrastructures scolaires,
- multiplier les établissements d'éducation préscolaire afin de développer chez les enfants les préacquis indispensables à un bon apprentissage scolaire,
- enrichir l'environnement familial et social de l'apprenant par la création, par exemple, de centres de suivi dans les communautés,
- baser l'enseignement du langage sur les contes, les légendes et les devinettes du terroir de l'enfant,
- former les maîtres à la méthodologie de l'enseignement du langage par le dialogue en 1ère et 2ème années de l'Enseignement Fondamental,
- assurer le suivi pédagogique des maîtres,
- doter les écoles en matériel didactique... etc.

Mesdames, Messieurs les Séminaristes,

Ces conclusions se situent en droite ligne des préoccupations des Départements chargés de l'Education, notamment en ce qui concerne l'amélioration de la qualité de l'éducation de base. C'est dire, Mesdames, Messieurs, que les autorités chargées de l'Education ne ménageront aucun effort pour la réalisation de ces différentes actions. Mais ces actions ne peuvent permettre d'atteindre les résultats escomptés qu'à la lumière de la recherche en éducation qui ne doit plus rester un champ réservé aux seuls spécialistes.

En effet, la recherche se doit d'impliquer les administrateurs scolaires, les pouvoirs centraux, les éducateurs et les parents d'élèves pour mieux les mobiliser en vue d'engager des actions pertinentes auxquelles tous les partenaires adhèrent.

Mesdames, Messieurs les Séminaristes,

Je voudrais cependant insister sur cette évidence que l'amélioration de la qualité de l'éducation passe nécessairement par l'utilisation des langues nationales dans l'enseignement. C'est pourquoi, l'introduction de celle-ci dans l'enseignement constitue actuellement une des préoccupations essentielles du Département de l'Education de Base. Au demeurant, comment véritablement procéder à l'analyse de facteurs influençant l'apprentissage du français chez nous en omettant la dimension langues nationales/langues maternelles ?

Assurément, cette dimension devra être nécessairement prise en compte dans les phases ultérieures du projet. Et j'y veillerai personnellement.

Mesdames, Messieurs les Séminaristes,

Les discussions que vous avez menées et les conclusions auxquelles vous avez abouti, clôturent la phase I du Projet d'Amélioration de la Qualité de l'Education au Mali et ouvrent les perspectives de la Phase II. L'importance de ce projet pour l'Education de Base et la manière dont ce séminaire a été organisé me donnent l'occasion de dire ici, avec insistance, que le projet PAQUE mérite un recentrage, dans le sens notamment d'un meilleur ancrage institutionnel, et d'une plus grande implication des décideurs au niveau des Départements chargés de l'Education. Cette implication se traduira, entre autres, par l'examen approfondi, en amont de toute production du projet y compris les travaux de recherche du genre de ceux qui ont fait l'objet du présent séminaire.

Chers séminaristes, je voudrais, avant de terminer, souhaiter, à chacun et à chacune de vous, un bon retour dans vos foyers. En particulier, à l'endroit de nos hôtes venus des Etats-Unis, j'adresse les remerciements des Départements de l'Education Nationale pour leur contribution de qualité à ce séminaire et les assure de tous nos voeux de bon retour dans leur pays.

Sur ce, je déclare clos les travaux du séminaire de discussion des résultats des observations qualitatives du Projet d'Amélioration de la Qualité de l'Education.

JE VOUS REMERCIE.

LISTE DES PARTICIPANTS AU SEMINAIRE

DIRECTEURS REGIONAUX

Kayes	Baba Diaby DOUMBIA
Mopti	Ibrahim Mahamadine MAIGA (Représentant)
Ségou	Issiaka DIONE
Sikasso	Lamissa SANOGO (Représentant)

INSPECTEURS D'ENSEIGNEMENT FONDAMENTAL

Bandiagara	Salia OUATTARA
Bougouni	Dioko TOGOLA
Kita	Famagan DEMBELE
Koutiala	Mamadou DIARRA
Niono	Koundou H. MAIGA --- Drahamane S. DIARRA C.P.
San	Yaya GOITA
Sevaré	Mme Hawa Mandé TRAORE
Segou	Samba DIANKA
Sikasso	Moussa SISSOKO

DIRECTEURS D'ECOLE

Kita	Bangaly Cissé
Badinko	Mamadouba DAGNO
Sévaré	Issa TOURE
Goundaga	Kotoalama TRAORE
Dieli	Mahamane I. TOURE
Macina	Boubacar KONATE
Markala	Issa KANTE
Sarakala	Amadouni A. TOURE
	Karamoko Sangaré
Wayerma	Karim CISSE
Zangaso	Kié Tiémoko SANOU

MAITRES D'ECOLE

Kita	Ramata TOUNKARA
Badinko	Boubacar BATHILY
Sévaré	Moussa OUMAR
Goundaga	Sidiki TRAORE
Dieli	Abdoulaye BITHIBALY
Macina	Drahamane Diarra
Markala	Hawa TOURE
Sarakala	Alhassane HAIDARA
Bougouni	Siaka DIAWARA
	Madina TALL
Zangaso	Baba BERTHE

PARENTS D'ELEVE

Kita	Koumba Fily KEITA
Badinko	Baboye KOUYATE

Sévaré	Mountaga DIALLO
Goundaga	Bara TAMBOURA
Dieli	Lanseni DEMBELE
Macina	Adama B. TRAORE
Markala	Abdoulaye DIARRA
Sarakala	Idrissa MAIGA
Bougouni	Tinimba BAGAYOKO
Wayerma	Gouro SANOGO
Zangaso	

CONSULTANTS

- Bréhima Sydi CISSE
- Mamadou Oumar MAIGA
- Souleymane SANGARE
- Drissa DIARRA

LISTE DES INVITES AU SEMINAIRE

Bailleurs

1. Boubabacar DIALLO
2. Aly CISSE
3. Chahine RASSECK
4. UNICEF
5. Mme GEHAN
6. Mr BELINI
7. Directeur de l'OMAES
8. Représentant du Group PIVOT
9. Directeur de l'EUMC
10. Représentant FAC
11. Directeur de World Education
12. Représentante de ROCARE
13. Secrétaire Générale UNESCO
14. Représentant du PNUD

Décideurs

15. IPN
16. Conseiller à la Recherche
17. Conseiller à l'Enseignement Supérieur
18. Conseiller à l'Enseignement Secondaire
19. Conseiller à l'Education de Base
20. Conseiller à l'Education Communautaire
21. Conseiller à l'Education Préscolaire
22. Directeur de l'Education Préscolaire
23. Directeur National de l'Enseignement Fondamental
24. Directeur de la DNAFLA
25. Centre de Formation Permanente IPEG

185

26. Directeur de CED
27. Mamadou SANGARE
28. Lala Aïcha FOFANA
29. Moussa CISSE

C. DOCUMENT DE TRAVAIL

Analyse des données

Introduction

Le but de la présente analyse est d'identifier les facteurs contribuant à l'amélioration de l'apprentissage de la langue française dans les écoles maliennes. Pour ce faire il s'agit de distinguer les facteurs discriminants des facteurs non discriminants à l'école, dans la famille et dans la communauté, afin d'esquisser des stratégies potentielles pour améliorer l'apprentissage en général et du français en particulier. Les classes de Première et deuxième années de l'enseignement fondamental sont concernées par cette étude car les taux de redoublement à ce niveau avoisinent 30%.

Les facteurs discriminants sont des variables qui permettent de distinguer les écoles performantes des écoles non performantes d'une part (et ou) les bons élèves des élèves faibles d'autre part.

Les facteurs non discriminants dans l'échantillon sont des variables qui, selon les données recueillies, ne permettent pas de faire cette distinction. Parmi ces derniers on distingue des facteurs non discriminants mais supposés l'être dans la littérature ou le bon sens et ceux non discriminants qui ne suscitent aucune question particulière. Sur ces facteurs non discriminants controversés des tentatives d'explications ou des discussions seront faites. Au terme de ces discussions des propositions de stratégies potentielles seront suggérées en vue d'une amélioration de l'apprentissage de la langue française dans les classes des première et deuxième années de l'enseignement fondamental.

Cette analyse s'articulera autour de trois grandes rubriques: Les conditions de l'enfant, le contexte d'apprentissage et les stratégies d'apprentissage. Pour chacune d'elles il s'agit:

- d'illustrer les résultats provisoires à travers des tableaux et des exemples qui seront commentés et discutés si nécessaire
- de tirer des conclusions partielles: et
- de proposer des stratégies et des interventions possibles.

Rubrique I

Les conditions de l'enfant:

A. Analyse des facteurs discriminants:

Au vu du tableau I, les variables qui permettent de discriminer les bons élèves des élèves faibles sont :

a. La distance qui sépare le domicile de l'enfant de l'école:

C'est à Goundaga, IEF (Inspection d'Enseignement Fondamental) de Bandiagara qu'il a été constaté que les élèves qui habitent non loin de l'école sont plus performants que ceux qui logent à un kilomètre de l'école, dans le village. Certains élèves déscolarisés dans ce village affirment avoir abandonné l'école à cause de la longue distance qu'ils parcouraient tous les jours pour y arriver. Il a été observé aussi que, dans les localités comme Diéli, Zangasso, Sarakala et même Macina, les enfants parcouraient 3 à 4 km pour arriver à l'école. Mais dans ces localités, la distance n'a pas été mise en relation avec la performance. Le fait de parcourir une longue distance peut être la cause d'une fatigue d'une somnolence ou d'autres désagréments pouvant entraîner une baisse de concentration chez l'enfant. B. Levinger (1993) insiste, en effet sur la fatigue et la faim passagère des élèves, comme une source de manque de performance constaté dans plusieurs pays développés.

En conséquence il serait souhaitable pour une meilleure fréquentation scolaire de rapprocher le site de l'école du lieu d'habitation des enfants ou d'envisager des moyens de transport communautaires pour les enfants. Une autre intervention pertinente serait d'envisager la création de cantines scolaires là où l'école est éloignée du village. En effet, l'emploi du temps de l'élève malien prévoit une pause déjeuner se situant généralement entre 12h et 15h. L'élève qui habite à plus d'un kilomètre préfère rester à l'école et se contenter d'une poignée d'arachides, de couscous ou de tout autre "amuse gueule" pour calmer la faim. Ainsi, la faim passagère apparait comme un phénomène lié à la distance. Toute étude ayant trait à la mise en place d'une cantine scolaire comme facteur de rapprochement des élèves à l'école devra prendre en compte cet aspect.

b) Les préacquis cognitifs:

Les préacquis cognitifs sont toutes les expériences de la vie courante dont les enfants peuvent bénéficier et qui peuvent rejaillir sur leur vie scolaire. Ce sont:

- la préscolarisation
- les acquisitions à l'école coranique
- l'apprentissage des contes, légendes et chants en langue maternelle,
- les jeux, etc.

Parmi ces préacquis, ceux qui semblent influencer l'apprentissage du français sont:

La préscolarisation:

D'une manière générale la préscolarisation est une pratique très marginale au Mali et plus particulièrement dans les milieux ruraux. En effet moins de O,84% des enfants bénéficient d'un encadrement préscolaire.

Il faut rappeler que même là où ils existent, les parents n'ont toujours pas les moyens d'y envoyer leurs enfants. C'est pourquoi dans l'échantillon, très peu d'enfants ont fréquenté le jardin d'enfants. En effet sur 100 enfants interrogés, seuls 17 ont fréquenté le jardin d'enfants. Parmi ces enfants la grande majorité a un résultat scolaire satisfaisant. Cela nous permet d'émettre l'hypothèse que la fréquentation du jardin d'enfants favorise au moins pour les deux premières classes, l'enfant dans l'apprentissage du français. Ces résultats concordent avec les travaux de Hassimi O MAIGA [1], de Abdoulaye KY et ceux du rapport ISFRA/CNMU 1993. Ces différents travaux ont montré que l'expérience préscolaire a un effet positif sur l'apprentissage scolaire au Mali. En outre des études menées par d'autres chercheurs africains sur le même sujet, révèlent que les parents considèrent la fréquentation des établissements préscolaires comme pratique favorisant l'apprentissage du français au primaire (Badini 1992; Les états généraux de l'éducation ,MEN,COTONOU,BENIN 1990).

Dans la pratique, les parents qui envoient leurs enfants dans les établissements préscolaires misent en général sur de meilleurs résultats à l'école fondamentale.

En terme d'intervention, il serait nécessaire de créer des jardins d'enfants ou d'autres structures préscolaires comme les garderies d'enfants traditionnelles selon le modèle de Kolondieba[2] (ISFRA, 1993) .

La pratique langagière au foyer: le français:

La capacité d'apprendre une langue se développe au foyer parmi les adultes et les autres enfants,(Hamers 1988),(Bloom 1979). Notre échantillon nous révèle qu'une minorité d'enfants parlent le français à domicile. En effet, 15 élèves pratiquent le français oral en dehors de l'école. Parmi eux, la grande majorité est d'un niveau bon ou moyen. Cette tendance permet de formuler l'hypothèse selon laquelle la pratique du français à domicile facilite l'apprentissage de la langue au moins pour les élèves des deux premières années. Cette hypothèse pourrait être vérifiée sur la base de données quantitatives.

Il convient de préciser que la pratique du français par les enfants se limite généralement à répondre aux questions qu'on leur pose et à des salutations du genre <<

---

[1]Hassimi O. MAIGA ,L'influence du jardin d'enfants sur quelques aspects des acquisitions scolaires au fondamental et de la socialisation."Mémoire de fin d'études de l'Ecole Normale Supérieure de Bamako, Juin 1975"

[2] Kolondieba est une commune rurale du sud de Mali qui a créé avec l'aide d'une ONG américaine "Save the Children" des garderies traditionnelles organisées et gérées par les populations en vue permettre aux femmes de mieux participer aux tr[illegible] domestiques ou champêtres

bonjour, bonsoir > >. Toutefois le simple fait pour l'enfant d'entendre souvent les adultes converser en français peut enrichir l'input linguistique. Par exemple à Markala il nous a été donné d'observer une famille où la pratique du français est très courante par le simple fait que le père de famille est un conseiller pédagogique en retraite. De surcroît il est écrivain et il communique beaucoup en français avec ses enfants qui sont tous d'un bon niveau à l'école. Il en est de même pour certaines familles de fonctionnaires à Dieli et à Macina.

Les acquisitions à l'école coranique:

Au Mali dans les milieux islamisés, il est très courant que l'enfant fréquente une école coranique avant d'entrer à l'école formelle. Les méthodes généralement utilisées par les maîtres de ces écoles consistent à mémoriser des versets du coran pendant les premières années.

A ce niveau, sur les 100 enfants interrogés, 19 ont fréquenté l'école coranique et sont en général de bons élèves. Aussi tout comme dans l'enseignement préscolaire, on peut se permettre de dire que la fréquentation de l'école coranique peut positivement influencer l'apprentissage. Si on place le problème sous l'angle de la compréhension cette influence pourrait être limitée à cause des méthodes telles que la répétition et la mémorisation, pratiques encore en vigueur dans ces écoles coraniques. Par contre si on place le problème sous l'angle de la mémorisation qui est encore très pratiquée même dans les écoles formelles, l'école coranique pourrait être un préacquis important dans des disciplines comme la récitation par exemple. On peut aussi considérer la présence de matériels de lecture (ardoise et coran) et d'écriture (plumes) comme des éléments qui peuvent prédisposer les enfants à la lecture et à l'écriture. Aussi, selon que les enfants seront exposés à une abondance de matériels didactiques, ils auront une bonne performance à l'école. Une étude systématique sur les effets de l'école coranique sur l'apprentissage scolaire en général et les acquisitions en lecture, écriture et langage en français en particulier serait nécessaire.

En terme d'intervention on pourrait sensibiliser les promoteurs des écoles coraniques dans le sens d'un enseignement basé sur la compréhension plutôt que sur la répétition et la mémorisation afin de mieux servir de préacquis pour l'enseignement formel.

B. Les facteurs non discriminants:

A ce niveau il y a deux types de facteurs:

1. Les facteurs non discriminants mais contraires aux résultats des recherches déjà effectuées , au cadre théorique, et même le bons sens.

2. Les facteurs non discriminants ne soulevant aucune question particulière.

1. facteurs non discriminants controversés

Sur le plan physique des facteurs comme l'intégrité physique et mentale et l'état nutritionnel n'ont pas été identifiés comme influençant la performance des élèves. Cela parait contradictoire aux études menées notamment par Save the children à Kolondieba (ISFRA 1993).

Ce paradoxe pourrait s'expliquer pour ce qui concerne l'intégrité physique par le fait que nous n'avons rencontré que quatre cas de déficience (dont trois cas de déficience auditive et un cas de déficience visuelle). A ce niveau il faut noter qu'en général les cas de déficience sont dépistés et éliminés au moment de la scolarisation.[3]

Pour ce qui concerne l'état de santé nutritionnelle, il ressort des informations recueillies que la majorité des enfants ont un régime alimentaire à peu près identique à base de céréales notamment, les légumineuses venant compléter cette alimentation. Les aliments à base de protéine comme la viande ou le poisson sont rares.(Cf. rapport d'expertise du médecin nutritionniste). La variable santé nutrition a été étudiée dans plusieurs pays. Selon ces études il existe une forte corrélation entre les facteurs nutritionnels et l'apprentissage scolaire.

La présente étude n'a pas permis d'établir une relation entre le rendement scolaire et l'état de santé nutritionnel à cause notamment de l'échantillon qui était très petit.

Sur le plan des préacquis, l'histoire de l'enfant joue un rôle prépondérant dans la mise en place des potentialités facilitant l'apprentissage dans la vie scolaire de l'enfant (Bloom 1979). La connaissance des récitations, l'utilisation d'au moins deux langues nationales au foyer et le fait d'aimer et de savoir narrer des contes sont apparus dans cette étude comme des facteurs non discriminants. Du point de vue des langues parlées à domicile, cela parait contradictoire avec la théorie selon laquelle un enfant qui parle deux à trois langues serait mieux prédisposé à apprendre un nouvelle langue par rapport à celui qui n'en parle qu'une. De même le fait de pouvoir réciter un texte, d'aimer et de savoir narrer les contes en langue nationale peut ne pas favoriser l'apprentissage de la langue française si on se limite aux seuls aspects de mémorisation et de répétition mécanique. Ce qui est le cas dans tous les sites visités. Par contre si on parvenait à faire prendre conscience aux enfants de la structure narrative du conte d'une part, et d'autre part si on axait les récitations sur des thèmes apparentés au vécu socio-culturel de l'enfant (les fables comme "les voleurs et l'âne" qui sont très appréciés et compris par les enfants enquêtés), ces préacquis pourraient influencer positivement l'apprentissage du langage et de la lecture en français.

Ainsi, en terme d'intervention il parait opportun d'engager des études sur les modalités d'exploitation des récitations, des contes et des langues nationales utilisées au foyer pour améliorer l'apprentissage du français à l'école.

2. <u>Facteurs non discriminants ne soulevant pas de questions particulières:</u>

Les données révèlent que sur l'ensemble des enfants interrogés, la grande majorité sait chanter.

Par ailleurs, les jeux les plus fréquents sont la danse, la course, le "ton" (association).ou "Parita" (tontine), le cache-cache etc. On constate la présence de beaucoup

---

[3] L'équipe de recrutement est traditionnellement constituée d'un éducateur, d'un parent d'élève et d'un agent de la santé. Son but est d'éliminer à la source des enfants [illegible]quement ou mentalement inaptes aux activités scolaires.

de jeux liés à la motricité ce qui pourrait être utile à l'écriture et au développement physique de l'enfant. Par contre, hormis le jeu de cache cache qui a un caractère de résolution de problème, les jeux à caractère intellectuel et les jeux de manipulation d'objets (confection de jouets: maisonnettes, poupées etc) sont rares. Ce qui pourrait donc expliquer l'impact limité des activités ludiques sur l'apprentissage.

En terme d'intervention il serait utile de sensibiliser les parents afin d'orienter les activités ludiques des enfants vers des jeux à caractère de résolution de problèmes et de manipulation. Une telle pratique serait à initier au niveau de l'enseignement préscolaire.

conclusion partielle:

Au terme de l'analyse des conditions de l'enfant, il apparait que les conclusions tirées méritent d'être validées par des recherches plus systématiques avant d'être généralisées à d'autres contextes. En effet notre échantillon est d'un point de vue quantitatif peu représentatif car les écoles visitées se limitent à une douzaine et le nombre des enfants interrogés ne dépasse pas la centaine.

Des études plus systématiques seraient souhaitables plus particulièrement sur l'intégrité physique et mentale de l'enfant, son état nutritionnel, le fait d'aimer et de savoir narrer un conte, pouvoir réciter un texte et l'utilisation de plusieurs langues au foyer. En effet ces facteurs sont apparus dans l'analyse comme ayant peu d'impact sur l'apprentissage contrairement aux données préexistantes.

Rubrique II
Contexte d'apprentissage

Le contexte d'apprentissage se définit comme l'ensemble des milieux dans lesquels l'enfant effectue son apprentissage. Il comprend:

- La famille et la communauté
- L'école

Au niveau de la famille et la communauté les facteurs analysés sont :

Les conditions physiques de la famille :

- la présence physique du père et de la mère :
- le niveau d'instruction des parents ;
- la ou (les) langue(s) de communication au foyer ;
- l'oralité et autres expériences linguistiques.

L'enfant évoluant entre la famille et l'école,les relations entretenues entre les deux milieux seront étudiées à travers l'attitude de la population vis-à-vis de l'école et de la scolarisation, le degré d'implication des parents d'élèves dans la vie de l'école, les relations personnelles qui s'établissent entre eux et les enseignants.Les données concernant ces relations ont été collectées auprès des parents d'élèves, des directeurs d'écoles et des maîtres.

A l'école les facteurs retenus sont:

- Le site de l'école analysé à travers l'accessibilité de l'école pour les enfants;
- l'environnement physique de l'école analysé à travers l'espace vital (c'est à dire la taille de la cour de l'école). l'état physique des bâtiments, l'existence des latrines et leur état d'entretien. la disponibilité de l'eau potable, la disponibilité d'un bureau et autres matériels didactiques pour le maître.

A) Le contexte familial et communautaire:

1) facteurs discriminants dans le contexte familial: Ce sont:

- Le niveau d'instruction des parents (selon que le parent est instruit à l'école formelle ou pas),
- La langue de communication au foyer (le fait que les parents communiquen avec les enfants en français),

La disponibilité de la lumière pour les enfants sont apparus comme des facteurs qu concourent à un meilleur apprentissage scolaire en français.

En effet sur l'ensemble des enfants considérés comme bon ou moyen, une grande majorité est de parents lettrés. A Sévaré, Markala et Macina par exemple, la plupart des parents lettrés rencontrés déclarent apporter une assistance continue à leurs enfants à domicile. En outre comme précédemment indiqué au chapitre I, le fait d'entendre le français parlé à domicile constitue pour l'enfant un enrichissement de son input linguistique. Ceci permet de pallier la pauvreté du discours pédagogique constatée lors des observations de classes. De plus les parents lettrés ont en général conscience de la nécessité d'apprendre et ménager en conséquence un temps d'apprentissage à domicile pour les enfants. Toutefois certains enfants de parents non lettrés ont de bons résultats et inversement. D'autres facteurs tels que la qualité du soutien pédagogique à domicile, les aspirations des parents pour leurs enfants, le degré de motivation des enfants eux-mêmes etc, interagissent avec le niveau d'instruction des parents dans l'amélioration de l'apprentissage du français en première et deuxième années.

Importance de la lumière et de l'espace pour le travail à domicile:

La vie scolaire de l'enfant malien en général et celle de l'enfant de première et deuxième années en particulier est organisée de telle manière que toute la journée est consacrée soit aux travaux à l'école soit aux tâches domestiques ou champêtres soit aux jeux. Il ne dispose donc que du soir pour réviser les leçons ou faire des devoirs pour le lendemain. C'est pourquoi la disponibilité de la lumière est essentielle. Par exemple à Goundaga, Zangasso, et Sévaré (milieux rural et semi urbain), la grande majorité des élèves faibles déclarent ne pas lire ou écrire le soir à la maison faute de lumière.

Par ailleurs, il ressort des données que les élèves ne disposent pas de lampes réservées exclusivement aux études. C'était le cas par exemple à Dieli, Zangasso, Goundaga et Macina. La lampe est commune à toute la famille, chaque membre peut s'en servir à tout moment On peut alors affirmer que là où les enfants disposent d'un coin et de la lumière pour les études. ils sont plus performants que là où ils n'en disposent pas. Cependant la présence d'un coin d'étude et de la lumière, bien qu'essentielle, ne suffit pas pour rendre compte de la performance scolaire de l'élève.

D'autres conditions telles que la surveillance et le contrôle effectif du travail accompli pendant les heures d'étude, doivent être remplies.

Par rapport à l'ensemble de ces facteurs qui influencent le rendement de l'élève en français, il serait souhaitable d'équiper certaines salles de classe en lampes et d'organiser des études surveillées le soir à l'intention des élèves dont les parents ne sont pas instruits ou qui ne disposent pas de lumière à domicile pour les études. On s'oriente ainsi vers des cercles d'études. Le système d'étude du soir a fait ses preuves dans certaines écoles fondamentales comme à Sébékoro[4] IEF de Kita dans les années 1970 et dans les écoles à internat.

---

[4] Dans les années 1970, les parents d'élèves de Sébékoro et le corps enseignant ont tenté d'instaurer le système des études surveillées le soir pour permettre aux candidats du DEF (Diplôme d'Etudes Fondamentales) d'avoir de la lumière, un coin pour étudier et aussi de bénéficier de la présence d'un maître. Ainsi on a pu constater une nette amélioration des résultats au niveau des candidats présentés au DEF.

Relations communauté-école :

On entend par relation communauté-école, les rapports de collaboration existant entre l'école et la communauté d'une part et entre les maîtres et les parents d'élèves d'autre part. Il est à signaler que les rapports entre parents d'élèves et école peuvent varier d'une personne à l'autre. L'analyse de ces rapports aurait pu être faite dans le cadre d'une analyse quantitative et aboutir à des conclusions plus édifiantes.

Pour les données disponibles, le degré d'implication de la communauté (prise de façon globale) à la vie de l'école a été pris en compte. Cela se manifeste par la participation des parents aux réunions, les visites de suivi à l'école, l'appui à la scolarisation et à la bonne fréquentation scolaire.

La participation peut être aussi financière ou matérielle (construction de locaux, fourniture de matériel de construction, équipement des classes ou même participation en nature à la vie scolaire).

Les données révèlent que sur l'ensemble des écoles performantes, la population participe matériellement à l'entretien de l'école, elle est favorable à la scolarisation et aide à la bonne marche de l'école à travers les visites de suivi et la participation aux réunions école-parents d'élève. Dans l'autre sens, il apparait que les directeurs d'école et les enseignants de par leurs initiatives encouragent les communautés comme le témoigne "le livret mensuel de correspondance entre l'école et la famille". Ce livret produit ici dans son intégralité, a été proposé par le directeur de l'école de Diéli 1er cycle comme contribution à l'amélioration des relations école-famille.

< < Nous souhaitons que ce livret soit vraiment un livret de correspondance entre l'école et la famille, quelque chose de mieux que la sèche communication des notes chiffrées. Le maître d'école a besoin d'appuyer son autorité sur celle du chef de famille qui lui permettra de mieux connaître le petit être qu'on lui a confié.

Le père, la mère, le tuteur ont le droit légitime de savoir comment leur enfant se comporte à l'école et s'il fait des progrès.

Un sentiment de confiance et d'estime réciproque unira les uns aux autres, au grand profit de l'éducation et de l'instruction de l'enfant malien.

Celui ci sentira ce lien au dessus de sa tête. Il n'y aura pas discontinuité entre les deux milieux où il vit. Il y aura réconfort de se sentir aimer, protéger, surveiller, guider, encourager.

Avant de commencer l'année scolaire, qu'il nous soit permis de rappeller que la rigueur des notes chiffrées ne réflettent pas forcément le mérite de l'apprenant. Il y a des efforts silencieux et malheureux. Rendons justice à cela et ne les accablons pas.

Que faut-il en somme?
-Susciter l'effort
- Encourager l'effort

- Récompenser l'effort. > >

Quand aux écoles non performantes, on constate une indifférence et souvent même une hostilité de la communauté vis à vis de l'école. Les raisons évoquées généralement pour cette indifférence ou même cette hostilité de la communauté sont, entre autres, la distance qui sépare l'école du village, les difficultés d'hébergement des enfants dans le village d'accueil de l'école, les rivalités entre communautés qui veulent souvent avoir chacune leur école.

L'adhésion de la communauté aux questions scolaires, pourrait être déterminante dans le rendement scolaire.

En terme d'intervention, on doit sensibiliser les parents à avoir des rapports plus étroits avec la communauté scolaire et même à assurer le suivi du travail des élèves auprès des maîtres. Ces derniers et les directeurs doivent être encouragés à exécuter cette tâche de sensibilisation en profondeur. On pourrait par exemple créer au sein des APE (Association des Parents d'Elèves), des comités de gestion de l'école ayant pour mission d'assister le directeur dans la prise des décisions concernant l'école.

Relativement à la distance qui sépare l'école des villages, on peut inciter les parents à s'organiser de manière à assurer, à tour de rôle, le transport des enfants par des moyens locaux. La création de cantines peut valablement résoudre le problème de logement des élèves non résidents dans le village où se trouve l'école. Ces cantines seront gérées par le comité de gestion ci-dessus mentionné.

2. Facteurs non discriminants dans le contexte familial:

2.1 Facteurs non discriminants controversés:

Dans le contexte familial, l'oralité définie en terme de capacité à narrer des contes, des légendes, des devinettes et des proverbes et les expériences linguistiques de l'enfant définis en termes de nombre de langues nationales parlées par l'enfant, n'ont pas permis, selon les données disponibles, de discriminer les bons élèves et les élèves faibles.

Le contexte culturel traditionnel malien est dominé par l'oralité. L'aspect oral et gestuel constituent les éléments de base de la communication. Ainsi l'apprentissage de la langue s'opère dans un processus naturel qui procède de l'écoute, de la compréhension, de l'imitation et de la création. Parallèlement aux conversations quotidiennes, il est rare de trouver une famille traditionnelle malienne dans laquelle les légendes, les contes, les proverbes et les devinettes ne sont pas racontés aux enfants.

Les enquêtes ont révélé que de nombreux maîtres utilisent le conte à l'école et que la plupart des enfants aiment et savent dire des contes. Les questions de la méthode d'apprentissage du conte n'ont pas été directement posées aux enfants.

Tous les élèves interrogés savent narrer correctement les contes en langue maternelle. En effet la plupart des enfants africains apprennent les contes lors de veillées animées par les grands parents ou des conteurs traditionnels. En outre, les récitations axées sur les contes et les légendes étaient mieux assimilées que celles qui étaient basées sur

d'autres thèmes qui ne réfèrent pas à l'univers socio culturel de l'enfant malien. Citons à ce sujet "mon beau village", ou "le beau petit frère tout rose et tout nu".

On peut donc émettre l'hypothèse selon laquelle l'introduction des contes et légendes dans l'enseignement du français et en particulier dans l'enseignement du langage par le dialogue, de la lecture-écriture et de la récitation faciliterait l'acquisition de la langue pour la majorité des élèves. B.S. BLOOM (1979) considère ce type d'apprentissage comme une activité comportant un minimum d'erreurs. Les écoles gagneraient beaucoup à mettre l'accent sur les facteurs culturels qui favoriseraient l'apprentissage du français oral ou écrit. A cet effet, elles peuvent s'inspirer des méthodes appliquées par les conteurs traditionnels. Ceux-ci ont une pédagogie spécifique du conte qui pourrait être adaptée et exploitée dans le contexte scolaire. Par exemple, au début du conte, le conteur présente les personnages, et explique à son auditoire les actions qui seront entreprises et les étapes à suivre. Ceci permet au public de suivre la trame du récit. Le conte est généralement adressé à une personne de l'auditoire qui encourage le conteur en disant "Nam" (ce qui veut dire nous te suivons) ou en posant des questions contribuant à relancer l'intérêt de l'auditoire. Le conteur peut également s'adresser à ce dernier pour l'amener souvent à deviner la suite de l'histoire avant de poursuivre. Il peut aussi interrompre un conte à un endroit particulièrement intéressant afin de maintenir l'intérêt du public. Toutes ces techniques pourraient inspirer notre enseignement en vue d'une adaptation au contexte culturel.

Par rapport au nombre de langues nationales parlées au foyer, les données recueillies ne permettent pas de savoir si les enfants de familles multilingues étaient plus performants que ceux des familles monolingues. Il serait intéressant de pousser les investigations dans ce sens.

le temps de réfléchir, le temps de répondre et de se corriger.

4. L'emploi de la langue:

L'enseignement formel au Mali utilise le français comme médium d'enseignement dès la première année. Les élèves apprennent le français, les règles de grammaire de conjugaison en même temps qu'ils apprennent les autres disciplines comme les mathématiques, les leçons d'observation, l'histoire, la géographie etc dans la même langue. Cela est réalisé à travers des programmes trop ambitieux même par rapport aux élèves qui apprennent dans leur propre langue dans des conditions matérielles meilleures (IPN 1994). Ce qui constitue des difficultés supplémentaires dans l'apprentissage. Le succès des écoles expérimentales en langues nationales illustre bien ces difficultés. En effet des évaluations (IPN 1984,1993) ont montré que les élèves des écoles expérimentales Bambara plus particulièrement ceux de la méthodologie convergente, performant mieux dans certaines disciplines (calcul, et même français en classe de sixième année) que les élèves qui apprennent en français exclusivement.

Dans cette analyse l'emploi de la langue a été mesuré par la fréquence d'utilisation des langues entre les élèves eux-mêmes d'une part et entre les élèves et le maître d'autre part. Sur ce plan, il a été remarqué que l'utilisation de la langue dominante du milieu, en l'occurrence le Bamanankan, n'est pas un facteur discriminant les écoles. Dans toutes les écoles visitées, les élèves s'exprimaient entre eux en langue nationale dans la classe. Il s'est même avéré que dans certaines écoles comme Zangasso, Dieli et Macina, le Bamanankan bien que n'étant pas la langue maternelle de la majeur partie des enfants était la langue dominante du milieu utilisé en classe. La question qu'on peut se poser est alors de savoir si le Bamanankan en tant que langue dominante du milieu ne peut pas soutenir l'enseignement du français comme c'est le cas, avec succès, dans les écoles où on applique la méthodologie convergente.

Pour ce qui concerne le degré d'utilisation du français par le maître, l'observation des classes montre que ce facteur n'est pas discriminant par rapport à la performance. A MacinaII la maîtresse, non locutrice de la langue dominante du milieu, s'exprimait avec les élèves le plus souvent en français.Il est possible que dans ce cas précis, le français ne soit utilisé par la maîtresse que comme langue de communication unilatérale allant du maître aux élèves sans compréhension réelle de la part de ces derniers.D'où la nécessité pour l'étude de raffiner les critères de performance dans la mesure où ce constat est contraire au bon sens. Dans bon nombre de cas, le français n'intervient qu'à travers les répétitions et la mémorisation. Dans les classes visitées, la récitation par exemple ne servait que d'exercice phonatoire.Les enfants récitaient des poèmes sans en comprendre le sens.

Parmi les élèves faibles à Wayerma et à Zangasso aucun ne comprenait le sens de ce qu'il récitait.

Parmi les élèves moyens un seul comprenait le sens. Parmi les bons élèves seuls 2 sur 6 comprenaient le sens de ce qu'ils récitaient et 4 sur 6 savaient très bien réciter sans compréhension réelle.

Par ailleurs, les récitations axées sur nos valeurs culturelles étaient bien comprises par les enfants comme par exemple "les voleurs et l'âne" qui ressemble beaucoup aux contes du terroir alors que des récitations comme "mon beau village" n'étaient pas du tout comprises. On peut alors supposer que l'introduction des contes maliens dans les récitations favoriseraient la compréhension chez les élèves.La récitation pourrait donc être mieux assimilée si elle était axée sur les valeurs culturelles de l'enfant. Actuellement la récitation en tant que moyen d'expression orale ne traduit pas toujours un niveau de compréhension chez les élèves.

Les écoles gagneraient beaucoup à mettre l'accent sur les facteurs culturels qui favorisent l'apprentissage du français oral ou écrit.

La communication est un échange fructueux d'informations entre maîtres et élèves permettant la compréhension du message pédagogique en classe. Cet échange peut être verbal, gestuel écrit ou illustré. Il a été constaté que ni l'utilisation du langage verbal, ni celle du langage gestuel écrit ou illustré n'étaient des facteurs discriminant les écoles . Par exemple, le langage par le dialogue de par la nature de sa démarche méthodologique incite les maîtres des écoles performantes aussi bien que ceux des écoles non performantes à utiliser le langage gestuel et illustré. Au delà de cette application mécanique des consignes de la méthodologie du langage par le dialogue (enseignée surtout au cours des stages de formation des maîtres du IVème projet), certains maîtres réussissaient plus que d'autres à utiliser de manière expressive et intéressante pour les élèves, les gestes et les illustrations. On peut citer le cas d'un maître qui a apporté en classe des objets permettant de mieux illustrer la leçon du jour malgré la présence de l'image. Ce caractère non discriminant de l'utilisation du langage gestuel dans l'acquisition d'une langue étrangère apparait comme un paradoxe qui peut pousser à se poser les questions suivantes:

Les élèves comprennent-ils ce qui est enseigné à travers les images et les gestes dans nos écoles? Associent-ils les gestes, les images et les expressions avec leur expérience vécue? On peut douter de la capacité d'utilisation correcte des images , des gestes et de la parole par les enseignants. Est-ce leur formation qui est en cause? Les maîtres évaluent-ils la compréhension des gestes et des images par les élèves? Est ce qu'ils ne privilégient pas la répétition des répliques par rapport à la compréhension? Les différentes évaluations faites par les maîtres lors des leçons de langage permettent de supposer que la compréhension n'était toujours pas évidente. La communication serait-elle plus facile si les élèves comprenaient ce que les maîtres leur enseignaient à travers le langage gestuel, verbal et illustré?

Comme intervention, il s'agira de former les maîtres aux techniques de communication en classe de manière à ce qu'ils privilégient la concrétisation et la communication nécessaires à la compréhension du français en tant que discipline d'enseignement. On peut également suggérer aux maîtres de s'exprimer moins et de faire en sorte que les élèves parlent plus. Les enseignants peuvent par exemple soutenir le vocabulaire obligatoire dans l'enseignement par un vocabulaire facultatif abondant. Ils doivent consacrer beaucoup plus de temps à la compréhension plutôt qu'à la mémorisation dans leur enseignement.

2.2 Facteur non discriminant ne soulevant pas de questions particulières:

- La présence du père et de la mère au foyer:

Selon les données recueilliés, la présence physique du père et de la mère au foyer n'est pas un facteur discriminant les bons élèves des faibles. En Afrique en général et au Mali en particulier, l'absence des parents est généralement compensée par la présence de substituts parentaux comme les oncles, les tantes, les frères et soeurs, les grands parents etc. Il est de coutume dans certains milieux qu'un homme épouse la femme de son frère défunt pour mieux encadrer les enfants. Dans le sud du Mali, à Kolondiéba, les bambara (ethnie Du Mali) offrent aux orphelins et aux enfants de parents absents la même éducation que leurs propres enfants.

B. Le contexte scolaire:

Facteur discriminant: Au niveau de l'école le seul facteur discriminant est l'état d'entretien des latrines. Les écoles dites performantes avaient toutes des latrines bien entretenues contrairement aux écoles dites non performantes. Ce résultat serait lié au fait que la propreté des latrines pourrait être révélatrice d'une autre caractéristique des écoles performantes à savoir le sens de l'organisation propre au directeur de l'école.

Dans une école dont le directeur responsabilise les maîtres et les élèves, il apparait normal que les latrines soient propres. Or ce sens de l'organisation du directeur à été souligné comme une des caractéristiques des écoles performantes.(OUELLET 1990)

Facteurs non discriminants:

Au niveau des conditions physiques de l'école, les données disponibles n'ont pas permis de faire une différence entre les écoles performantes et les écoles non performantes. D'une manière générale l'ensemble des écoles visitées travaillent dans des conditions à peu près similaires pour ce qui concerne l'éloignement du site de l'école du domicile des élèves, la taille de la cour de l'école, l'état des bâtiments, l'existence des latrines, la disponibilité de l'eau potable et du matériel didactique de première nécessité pour le maître (bureau, chaise, règles compas etc). Ce résultat se recoupe d'ailleurs avec ceux de l'évaluation des écoles du IVè Projet Education (IPN 1991).

La gestion de la classe mesurée par les interactions sociales en classe (distribution de la parole, réglementation des déplacements, organisation des travaux de groupes, attribution des places assises et les encouragements verbaux suite à une bonne réponse de l'élève), ne discriminent pas les écoles performantes et non performantes. Cela peut s'expliquer notamment par le fait que même dans les écoles dites performantes, les maîtres continuent à adopter un enseignement de type frontal dans les relations maîtres élèves.

La distribution de la parole aux élèves,dans les écoles performantes, aussi bien que dans les écoles non performantes, était effectuée exclusivement par le maître. Au cours des leçons, il était courant de voir les élèves prendre très souvent la parole pour répondre à une question fermée par un "oui "ou par un "non". Les questions posées sont généralement du genre "qu'est ce que c'est? As-tu compris? "Est ce que c'est untel?" "Alors c'est qui?" Il est rare de constater des questions ouvertes exigeant des réponses élaborées par les élèves.

Ces derniers interviennent également pour répéter mécaniquement la réponse trouvée par un camarade. Dans l'ensemble des écoles visitées seuls trois élèves ont posé une question au maître. Dans ces rares cas,(cas de Markala par exemple), c'était en langue nationale et pour demander des précisions sur les consignes de travail.

Les interactions entre les élèves à travers les travaux de groupe, étaient réalisées à Diéli et à Macina. Le langage par le dialogue de par sa démarche méthodologique incitait les maîtres à faire répéter les répliques par des groupes. Mais les répétitions étaient mécaniques dans la plupart des cas.

Les échanges dans la classe entre les élèves eux-mêmes se manifestent en général à travers le prêt de matériel (crayons, craies, gommes, chiffons etc), la demande d'autorisation au maître pour sortir et le bavardage en classe. Ces mouvements des élèves apparaissent le plus souvent pendant les pauses ou pendant les périodes de transition entre deux disciplines d'enseignement. Les maîtres n'arrivent pas à exploiter ces rapports horizontaux entre élèves. Les bonnes réponses que les élèves murmuraient entre eux n'étaient pas souvent perçues par le maître. Un enseignant qui pratique une pédagogie frontale ne saurait exploiter ce que les enfants pourraient se murmurer en classe. L'exploitation de la méthode des "incidents critiques" était absente chez les maîtres observés. Là, il faut souligner que l'effectif pléthorique des classes constituait un véritable handicap pour le maître quant au suivi et à l'exploitation des "incidents critiques".

Pour ce qui est de la correction des erreurs sur le plan lexical, syntaxique (fautes grammaticales), phonologique (mauvaise prononciation) et sémantique (compréhension du sens des mots), la manière dont les maîtres corrigeaient leurs élèves variaient d'un maître à l'autre. Toutefois on peut supposer que la nature des erreurs aussi bien que la manière dont elles sont corrigées par le maître pourraient constituer des facteurs discriminants. Tandis que certains maîtres faisaient corriger les erreurs des élèves par leurs camarades (cas de Markala classe de première année...), dans d'autres cas, les erreurs faisaient l'objet de railleries de la part du maître ou des autres élèves.

Dans certains cas le maître corrige l'erreur notamment en faisant répéter la bonne réponse sans expliquer à l'enfant la nature de son erreur. Le rapport d'évaluation du IVè Projet éducation (IPN 1992) avait révélé que les maîtres avaient des lacunes importantes dans la correction des erreurs. Il a été constaté par exemple que les fautes d'orthographe commises par l'élève étaient systématiquement pénalisées même en calcul.

Par rapport à ces résultats les maîtres devraient être formés à mieux gérer leurs classes. Cette formation devrait mettre l'accent sur l'apprentissage théorique et pratique de techniques de gestion de la classe telles que les travaux de groupes, la manière de développer l'entraide entre les élèves en classe, la capacité à poser des questions ouvertes permettant aux élèves de s'exercer à parler effectivement le français à travers des réponses élaborées.

Par ailleurs la formation devrait permettre aux maîtres de comprendre qu'il n'est pas toujours nécessaire de corriger systématiquement toutes les erreurs commises par l'élève surtout si celles-ci ne gênent pas la compréhension de la leçon, ni de sanctionner des erreurs qui ne relèvent pas de l'objectif de la leçon. Les maîtres devraient également tenir compte des facteurs affectifs dans la correction de l'erreur, ils devraient également donner à l'élève

Les maîtres doivent être formés de manière à évaluer la compréhension notamment à travers la formulation de questions de compréhension . Ils doivent s'inspirer beaucoup de la banque d'items disponible à l'IPN à cet effet. Enfin il est avantageux de recommander aux inspecteurs et aux formateurs de laisser beaucoup plus d'initiatives aux maîtres lors des leçons de langage par le dialogue (utilisation des contes par exemple).

Rubrique III
Les stratégies d'apprentissage

Les stratégies d'apprentissage sont considérées comme les voies et moyens permettant à l'apprenant d'aller d'un niveau d'acquisition élémentaire à un niveau supérieur. Ces voies sont entre autres, les méthodes, techniques et procédés didactiques que le maître emploie dans le processus d'enseignement/apprentissage.

Les moyens se définissent à travers l'équipement de la classe en mobilier, en tableau noir, en support visuel et autres accessoires. Les substituts que le maître peut apporter pour concrétiser ses leçons, l'équipement des élèves en manuels et autres fournitures scolaires telles que les cahiers, les carnets, les ardoises, les crayons,les règles, la craie etc sont parties intégrantes de ces moyens.

La présente rubrique comporte 2 sections:

- L'analyse de l'utilisation du matériel didactique et son impact sur l'apprentissage du français.
- L'analyse des stratégies didactiques: A ce niveau l'étude porte sur les méthodes, techniques et procédés que peut employer le maître de façon formelle ou non formelle.

Les stratégies didactiques formalisées ne sont pas seulement les stratégies officielles mais concernent tout ce que le maître fait de façon organisée. Quant aux stratégies non formalisées, elles relèvent des actions d'initiative et d'improvisation raisonnées de la part de l'enseignant. Elles sont non conventionnelles et nécessitent une certaine tolérance de la part de l'encadrement constitué par les formateurs, les inspecteurs et les conseillers pédagogiques.

Les composantes de cette rubrique bien qu'étant des entités distinctes entretiennent tout de même entre elles des inter-relations dynamiques.

a) <u>Les matériels didactiques</u>

a1) Facteurs discriminants:

Il est généralement admis que la disponibilité des manuels scolaires à la maison favorise l'apprentissage parce que donnant l'occasion à l'enfant de s'exercer aux activités scolaires (Coleman 1968). C'est aussi un indicateur de la richesse culturelle du milieu familial de l'enfant (Jenks 1972).

L'impact de la disponibilité des manuels à domicile sur le rendement scolaire est confirmé d'ailleurs par les réponses de la plupart des élèves considérés comme bons et moyens interrogés dans le cadre de cette recherche. Ces derniers affirment lire à domicile parce qu'ils disposent de livres de lecture. En effet plus de la moitié des enfants bons ou moyens possèdent un manuel scolaire à domicile. Par contre rares sont les élèves faibles qui disposent de manuel scolaire à la maison.

La disponibilité du matériel scolaire au foyer discrimine les bons élèves des élèves faibles.

En terme d'intervention à ce niveau, il serait souhaitable que les écoles soient dotées de livres en quantité suffisante permettant aux enfants de les apporter à la maison et de les exploiter. Même si les livres ne sont pas suffisants, il serait mieux d'instituer un système permettant à chaque élève de les amener à domicile et de les utiliser à tour de rôle.

a2) Facteurs non discriminants:

- la disponibilité du matériel didactique à l'école :

Dans toutes les écoles concernées par l'étude, il apparaît que les classes sont dotées de matériel de première nécessité (tableaux, craie, règles, supports visuels, cahiers de préparation) pour le maître (ardoises, crayons, cahiers, stylo etc.) pour les élèves.

En outre, certains maîtres apportaient des substituts permettant de concrétiser la leçon. Dans le cas de Diéli, Macina et Faraba, les maîtres apportaient pour les leçons de lecture, des étiquettes qu'ils avaient eux mêmes confectionnées (il s'agissait, en général, de lettres ou de figures géométriques que le maître dessinait sur du carton et découpait avant de venir en classe).

La disponibilité du matériel à l'école ne permet pas de discriminer les écoles performantes des écoles non performantes. Toutefois les différents rapports d'évaluation du projet de développement de l'éducation de base ont établi que la présence de livres ne signifie pas toujours qu'ils sont mis à la disposition des élèves, certains maîtres les gardent sous clé en affirmant qu'ils sont insuffisants ou qu'ils peuvent se détériorer. D'autres ne les distribuent pas parce qu'ils ne disposent pas de guide du maître pour les enseigner. Le seul guide du maître en usage dans la plupart des écoles est celui du langage par le dialogue et cela en raison souvent d'un livre pour plusieurs maîtres et voir même souvent un livre pour plusieurs écoles tel que de cas de Goundaga et Kargué.

Pendant les enquêtes les livres ont été rarement utilisés dans les classes. Cela s'explique par le fait que les enquêtes se sont déroulées généralement en début d'année.

- L'exploitation du matériel scolaire: Dans les classes observées (1ère et 2ème années), le tableau noir et l'ardoise apparaissent comme des instruments très essentiels. Dans certaines écoles, les maîtres ont fait utiliser les manuels et les étiquettes (Faraba, Macina et Diéli). Certains maîtres apportaient, pour leur cours, des substituts que les élèves appréciaient beaucoup (Wayerma, Faraba et Macina). Ces substituts s'appliquaient surtout aux leçons de langage par le dialogue.

Les données relatives à l'exploitation du matériel didactique ne permettent pas de discriminer les écoles performantes des écoles non performantes.

Un cas particulier a retenu l'attention lors des observations de classe à Zangasso (école performante).Au cours de la leçon non seulement le tableau était rarement exploité mais aussi le maître ne faisait pas du tout utiliser les ardoises par les élèves lors des séances de lecture-écriture.

L'exploitation du matériel en rapport avec la performance pourrait être clarifiée davantage avec une étude plus approfondie.

En terme d'interventions il est nécessaire de former les maîtres dans le sens d'une utilisation plus fréquente des manuels scolaires et autres matériels didactiques. Cette formation devrait aussi permettre aux enseignants de sensibiliser les parents à suivre l'exploitation des manuels par leurs enfants à domicile.

Il est également indispensable d'élaborer des guides permettant au maître de mieux exploiter les manuels d'élèves. Pour ce faire il est urgent d'élaborer un guide du maître pour chaque livre d'élève actuellement disponible.

B. Les stratégies didactiques formalisées et non formalisées:

B1. Les stratégies didactiques formalisées.

Elles ont été analysées à travers les éléments suivants:

1° Le respect de la fiche de leçon en langage et en lecture écriture préconisée par les formateurs.

2° La concrétisation des leçons et la variation des exemples.

3° La pratique de l'émulation en classe.

4° Le travail en groupe.

5° L'utilisation des méthodologies d'enseignement du langage par le dialogue et de la lecture écriture.

6° Les répétitions individuelles et collectives en classe.

7° La correction des erreurs.

L'exécution de la fiche type de leçon en langage et en lecture écriture n'est pas un facteur discriminant. En effet, dans les écoles performantes comme Wayerma I aussi bien que dans les écoles non performantes comme Sarakala, Faraba A 1ère année et Macina II 1ère année, la plupart des maîtres appliquaient scrupuleusement ce modèle. Dans ces mêmes écoles certains maîtres ne les appliquaient pas. Cette situation peut s'expliquer par le fait que tous les maîtres ne sont pas encore formés à la méthodologie. (Cf rapport d'évaluation du

IVème Projet IPN 1992). Il arrive souvent que des maîtres qui enseignaient dans des zones non encore couvertes par le Projet, soient affectées dans ces écoles.

S'agissant de la concrétisation des leçons, à Zangasso, Dieli et Wayermal, des efforts sérieux étaient déployés. A wayermal par exemple, la maîtresse de 2ème année a amené des matériels locaux (arcs, flèche, lance- pierre, fauteuil), en classe au cours d'une leçon de langage par le dialogue. A Zangasso, la maîtresse a concrétisé une leçon portant sur la pêche par des outils de pêche apportés pour la circonstance. Dans toutes les écoles performantes visitées les leçons étaient suffisamment concrétisées par les maîtres. Il y avait également des écoles non performantes dans lesquelles les maîtres concrétisaient également leurs leçons comme à Faraba A 1ère année et à MacinaII 1ére et 2 ème années. Ce constat laisse supposer que la concrétisation des leçons pourrait être plus systématique dans les écoles performantes que dans les écoles non performantes.

On peut se demander si au delà de l'apport de substituts de matériel de concrétisation en classe par le maître, la manipulation effective du matériel didactique par les élèves ne permettrait pas de discriminer les écoles performantes et les écoles non performantes. Par exemple à Markala (école performante), les notions, "dessus, dessous, à gauche, à droite" ont été enseignées et évaluées à travers des manipulations faites par les élèves. En effet,le maître a invité les élèves à faire des démonstrations et à dire si l'objet se trouve "sous", "sur", "à gauche", ou à "droite". En réaction à cette méthode participative, les élèves ont montré un grand intérêt pour la leçon en manifestant le désir d'être désignés pour démontrer qu'ils ont réellement compris les notions enseignées.

A défaut d'être désignés certains élèves soufflaient la réponse au camarade interrogé. En évaluant l'atteinte des objectifs, les observateurs et l'enseignant se rendaient tous compte que les élèves arrivaient à associer les termes appris avec les objets de concrétisation. Cet exemple montre que la compréhension des notions en langue étrangère, surtout en première et deuxième année, nécessite une concrétisation au cours de laquelle l'élève à travers des manipulations d'objets découvre les termes et expressions de la langue.

L'utilisation des méthodes d'enseignement du langage par le dialogue (essentiellement la reproduction des répliques du dialogue mémorisé à partir d'un support visuel) et de la lecture-écriture (méthode mixte)[5], n'est pas discriminante non plus. Tous les maîtres observés utilisaient ces méthodes prescrites par l'IPN pour l'enseignement du langage et de la lecture-écriture.

Toutes les écoles visitées pratiquaient les répétitions individuelles et collectives. Cependant dans certaines écoles performantes, l'enseignement du langage était accompagné de gestes compréhensibles par les enfants. Par exemple au moment de simuler les personnages du langage, certains maîtres des écoles performantes parvenaient à déceler chez les élèves les confusions qui demeuraient et leur faisaient découvrir les gestes qui correspondaient aux répliques. Exemple à Wayerma I et à Diéli,les maîtres amenaient les élèves à identifier les personnages en les pointant du doigt d'une part et d'autre part, ils les invitaient à simuler les rôles en liant le geste à la parole.

---

[5] La méthode mixte de lecture/écriture est une combinaison des méthodes analytiques et synthétiques de lecture/écriture.

Dans d'autres écoles, les élèves répétaient souvent les phrases sans même observer le support visuel. Ce qui laisse supposer que la reproduction des répliques du dialogue constitue pour le maître l'unique objectif de la leçon. Or l'idéal aurait été d'amener les élèves à associer ces répliques à des images ou à des actes simulés. Ce qui serait un début de compréhension. A partir de ce constat on peut dire que c'est la manière dont ces méthodologies sont mises en oeuvre qui constitue le facteur discriminant les écoles performantes et non performantes.

Pour améliorer l'application des méthodes d'enseignement du langage par le dialogue il est nécessaire lors de la formation des maîtres de mettre l'accent sur la compréhension. Pour ce faire les maîtres doivent être formés à l'utilisation des jeux de rôle pour évaluer cette compréhension. Les textes du langage doivent être choisis en fonction de leur signification par rapport au vécu socio culturel des enfants. C'est pourquoi un programme d'élaboration de textes et de supports visuels à partir de contes et légendes du terroir devrait être conçu pour le langage et la lecture. La formation des enseignants pourrait se réaliser à travers des modules conçus sur la base d'observations de leçons auprès de certains maîtres des écoles performantes (le cas de Markala par exemple). Ce cas pourrait être vulgarisé à travers des leçons modèles données par ce maître dans les autres écoles pilotes que le Projet PAQE aura définies.

Quant aux erreurs elles étaient corrigées à peu près de la même manière dans toutes les écoles visitées. C'était soit le maître lui-même qui s'en chargeait soit un élève était invité par le maître à corriger son camarade. La façon dont les erreurs sont corrigées est tellement importante qu'il serait souhaitable de pousser les investigations dans ce sens dans la mesure où nos données actuelles sont très limitées. Toutefois il a été constaté que les corrections se faisaient par simple répétition de la réponse de l'élève reformulée par le maître ou un autre élève. Cette étude pourrait exploiter les difficultés identifiées auprès des enseignants dans l'évaluation de leurs élèves par l'équipe d'évaluation de l'IPN (IPN 1992 rapport technique).

C2. Les Stratégies didactiques non formalisées:

A ce niveau, l'analyse a porté sur :

- les stratégies qui facilitent l'enseignement du maître.
- l'exploitation des incidents critiques (situations inattendues ou enseignement occasionnel en classe).
- l'incitation à la lecture en dehors de la classe.

A Dieli 2ème année et à Faraba A 2ème année il a été observé des stratégies non formalisées qui ont aidé les maîtres dans leur enseignement. A Dieli, le maître de la deuxième année est sorti de la classe pour cueillir une feuille et les élèves n'ont eu aucun mal à trouver le mot correspondant contenant le son "euil". A Faraba A 2ème année la maîtresse est arrivée à amener les élèves à construire leur propre texte de lecture en leur demandant d'abord de trouver des mots terminés par "on" et ensuite de les employer dans de courtes phrases. Celles ci étaient portées au tableau et lues pas l'ensemble de la classe.- Les stratégies non formalisées défavorisant l'apprentissage ont été également observées dans certaines écoles plus particulièrement à Sarakala.le maître de première année s'est servie d'une feuille de papier illisible pour faire lire une phrase. On pouvait à peine distinguer les

mots de la phrase. En fait les enfants ne lisaient pas mais répétaient mécaniquement après le maître ne voyant pas ce qui était écrit sur le papier.

Les données n'ont pas été collectées sur l'exploitation des incidents critiques. Toutefois ,il semble que l'exploitation judicieuse des conversations informelles entre élèves au cours de la leçon pourrait favoriser l'apprentissage.

Les données collectées n'ont pas permis de conclure si l'incitation à la lecture en dehors de la classe par le maître est un facteur discriminant. Cependant,l'incitation à la lecture est d'autant plus importante que l'enfant en milieu rural aussi bien qu'en milieu urbain est de plus en plus exposé à l'écrit (livres, journaux, pancartes, plaques publicitaires, graffiti etc). Il apparait que l'incitation des élèves à la lecture en dehors de la classe par le maître favorise l'apprentissage.

Conclusion

Au terme de cette étude on constate que l'amélioration de la qualité de l'éducation nécessite la prise en compte de trois groupes de facteurs:

- Les facteurs liés à l'environnement socio économique, culturel et sanitaire dans lequel l'enfant évolue avant et pendant sa vie scolaire;
- Les facteurs liés au contexte d'apprentissage à l'école et à domicile;
- Les stratégies didactiques formelles et non formelles mises en oeuvre dans le processus d'apprentissage.

Les facteurs qui sont apparus les plus déterminants dans l'amélioration des rendements en langue étrangère française sont:

- La distance parcourue par l'enfant pour arriver à l'école;
- L'expérience de préscolarisation;
- La fréquentation préalable d'écoles coraniques;
- La pratique du français au foyer et en classe;
- La disponibilité du manuel scolaire et de la lumière pour son utilisation à domicile;
- Le degré d'utilisation des manuels scolaires à l'école;
- la fréquence des stratégies didactiques non formalisées telles que l'utilisation de la concrétisation expressive par des substituts de matériels didactiques liés au vécu socio culturel de l'enfant.
- L'attitude de la communauté vis-à-vis de l'école et de la scolarisation.

En outre, certains facteurs identifiés par des études antérieures (ou le bon sens) comme ayant un effet positif sur l'apprentissage sont apparus dans cette étude comme non discriminants. Des tentatives d'explication ont été données sur ces paradoxes. Elles méritent d'être validées par des études à partir d'un échantillon plus représentatif et un temps d'observation plus long.

Au regard de ces résultats qui sont en fait des hypothèses, certaines interventions ont été préconisées pour une amélioration de l'apprentissage du français dans les classes de 1ère et de 2ème années plus particulièrement en langage et en lecture/écriture. Les modalités de mise en oeuvre de ces interventions devraient faire l'objet d'études menées par des équipes pluridisciplinaires./.

TABLEAUX

Tableau 1 Facteurs liés aux conditions de l'enfant:

Facteurs	Bon élèves	élèves faibles	commentaires
Intégrité physique **	bonne	bonne	3 cas de déficience, tous faibles
Etat nutritionnel**	Etat moyen	Etat moyen	Pour chaque catégorie 50 % sont bien nourris
Distance école-foyer+	Proche	Eloigné	Goundaga: école hors de village.
PREACQUIS			
Aimer les contes**	Aiment les contes	Aiment les contes	La plupart tous niveaux aime les contes
Narration de contes**	Savent narrer un conte	Savent narrer un conte	La plupart tous niveaux, sait narrer un conte
Récitation**	Récitent sans comprendre le sens.	Récitent sans comprendre le sens	Comprennent le sens du "les voleurs et l'âne"
Préscolarisation+	Préscolarisés	non préscolarisés	Dans l'ensemble peu de préscolarisés
Ecoles coraniques+	Ont fréquenté	n'ont pas fréquenté	Dans l'ensemble peu de fréquentation
Connaissance des chants*	Savent chanter	Savent chanter	Pratique très courante
Activités ludiques*	Pratiquent des jeux	Pratiquent des jeux	Jeux pratiqués: Danse, course,"-ton" cache-cache
Langue du foyer+	Français courant au foyer	français peu courant au foyer	Utilisation peu courante du Français en dehors de l'école
langue maternelle plus une autre langue parlées au foyer**	Parlent la langue maternelle + autre(s) au foyer	Parlent la langue maternelle + autre(s)	Pratique des langues mais ignorance de leur structure.

Légende: +: facteurs discriminants
**: facteurs non discriminants mais contradiction avec les résultats de recherche et le bon sens.
*: Facteurs non discriminants ne suscitant pas de commentaires spécifiques.

TABLEAU 2.1 Facteurs liés au contexte d'apprentissage de la langue française.

Facteurs	Ecoles performantes			Ecoles non performantes		
	Dieli	Wayerma	Zangaso	Faraba	Macina II	Sarakala
A l'école						
Site école*	Accès facile	Accès facile	Accès facile	Accès facile	Accès facile	Accès facile
Conditions physiques*	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable
Gestion de la classe**	plus ou moins bonne	plus ou moins bonne	plus ou moins bonne	plus ou moins bonne	plus ou moins bonne	plus ou moins bonne
Emploi des langues**	utilisation fréquente de la langue nationale	idem	idem	idem	idem	idem
Communication**	Répétition privilégiée	Idem	Idem	Idem	Idem	Idem
Relation école communauté+	Favorable à la scolarisation participation à la vie de l'école(matérielle réunions visites à l'école)			peu favorable à la scolarisation, participation réduite à la vie de l'école		

Tableau 2.2 Facteurs liés au contexte d'apprentissage de la langue française.

B Famille communauté			
Facteurs	Bons élèves	élèves faibles	Observations
Conditions physiques**	Lieu pour les études lumière disponibles+	lieu pour les études lumière non disponible	La disponibilité de la lumière est importante
Présence père/mère *	Présence	présence	Simple présence physique peu importante
Niveau d'instruction des parents+	Parents instruits	Parents peu instruits	Parents instruits peuvent encadrer leurs enfants
Communication au foyer+	Utilisation de la langue du milieu et du français par les parents	Utilisation de la langue du milieu	Utilisation du français par les parents très importante
Oralité et autres expériences linguistiques cf.chapitre I **			

TABLEAU 3.1: Stratégies d'apprentissage:

Facteurs	Ecoles performantes			Ecoles non performantes		
	Dieli	Wayerma	Zangaso	Faraba	Macina II	Sarakala
Disponibilité du Matériels didactiques à l'école *	Matériel didactique disponible (tableau noir,craie, règles, ardoise crayons supports visuels et cahiers de préparation pour les maîtres.)			Idem		
Utilisation du matériel+	Matériel exploité lors des leçons: cas des livres distribués malgré l'insuffisance du nombre.			Matériel peu exploité lors de leçons: cas de livres gardés pour insuffisance du nombre ou autre.		
Stratégies didactiques formalisée	Application des stratégies officielles conseillées par les formateurs.			idem		
Stratégies non formalisées+	Beaucoup d'initiatives de la part des maîtres			très peu d'initiatives en dehors des stratégies formalisées		

Facteurs	Bons élèves	élèves faibles	Observations
Matériels didactiques au foyer+	Manuels scolaires disponibles à domicile	Manque de manuels scolaires à domicile	La disponibilité du matériel à domicile facteur de bons rendement en français

Attachment 4*a*

Defining Educational Quality

212

DEFINING EDUCATIONAL QUALITY

Don Adams

One of the striking characteristics of the 1980s and 1990s is the international focus on educational quality. To some extent, plans and policies calling for higher quality schooling now supplement or even replace earlier attention given to such priorities as educational expansion and school access. The universal assumption seems to be that current education is inadequate to cope with the social and economic transformations underway or to which people aspire.[1]

Conditions both external and internal to education appear to account for this recent trend. External or environmental factors include a reaction to an extended period of fiscally demanding emphasis on quantitative growth. This in general fails to achieve the prevailing national expectations and results in many "educated" unemployed, and both economic and technological changes increase the demand for higher level skills and knowledge. A major educational factor internal to the educational system relates to contemporary school and classroom level research which has created a new sense of professional optimism by suggesting that schools, irrespective of their socioeconomic environment, can be designed to increase learning.

Yet even under intense scrutiny, the concept of educational quality has remained somewhat elusive, and many persistent questions surround any attempt at definition. What knowledge bases or theories can be of assistance in trying to define quality: Social theories? Learning theories? Instructional theories? Effective school research? Educational production-function studies? Do various educational theories and paradigms generate different definitions? What is the relationship of politics and power to conceptualizations of educational quality? That is, it may be important to ask, quality for whom or, quality according to whom? Who decides on the operational definitions of quality? Are there differences in definitions given by those at the "top," e.g., the central ministries or national policy groups, and those at the "bottom," e.g., community leaders or teachers? To what extent can generalizations be made across nations, communities, schools, or even classrooms? When are there tensions between the educational interests of the state and those of communities and families? If different clientele have different definitions, how can policies be developed which address contradictions? And, in attempts to design better educational systems, how are size, selectivity, and diversity of student population related to quality? Do policies of universalization lead to lower quality?

These are but a few of the questions which arise when trying to understand, and utilize for planning purposes, the concept of educational quality. In this brief paper three issues are addressed. First, distinctions are drawn between quality and some of the other related educational concepts used to characterize and assess educational systems, organizations, and programs. Then multiple meanings of educational quality are identified, which sparks a beginning attempt at operationalization of the term quality for purposes of easier communication, planning, and evaluation of educational change.

Some Distinctions Between Quality, Efficiency, Effectiveness, and Equity

Education literature is frequently imprecise and inconsistent in the use of the terms quality, efficiency, effectiveness, and equity. A comprehensive review of the development and many usages of these terms would require exploration of several disciplines and could easily fill a large volume. The following brief examinations of distinctions between these concepts may, however, contribute to better communication among those associated with the planning and evaluation of educational change.

In practice, quality and its associated concepts are usually defined as outputs, outcomes, processes, or inputs. Outputs typically refer to changes in student achievement, completion rates, certification, skills, and certain attitudes and values. Outcomes, if distinguished from outputs, are conceptualized as the longer term consequences of education such as employment, earnings, and changes over time in attitudes, values, and behavior. Inputs, if limited to factors subject to policy manipulation, include characteristics of teachers, pupils, facilities, curriculum, and fiscal and other resources necessary for the maintenance or change of the educational enterprise. In a broader sense, contextual influences may also be considered as inputs. Processes are usually interpreted as the forms of interaction between teachers, students, administrators, materials, and technology in educational activities.

Efficiency may be defined simply as the relation of outputs to inputs. Or more precisely: "... efficiency is defined as existing where the output is maximized for a given level of input (measured as cost) or where input is minimized for a given level of output" (Windham 1986).[2] A more inclusive definition is offered by persons associated with the USAID supported IEES Project: "The concept of efficiency provides a broad perspective from which to analyze an educational system: one in which the costs of educational inputs and processes can be related to benefits, such as improved effectiveness . . . this concept has meaning only if outputs and outcomes are correctly specified and measured" (Burchfield 1991, Winter). However, inputs, outputs, and outcomes may vary significantly from one country, region, or community to another. Outputs and outcomes, for example, may involve combinations of affective and cognitive results, and group, as well as individual, effects.

Efficiency is typically seen by managers and planners as a requisite of institutions in order to maximize the use of, and to avoid the wastage of, human and other resources in the attainment of outputs and outcomes. (Such terms as "use" and "wastage" are, of course, subject to multiple interpretations.) In educational planning and economics of education, it is customary to distinguish between internal efficiency and external efficiency. Internal efficiency refers to the wise use of resources--getting the most output for the same input or getting the same output with a reduction of input. Measures of outputs, objectives, or targets are associated with costs of inputs and processes. Lockheed (1988) make a further distinction between internal efficiency and internal effectiveness. In her conceptualization, internal efficiency is equated to effectiveness/cost with the measure of output given in nonmonetary terms, and the measure of input given in monetary terms. Internal efficiency thus does not necessarily mean lower costs. Better ratios of outputs to inputs may even require larger unit costs. In Lockheed's scheme, internal effectiveness (not to be confused with effectiveness/cost) or "technical efficiency" describes the ratio of outputs to inputs, when both are measured in nonmonetary terms.

External efficiency relates input costs to outcomes, i.e., the longer term effects of education. Consistent with this logic, external effectiveness refers to the ratio of nonmonetary inputs to outcomes. Windham notes that for purposes of planning and implementing educational change: ". . . effectiveness or efficiency enhancement activities must be part of a scholastic process wherein the planner or administrator attempts to maximize the probability of increased effectiveness or efficiency based on: (1) the available information on inputs and their influence on process effects; (2) the probable relationships of process variables to the desired outputs and outcomes; and (3) the probable costs of reforms relative to the expected availability of resources" (10).

Equity[3] is customarily defined in terms of opportunities, distribution, or consequences. Cobbe (1990) defines it succinctly: "By equity in education, we mean fairness between distinguishable groups in terms of access to, participation in, and achievement of the educational system." Thus, if the distribution, opportunities, or consequences are viewed as unfair,

"efficient" policies of education may need to be supplemented by other policies in order to achieve an adequate level of equity. As might be expected, persistent controversy may be found in many countries over the acceptable criteria against which equity should be judged and over specific social and educational programs developed to attain greater equity. Attempts in schools to address programmatic and assessment issues in terms of equity or to use legal tools to guarantee equal educational rights have often resulted in acrimonious debate. Even with agreement in principle, consensus of practice may not follow.

Although equity considerations may be aspects of a definition of quality educational programs, quality and equity at times have been viewed as conflictual. The choice is often phrased as "equity or excellence?" Such wording may imply that provisions of resources or other inputs and processes to support the latter should have priority over attempts at further developing a more equitable distribution of educational services and outputs. Learners vary in cultural and linguistic backgrounds, aptitudes, and abilities. Equity fundamentally implies that such differences are recognized and appropriate adaptations are made in educational practice. In a number of countries, the use of legal tools has been necessary to reduce practices interpreted to be educationally discriminatory. In the United States, for example, constitutional guarantees of equal rights, including educational rights, are now found in several states and specific state and federal funding has been forthcoming to ensure compliance.

The term "quality," like efficiency and equity, has a number of uses. As a concept, quality has both descriptive and normative characteristics. Thus, quality may be an attribute or an intrinsic characteristic of an individual or organization, e.g., "a school is an organization which has teachers." Quality may also refer to status or relative degree of worth, e.g., "schools A and B are good schools"; or "school A is a better school than B." In the context of educational reform and innovation, most discussions of quality assume or imply a normative usage of the term.

Quality is often defined, synonymously with effectiveness, as the degree to which objectives are met or desired levels of accomplishment are achieved. Higher quality thus typically means a real or anticipated increase in effectiveness, that is, better or larger output, process, input, or outcome. Snyder (1990) personalizes quality: "Quality is a personal evaluation. Although it may be influenced by physical conditions and circumstances, quality entails feelings, attitudes, and values, and it is more than the sum of objective indicators."

Clarifying the Multiple Definitions of Educational Quality

The conceptual confusion over the idea of educational quality comes through clearly in educational literature where redundancies and tautologies abound. The definitions offered frequently are on the order of "good quality programs are those which produce good results" or "high quality schooling is associated with excellence," and thus are of little value for purposes of planning or evaluation. Many educators are probably sympathetic with Pirsig (1974), who noted in frustration: ". . . obviously some things are better than others . . . But what's the 'betterness'? . . . so round and round you go, spinning mental wheels and nowhere finding any place to get traction. What the hell is quality? What is it?"

At least six common views of quality appear to be given by educators: quality as reputation; quality as resources and inputs; quality as process; quality as content; quality as outputs and outcomes, and quality as "value added." The application of the definition "quality as reputation" is probably most prevalent in assessment of higher educational institutions but not infrequent in evaluations of lower educational levels. Astin (1983) perhaps has reputation in mind when he argues that it is easy to reach consensus on the most excellent colleges and schools.

215

He concludes: "What . . . this suggests to me is that there exists in the minds of most people in this country [the United States] a folklore about which are the 'best' educational institutions in the country." The basis for reputation, although usually not fully clear, would seem to often include information or assumptions about inputs and outputs.

Quality as resources and other inputs has been a popular definition with professional bodies of accreditation and also is extensively reflected in the work of international agencies. Data on fiscal resources, number and education of teachers, extent of facilities, and even the social and learning histories of students are often more easily available than data on the consequences of education.

Quality as process suggests that not only inputs or results, but also the nature of the intra-institutional interaction of students, teachers, and other educators, or "quality of life" of the program, school, or system, is valued (WCEFA, 1990). Teachers usually include and sometimes emphasize the view of quality as process. There is the assumption that a judgment of quality need not await assessment of results, outputs and outcomes, but can be made from an examination of the judgment, pleasure, enthusiasm, or other interpretations of teachers and students. Process may itself be an objective, or the processes of interaction and student engagement may be seen only as proxies for the outputs sought.

Quality as content reflects the particular bias of a country, community, or institution toward some body of knowledge, skills, or information. To some extent, although many regional and community variations may be found throughout the world, a trend toward common educational content can be recognized in the movement toward an internationally recognized core curriculum at the earlier levels of schooling (consisting of the 3Rs, national language(s), and history). However, content is not an adequate synonym for curriculum. Curriculum (core or extended) may be conceived as a many faceted process of interaction involving a wide variety of cognitive, affective, and social activities in the search for meaning. Thus, in one conceptualization of curriculum, process and content may be seen as inseparable.

Quality considered as outputs or outcomes, in spite of measurement difficulties, is highly popular with policy makers. Typical measures of this definition of quality are achievement in cognitive skills, entrance ratios to next levels of education, income, and occupational status.

Quality may be interpreted as a measure of change. Quality as "value added" typically refers to the impacts, influence, or effects of the institution or system on the student; that is, how the student has changed because of the program, the culture, and the norms of the school. Education is sometimes said to "enlarge human capacities" or to help students to achieve their "potential." In principle, the change being examined could focus not only on the individual but also on social groups or institutions. The "value added" definition implies that the higher the quality of the education, the more the contribution to the knowledge, attitudes, values, and behavior of the students. Typically, the focus is on some assessment of student growth and development. Operationally, this definition combines output or outcome considerations with pertinent base line data on the student at the point of entry into the program or school.

Examples of quality defined as inputs, processes, outputs, outcomes, and value added are provided in Box 1. However, definitional statements of educational quality frequently include combinations of inputs, processes, contents, outputs, or their relationships. A trend in this direction can be found in the recent international research literature, and to a lesser extent, in international policy and planning documents. Box 2 provides examples which encompass elements of two or more of the six views of quality.

Box 1. Definitions of Educational Quality as Inputs, Processes, Outputs, Outcomes, and Value-Added

As Inputs

Academic (educational) program quality is best understood as a set of discrete dimensions, independently measuring faculty quality, student quality, size, resources, and overall prestige. Fairweather, J.S. & Brown, D.F. (1991). Academic program quality. *School Administrator, 14* (2).

As Process

I mean by school regimen (whole school environment) the quality of living that seems to permeate the school.... The quality of living in the school not only reinforces the specific purposes of the school, but also more than anything else, seems to be the way by which the school can achieve the purpose it shares with other agencies/groups in the culture. Frymier, J. (ed.). (1983). Bad times, good schools. *Kappa Delta Pi, 17.*

As Ouptuts and Outcomes

Quality pertains also to how well the school or system prepares students to become responsible citizens and instills attitudes and values relevant to modern society (pp. 31-32).

Quality thus encompasses how well the education system does the job of accommodating modern market oriented skills to traditional, home-based values and needs (pp. 31-32). *Education in sub-saharan Africa: Policies for adjustment, revitalization and expansion.* (1989). A World Bank Policy Study.

UNESCO subscribes to the view that a good quality primary schooling and the provision of essential knowledge and skills for adults to compe with the diverse demands of a modern society should be available to all people. Education for all. (1990). *Bulletin of the UNESCO Principal Regional Office for Asia and the Pacific.*

We are defining quality simply as the acquisition level of output student knowledge and skills as measured by achievement examinations. *IEQ Project Paper* (936-5836). (1991). Office of Education. Bureau for Research and Development. USAID.

As Value-Added

The quality of an educational program can be adequately assessed only if one can determine the extent to which the program has directly contributed to the desired outcomes. This is called the value-added definition of quality. Bergquist, W.H. & Armstrong, J. (1986). *Planning effectively for educational quality.* Jossey Bass Publishers.

The quality of a school or an education program is defined in terms of the intrinsic nature and purpose of education to enlarge human capacities. Commonwealth Secretariat. (1991). *Improving the quality of basic education, 4,* London.

Box 2. Educational Quality as Some Combination of Inputs, Processes, Outputs, Outcomes, or Value-Added.

Ultimately, of course, the quality of an educational program will be defined by input, output, and value added measures assessed in desired outcomes, for their interrelationship with one another.
Bergquist, W. H. & Armstrong, J. (1986). *Planning effectively for educational quality*, 2. Jossey-Bass Publishers.

. . . The meaning of educational quality should be clarified. The term can be defined in two ways in terms of either inputs or outputs. In the first, the quality of education is linked to school inputs, such as teachers' qualifications, class size, teaching methods, pedagogical materials, and curriculum. Educational quality is said to be high when these inputs are considered good. In the second, educational quality is linked to the output of the system, regardless of its internal operation. Quality is considered high if exiting students achieve many of the curriculum objectives.
Mingat, A. & Ping Tan, J. (1988). *Analytical tools for sector work in education*, *59*. Washington, DC: The World Bank.

Quality of education can also be seen in the form of selected characteristics which are intrinsic to education, and to which we give a significant meaning as worthwhile goals to be realized, as standard of our education.
. . .The quality of education calling for good education is basically a claim for redefinition and redirection of educational practice as a whole . . . .
Quality of education:What art thou (November 1991), *5 &16*. Third SEAMEO INNOTECH International Conference. Philippines.

[Improving school quality is]. . . a systematic, sustained effort aimed at change in learning conditions and other related internal conditions in one or more schools, with the ultimate aim of accomplishing educational goals more effectively.
Bollen, R. (1989). *School improvement*, *10*. Acco, Amersfoort (The Netherlands).

A basic quality education is a process which can enable students to transform their potential into actuality. *Basic quality education: An interim report* (1974). Helena: Montana State Department of Public Instruction.

Statements pertaining to ongoing educational reforms in Guatemala and Ghana, two of the countries with which the Improving Education Quality (IEQ) Project is involved, also reflect broad views of educational quality. The definition of quality in Guatemala emphasizes inputs and processes, particularly those associated with teaching, that are assumed to lead to higher student performance. Explicit consideration of equity and, in a limited way, costs are recognized as integral aspects in achieving quality. By including a partial critique of existing conditions, this detailed definition provides an assessment of constraints to qualitative change and sets certain initial criteria for raising quality.

Box 3. Definition of Quality - Guatemala

In Guatemala, educational quality has been defined as material inputs and non-material characteristics of schools which have been shown to improve student learning. Poor teaching is seen as the principal factor in poor student performance.Deficient supervision and staff development, isolation, poor teacher placement, lack of parental/community support, minimal teaching materials and supplies, and lack of achievement standards are among the problems cited as contributing to poor teaching and the resultant waste and inefficiency through student dropout and repetition. Thus, recent educational reform has focused on upgrading teachers' skills through improved in-service training and supervision to aid teachers to use existing resources more effectively, and on developing low cost materials to assist teachers in providing better instruction (interactive radio, multigrade teaching techniques, and instructional materials). Equity is of primary concern as many of the interventions being developed are aimed at those students who have traditionally had the least success in the Guatemalan primary school system-the rural poor, minority language populations, and girls. Internal memorandum prepared by IEQ Project staff (see Endnote #1).

The statements on educational quality in Ghana by Ghanaian educators (Box 4) reflect the recent history of extreme neglect of the education system. Quality in this context becomes associated with rebuilding as well as redesigning the whole educational enterprise. Higher levels of inputs, a revitalized, more interactive, learning environment, and specific, practical outputs useful in everyday life are all called for as basic building blocks for improved quality.

Box 4. Educational Quality in Ghana

Ghanaian educational standards declined in the early 1980s: many trained teachers migrated to other African countries; the government interest shifted away from education; we had no supervision and no inputs; the literacy skills of our school leavers were undeveloped. The system was grinding to a halt. Something had to be done.
In 1985, the World Bank supplied basic items for basic education. We directed our attention to the curriculum and integrated Ghanaian values and culture. We introduced courses to teach technical skills that related to socioeconomic needs and predisposed young people to avenues of employment.

Mrs. Camille Haldane-Lutterodt
Coordinator, PREP/Management Unit
Ministry of Education
Accra, Ghana

In the late '80s, the government began to put resources into the schools. We converted the middle schools to the junior secondary schools. We looked at ways to predispose our students to vocational skills. Schools offered crafts that were developed within the community. The teachers began to return. We are now phasing out all unqualified middle school teachers, those who failed to pass the O level examinations. Our priority is to teach students to read and write. I want our students to live a better life; to read the signs on the road; to go to the bank and sign their names; to be useful in the community; to be able to read a pamphlet that provides nutritional information; to know that it is critical to boil water before drinking; and to write your name and vote. Our focus is to train teachers who can help students learn. We're now taking a census to determine how many must leave so we can plan our training. Perhaps 14%.

Mrs. Sara Opong
Director of Basic Education
Ministry of Education

In reform, we stress creativity. We want students to be active and to ask questions. For example, we are adopting an integrated approach to teaching and learning. We want to create new learning environments. What is important to know and do in the life after school? We want our children to have confidence to do things for themselves and to have an inquiring mind. In our teacher training programs, we focus on the teacher as a facilitator. We want teachers to interact with students.

Dr. John Atta-Quason
Deputy Director-General
Ghana Education Service

Definitions collected by Dr. Jane Schubert, Director of IEQ Project (see Endnote #1)

Further Operationalization of the Concept of Educational Quality[6]

This brief review of the concept and the various definitions of educational quality suggests:

- Quality has multiple meanings.
- Quality may reflect individual values and interpretations.
- Quality is often multi-dimensional; it may subsume equity and efficiency concerns.
- Quality is dynamic; it changes over time and by context.
- Quality may be assessed by either quantitative or qualitative measures.
- Goals of quality may conflict with efficiency, equity, or other goals.
- The meaning of quality is grounded in values, cultures, and traditions; it may be specific to a given nation, province, community, school, parent, or individual student.
- Different stakeholding groups often have different definitions of quality. Thus, "winners" and "losers" may be associated with any particular definition.

It should be further noted that because of the characteristics identified above, comparisons of levels or degrees of educational quality are extremely difficult. Because educational programs and activities can be designed for many different purposes and interpreted in different ways, international, inter-community, inter-school, or even inter-classroom evaluations of quality may have little meaning.

It is frustrating, to be sure, to have to work with such a slippery idea, yet one need not necessarily become overwhelmed. A more optimistic list of characteristics of educational quality could include:

- Quality is definable in context.
- Under some assumptions it can be measured "objectively."
- Quality often supplements, complements, or is integrated with interpretations of efficiency and equity.
- Quality is not necessarily associated with high costs.
- Given similar missions and goals and comparable contexts, educational quality can be evaluated across educational settings.
- Even if there is lack of agreement on what quality is, there often is agreement that it should be approved.

Considering this sample of characteristics, perhaps a useful general statement about defining quality can be fashioned. The specification of an operational definition, one useful in planning and implementing change, as opposed to the identification of a generic category, e.g., "quality as content," is facilitated by:

(1) a clear sense of direction(s), objective(s), and mission(s);

(2) an understanding of the ethical and moral constraints in the process or path taken to attain the chosen definition of quality;

(3) knowledge of the range of learnings that any given classroom, school, program, or system is and is not capable of fostering, e.g., can a school teach honesty?;

(4) a user-friendly monitoring and accountability system of performance review which not only addresses the question "how are we doing?" but also asks why the particular information on quality is needed; and

(5) a long term commitment to illuminate further the idea and full range of meanings and standards of quality.

It is not the purpose of this paper to analyze the professional or sociopolitical processes by which educational quality becomes conceptualized, operationalized, or "institutionalized." A subsequent paper will discuss at length problems and strategies of improving or implementing qualitative educational change. However, following the guidelines above, introductory comments are made here regarding a few of the activities typically assumed to be necessary in order to move from isolated definitions of quality to a process of examining quality within the context of reform and innovation. In planned attempts at improving educational quality, three types of activities are usually viewed as unavoidable: implicit or explicit identification of objectives; acceptance of a descriptive model of high quality education; and development of qualitative or quantitative measures or indicators of educational quality. A brief discussion of each activity can illustrate the potential complexity of the tasks involved.

The bottom line of concerns for educational quality is typically the achievement of particular or shared objectives. Table 1 provides a few illustrative examples of the many possible educational objectives.

Table 1. Educational Quality Objectives

Student achievement
Equal access
Equal success
High student expectations and satisfaction
High parent expectations and satisfaction
Civic responsibility
Democratic decision making
Employability

Objectives evolve and change. Each objective may be viewed as an aspect of one or more explicit or implicit broader goals which in turn responds to a need or problem. An ongoing process of planning, including developing of "mission statements," would be necessary before the objectives could be prioritized. A major problem could generate several goals, each of which could be linked to numerous objectives at various educational levels. In practice, the overarching goals may not exist and educators must work with explicit or implicit objectives at the school, program, or project level.

A few questions focussed on the objectives in Table 1 are suggestive of discussions, professional debates, and political battles which might be associated with selecting and operationalizing objectives. Development and utilization of measures or indicators for these objectives require answers to questions such as:

- To what extent is specification of objectives prior to initiating reform desirable or possible? How can differences in the educational objectives associated with various interest groups be reconciled?
- In terms of student achievement, for which student groups are the greatest gains sought? Or should the purpose be to maximize "achievement yield," i.e., the most gain for the most students? Does achievement demand critical literacy and higher-order skills? Who decides which knowledge and skills are to be required of which students? What ethical principles are involved in the above choices?
- In what forums should questions be raised about ethnicity, gender, family, and cultural contexts pertaining to equality and equity?
- How realistic in terms of costs and human resources are attempts to determine and respond to student and parent expectations? Who has priority in terms of "satisfaction" — parents or teachers?
- Should objectives of civic responsibilities and democratic decision making support a critical examination of existing social and political institutions?
- Should employability meet criteria of meaningfulness or enjoyability?

For purposes of contributing to ongoing definition, evaluation, and fostering implementation in educational quality, a descriptive, qualitative model of the characteristics of high quality schools may be crucial (see Box 5). A profile of quality schooling may be seen as a necessary prerequisite, for example, to any attempt to specify acceptable curriculum, teaching methods, and management roles. The development of a localized profile of quality schooling could be an integral part of a broadly conceived, continuing community and school level dialogue on educational improvement. Again, however, the complexity of the task should not be underestimated. For example: Are the only purposes of such a "model" to initiate and extend discourse? Does educational science warrant reliance on such a "profile" for purposes of setting targets and allocating resources? Can priorities be established between these conditions and processes? Can costs be determined for each characteristic? Does experience suggest which are the most cost/effective? Does the sequence in which the elements of content, process, and management are achieved matter?

Establishing educational objectives and identifying characteristics of quality programs and schools are important if not unavoidable activities in the operationalization of and planning for change in educational quality. Additionally, and equally unavoidable in monitoring, evaluating, and effecting change are collective judgments, sets of measurable indicators or checklists of educational conditions or accomplishments. Analysis of educational indicator systems is well beyond the scope of this paper; however, a few observations can be offered.

Box 5. Integrated Profile of Quality Schooling

Content and Process

- Classroom culture recognizing gender, class, and ethnic differences and the individuality of each student
- Availability of textbooks and supplementary reading materials
- Systematic and logical sequences in teaching
- An orderly, safe, healthy, environment
- Clear instructional objectives
- Maximization of time on task
- Regular homework
- Training in problem solving and higher order reasoning skills
- High achievement expectations clearly communicated
- Use of interactive radio instruction and other low cost technologies when necessary
- Classroom climate emphasizing active learning
- Regular monitoring of learning and feedback on all practice
- Emphasis on independent learning

School Management

- Knowledge of education quality research
- Commitment to educational quality
- Commitment to development of school climate which emphasizes achievement and encourages high expectations
- Commitment to provision of adequate facilities
- Assistance in the evaluation and professional growth of teachers
- Effective interaction with educational bureaucracy
- Commitment to implementing change as well as maintaining stability
- Commitment to both accountability and capacity building
- Acceptance of role as instructional leader
- Recognition of the unique styles and needs of teachers
- Provision of regular local in-service training for teachers
- Expectation of, and competence to cope with, unintended consequences
- Development of cooperative school-community relations

If educational efficiency, equity, and quality are distinct concepts and each has input, process and output components then a neat 3 x 3 classification would allow for meaningful identification and comparisons of distinct measures. Such does not appear to be possible. More promising are efforts to develop sets of indicators of <u>either</u> the notions of educational inputs, process and outputs <u>or</u> of educational efficiency, equity, and quality in educational practice. Yet

224

any attempt at such operational distinctions is constrained since quality may subsume dimensions of equity and efficiency. That is, objectives and targets of equity and efficiency may be integral to measures of quality. Most proposed sets of indicators focussed on educational quality exhibit severe limitations. The creative work of Horn (1992),[7] for example, useful as it can be for some planning purposes, points out many of the potential pitfalls. Horn argues the need for, and provides a prototype of, a checklist designed "to assess whether a school is providing the fundamental prerequisites for student learning to take place." The particular criteria for an assessment of what he refers to as fundamental quality level (FQL) should be developed in each country. However, Horn provides illustrative examples:

Example Criteria for Defining FQL: Quality-Related Process

a) Reports prepared by school inspectors or circuit officials indicated that classroom teachers report to school daily, and that head teachers or their deputies visit and observe in every classroom at least once per day;

b) District reports indicate that a district or higher-level inspector observes in the school at least twice each year.

Example Criteria for Defining FQL: Quality-Related Outcomes

a) Over 75% of primary 1 entrants complete primary 6;

b) At least 80% of primary 6 students attain specific performance standards in the areas of literacy and numeracy as measured by a criterion referenced assessment.

Example Criteria for Defining FQL: Pedagogic-Related Inputs

a) There should be between 30 to 45 students per classroom and per teacher;

b) At least one complete set of "approved" language and mathematics textbooks is available for the use of every three students (distributed to the pupils).

It may well be possible through checklists and easily quantifiable indicators to provide guidance to administrators, teachers, and communities on some of the basic requisites for schooling, e.g., adequate facilities, and useful instructional materials. Such efforts are generally better seen, however, as providing initial and ongoing information more useful for informing a process of discussion and debate rather than constituting an exercise of formal assessment.

In summary, a cursory examination of the FQL and similar attempts suggests the following limitations:

- Indicators to be part of valid decisions must evolve from an acceptable theoretical framework.
- Neither the FQL nor the profile of Educational Quality (Box 5) recognize the potentially important role of politics in choosing and rejecting indicators.

225

- National indicators or definitions of quality are unlikely to be adequate for planning at the subnational levels.
- Consensus among educators on cut-off levels of indicators is unlikely.
- As a bureaucratic tool such indicators may be used uncritically for assessment and subsequent "reward" or "punishment."
- Highly specific targets risk limiting achievement to those standards.

Many of the same criticisms could extend to any attempt to associate measures with the illustrative objectives of educational quality in Table 1. Measures of the achievement of any of the objectives have technical limitations and are subject to political and professional controversy. Probably no set of quantitative or qualitative measures captures the full range of objectives of citizens, teachers, and students. Thus, the questions "who develops the technology of measurement?" and, "for whom is a given measure satisfactory?" may become issues of intense debate.

In principle, and if available research tools were sophisticated enough, it would be possible to construct, for each educational setting at any particular time, a matrix pairing actors (teacher, parent, student, administrator, policy maker, etc.) with one or more definitions of quality. Further, one could associate each definition with one or more quantitative or qualitative measures. The measures, in turn, could be linked in a three-fold classification of normative, criterion, and "connoisseurship" standards. But, of course, even if these efforts were possible, the uncertainties inevitably associated with multiple interpretations of data and meaning throughout such a process could not be avoided.

Any given definition of quality may be subject to criticism and possible rejection by those who have different expectations or understandings of the purposes and capabilities of educational institutions. The use of such concepts as inputs, outputs, and outcomes, although convenient and useful up to a point, is far from being fully satisfactory. If such rhetoric suggests high quality education can be described merely by a compilation of discrete conditions and results, it is surely inadequate to capture either the organizational complexity of schools or the potential dynamism of their interaction with the community and larger social environment. Manipulation of certain identifiable and fixed skills and behavior of students and teachers may well increase certain output measures. However, should a community's definition of quality imply, for example, the learning of democratic practices or performing critical analyses or organizing for popular action, then merely increasing the resources, extending the school year, or even making more instructional materials available will not achieve the desired results. Nor, for that matter, are the desired results likely to be discovered by scores on standardized tests.

Summary

The ongoing international attention to educational quality has shifted the focus of educational debates and reforms away from educational growth to discovery of those combinations of inputs, processes, and outputs which are assumed to define or cohere to improved types of education. This refocus has raised many questions and has also heightened awareness of the complexities and uncertainties surrounding schooling and its interchanges with its environment. By acknowledging the difficulties in defining educational quality while insisting on the need for educational improvements, citizens and governments have created new challenges for educators.

This paper has attempted to clarify the concept of educational quality, provided an illustrative range of definitions, and suggested some of the difficulties in operationalizing the notion of quality for purposes of assessment and planning. The complexity and dynamic characteristics of educational quality, and its changing contextual characteristics, have been emphasized. Defining quality ultimately becomes linked to the diversity, conflicts, and power

divisions within society. Full consensus on the specifics of educational quality is unlikely to ever be reached in heterogeneous societies, but such agreement is not necessary for initiating change and improvement. What may be a more crucial task for educators, parents, and citizens is the development in schools and in communities of a growing capacity for and commitment to ongoing definition, redefinition, and improvement of quality.

ENDNOTES

1. This paper was prepared with support of the Improving Educational Quality Project (IEQ), Institute for International Research, USAID. The IEQ project is designed to link classroom research to improved classroom practices in selected developing countries. Appreciation is expressed for the helpful comments from Mark Ginsburg, Leo Klopfer, Jane Schubert, Steve Anzalone, and Ray Chesterfield.

2. Also see: B. Fuller, Defining school quality. In J. Hannenay & M. Lockheed, *The contribution of the social sciences to educational policy and practice 1965-1985* (pp. 32-27). Berkeley, CA: McCutchan; Organization for Economic Co-operation and Development. (1989). *Schools and quality: An international report.* Paris: OECD; Lockheed, M. & Verspoor, A. (1990). *Improving primary education in developing countries: A review of policy options.* Washington, DC: The World Bank; Ross, K. & Mahlck, L. (Eds.). (1990). *Planning the quality of education: The collection and use of data for informed decision-making.* Paris: IIEP/UNESCO with Pergamon Press; Hawes, H. & Stephens, D. (1990). *Questions of quality: Primary education and development.* London: Longman; Bender, L. (1983). *Differences and implications of legislator and educator perceptions of quality education.* Paper presented at the 54th Annual Convention of California Association of Community Colleges. Sacramento, CA, November 18-20, 1983; Hansen, K. (1979). *Defining quality education: An analysis of state educational policy options.* Prepared for chief state school officers of the Northwest and Pacific; Kwak, B. (1991, November). *Quality education: What art thou?* A paper presented at the Third SEAMEO INNOTECH International Conference. Manila, Philippines.

3. A thorough understanding of the sophisticated and subtle ideas of quality and equity obviously require a much more extensive examination than they are given here. For one formal analysis of the "best" and "equal" principles applied to education the reader may refer to: T. Green, *Predicting the behaviour of the educational system*, Syracuse, Syracuse University Press, 1980. Chapter 7. Green's provocative definition of "best" is ". . . the education that the rich provide for their sons" (p. 120). Yet he also argues that the claim that the two principles are jointly satisfied under the conditions that constitute realization of the best principle is spurious. He concludes: ". . . what we seek in the system is some balance between these two principles without the sacrifice of either. What is sought is (1) the provision of the best education for each, so that (2) what is provided for some is not significantly different from what is provided to all others. The equal principle expresses the demand for an education for each that is the same as that provided for all others" (p. 133).

4. This confusion of meaning appears to extend to fields other than education and use of the term in the world of business seems incrementally less problematic. A publication of the American Management Association, concludes: "Customers aren't interested in our specs. They're interested in if the answer is yes, then it's a quality product. If the answer is no, then it isn't. . . . Quality is conformance to requirements" (AMA. *A modern fable about quality* (p. 9). San Francisco: Jossey Bass). This is clearly a rejection of input definitions of quality in favor of an emphasis on outcomes. Even so, one wonders if any organization can be constrained only by views of "customers" in defining quality.

5. See also Bogus, E. (1992). *The evidence of quality: Strengthening the tests of academic and administrative effectiveness.* San Francisco: Jossey Bass; Richardson, R. C. & Skinner, E. F. (1991). *Achieving quality and diversity.* New York: Macmillan.

6. The most common approach to assessing educational quality involves some measure of student achievement (at the primary school level often in the area of "basic skills"). Although many teachers and other educators would probably find reliance only on a measure of cognitive skills or familiarity with a particular body of information an inadequate way to judge quality, researchers have found achievement test scores convenient for purposes of comparison of programs, schools, and school systems. Restricting the definition of quality of student achievement and the increasing use of standardized tests internationally-a trend frequently encouraged by national and international agencies-warrants scrutiny and critique not possible here. Suffice to say that this trend is not without its critics. Because of the conditions

227

sometimes accompanying national testing, (e.g., the narrowing of educational interests, the potential for socioeconomic, racial, or gender bias, the inevitable association of quality with the characteristics of entering students, the intrusion of bureaucratic agencies), many educators fear that any national movement to assess student achievement will be detrimental to the achievement of many valued educational objectives.

7. Also see Samah, A. A. (1991). *Effective indicators of quality education.* SEAMEO INNOTECH International Conference. Manila, Philippines; OECD. (1991) *OECD International education indicators: Outcomes of education.* Paris; Finn, C.E. Jr. (1989). *What good are international indicators anyway?* Paper prepared for the Indicators Panel Study Group, Washington, DC; NCES; Oakes, J. (1990). *Education indicators: A guide for policymakers.* Santa Monica: RAND Corporation, CPRE.

REFERENCES

Astin, A. W. (1983). Educational excellence: Aspirations and realities. In the proceedings, *Middle States Association of College and Schools.* Philadelphia.

Burchfield, S. (1991, Winter). *Planning and implementing educational management, 9.* Tallahassee, FL: IEES Bulletin, Florida State University.

Cobbe, S. (1990). *Education indicators for policy purpose in Indonesia Jakarta.* Ministry of Education and Culture.

Horn, R. (1992). *The fundamental quality level indicator system for primary schools* (Draft Memorandum). United States Agency for International Development, Bureau for Africa.

Lockheed, M. & Hannushek, E. (1988). *Improving educational efficiency in developing countries: What do we know?*, 21-37.

Pirsig, R. (1974). *Zen and the art of motorcycle maintenance.* New York: Morrow.

Snyder, C. W. (1990). Affective context of schools as a potential indicator of teacher receptivity to instructional change and teacher worklife quality. In D.W. Chapman & C.A. Carrier, (Eds.), *Improving Educational Quality.*

WCEFA. (1990). *Meeting basic learning needs: A vision for the 1990's.* New York: UNICEF.

Windham, D. (1986). *Indicators of educational effectiveness and efficiency.* Tallahassee, FL, IIES Project, 10.

228

Attachment 4*b*

Implementing Change in Educational Quality

February 3, 1994

IMPLEMENTING CHANGE IN EDUCATIONAL QUALITY[1]

Don Adams

with Thomas Clayton, Michel Rakotomanana, and Yidan Wang

The educational planning and policy-making efforts for most countries until recently gave little attention to problems of implementation. Throughout the 1950s, 1960s, and early 1970s, implementation often was not formally planned, responsibility for implementation was assumed to lie exclusively with lower-level administrators and managers or with those whose everyday work actually was affected by the intended change, and the failures of implementation were defined as any level of departure from the original objectives. However, during the late 1970s and 1980s there was rapid growth in the perception of failure of educational reforms and innovations in educational and other sectors with the result that concern for the implementation of programs and projects at all levels from the classroom to the national system has increased radically.

The experience of the 1960s and 1970s demonstrates that implementation does not automatically follow the development of educational plans and policies. The planned improvement of education requires information and knowledge of the organizational and environmental contexts, insights into the behavior of implementers, and understanding of such processes as needs assessment, monitoring, adapting, evaluating, and mobilizing support for the innovation. This

[1]This paper is a reduced version of a much longer working paper produced under the United States Agency for International Development's Improving Educational Quality Project.

paper draws on U.S. and international research including the field work of the authors to analyze the models, strategies, and processes used in implementing educational reforms and innovations. The emphasis is primarily on attempts at the improvement of educational quality at the classroom and school levels. The first section of the paper examines a general model of implementing educational change. The second section concentrates on the supporting conditions, strategies, and operational activities for initiating and sustaining change.

A GENERALIZED MODEL OF IMPLEMENTATION

Although theoretically framed research on implementing educational change is still limited and good cross-national studies even more rare, a rapidly growing body of conceptual explorations, reflective analyses, and empirical research and evaluation efforts integral to educational reform now is available. The new insights resulting from research and practice, although helpful in avoiding some earlier mistakes, cannot provide prescriptions for those guiding the implementation process. The enthusiasm and optimism which often accompany the initiation of educational reforms and innovations all too often are followed by frustration at the inability to translate policies and programs fully into practice. Concern with implementation failure persists in the 1990s, and attempts to transfer insights from one innovation experience to a new case of implementation frequently have been unsuccessful.

One aspect of the difficulty in achieving successful implementation lies in

the conceptualization of implementation. Earlier views equating implementation to adoption emphasized the importance of clearly developed plans backed by legitimate decision-making authority as typically represented in efficient bureaucracies. The key to adoption was assumed to lie in control and compliance authority and detailed procedures. Implementation seen as a bureaucratic or tightly managed process thus focused on specification of responsibilities and standards and an efficient monitoring system.

More recently, implementation tends to be seen as effecting change or carrying innovations or reforms into practice, with or without a formal "plan." Such a view suggests that implementation may be defined as the introduction, continuation, and, perhaps, the institutionalization of change. To many observers, the key to full and lasting implemented change lies not with strict hierarchies of authority and rigid routines of operation, but with building and maintaining acceptable, satisfying human relationships. Attaining such conditions focuses more attention on the individual-in-context and the need for shared decision making, and it may require acceptance of the notion of continued adjustments during the implementing processes.

Planning Educational Change

By examining broadly the research on policy and program implementation, it is possible to build a loose conceptual foundation for implementation planning. This framework (Figure 1) is not intended to provide a checklist of necessary conditions for implementation success. It does provide a general lens for viewing

a wide range of educational reforms and innovations and is suggestive of basic questions which need to be considered in planning and monitoring change. These factors were identified from the authors' experience and research and in a review of Berman (1980), Berman (1981), Cerych, Ladislav, and Sabatier (1986), Elmore (1983), Hargrove (1983), Mazmanian and Sabatier (1983), McLaughlin (1987), Pressman and Wildavsky (1984), Rondinelli, Middleton, and Verspoor (1990), Sabatier and Hanf (1985), and Williams (1980).

Figure 1. <u>Factors Associated with Implementation</u>

1.0 POLICY OR INNOVATION FACTORS

- a. Validity of Causal Theory
- b. Clarity, Specificity, and Flexibility
- c. Degree of Change and Complexity

2.0 CONTEXT FACTORS

- a. Organizational Setting
- b. External Environment
- c. Resources
  - c. 1. Financial Resources
  - c. 2. Incentives and Sanctions
  - c. 3. Staff Competence

3.0 INTERVENTION FACTORS

- a. Information, Knowledge, and Technology
- b. Authority and Power
- c. Communication and Participation
- d. Individual Perception, Motivation, and Action
- e. Time

Figure 1 identifies a number of factors drawn largely from the general literature on implementation which are purported to influence, and hence help

understanding of, the implementation process. It should be emphasized that the review of international studies and experience which forms the basis for Figure 1 comprises a rather unsystematic body of research, analyses, and intuitively appealing insights of a large number of scholars and practitioners concerned with questions of implementation. Moreover, as will be discussed later, many of the factors are interpreted differently depending on the theoretical perspective of those who argue their significance. The three sets of factors found in Figure 1 are briefly discussed below.

1. Policy or Innovation Factors

Policy or innovation factors refer to the characteristics of the policy or innovation itself, particularly during the design and adoption stages of the change process. They include factors easily controllable and factors controllable only with great difficulty. There is by no means universal agreement on either the factors or even the direction of their influence.

Validity of causal theory refers to the importance of understanding how the particular change relates to the attainment of the objectives. For example: Does the proposed innovation reflect evidence from a respected body of international research? Is there support from local contextual research?

The variables of clarity, specificity, and flexibility suggest such characteristics as the degree of goal ambiguity, the understandability of orders and guidelines, and the amount of adjustments in objectives and programs which are allowed implementers. Clarity and precision of goals and objectives are

considered vital by advocates of some planning models. However, others have argued that lack of clarity and precision, by masking potential disagreements, may contribute at least initially to consensus on the necessity of the change in question and thus increase its support.

The degree of change and complexity refers to the magnitude of the departure of the innovation from the status quo, the number of objectives, roles, actors, decision points, and the extent of interdependence of organizations. Linear, expert-driven approaches to planning seek to reduce complexity, often by ignoring variables or by developing quantifiable indicators; but political and consensual approaches tend to accept complexity as a given. Although there is general agreement as to the importance of these factors, there is disagreement on the particular ways in which they affect implementation. Some observers have found that projects requiring significant change from traditional roles or organizational patterns are less likely to succeed. Likewise, the scope and complexity of change are often assumed to constrain implementation success. However, in some contexts, major changes apparently create more enthusiasm, energy, and commitment among implementers.

2. Context Factors

To implement organizational change, new patterns of work behavior may need to be developed and new relations may need to be established with the environment. Much about the internal workings and external linkages of educational organizations remains unclear. The persistently popular metaphor

which depicts education as a loosely coupled system suggests fuzzy lines of internal communication and complex, often non-hierarchal decision processes.

Moreover, the direct and subtly indirect ways in which the politics, economy, and culture of the external environment provide or withhold support for educational change often is unclear. For example, both highly turbulent and highly stable environments appear to be detrimental to implementing change. And, a long-standing debate persists as to whether major educational changes must originate in the external environment or may evolve from the internal dynamics of the educational system. Does the environment impose change on passive schools? Or have we radically underestimated the capacity of the educational system for autonomous change?

Resources, including fiscal and human resources, incentives, rewards, and sanctions, are the factors perhaps most frequently cited in the implementation literature as affecting implementation success or failure. Given limited resources and goals that are often irreconcilable, all interests cannot be pursued simultaneously. Resources serve not only as the direct means in buying new equipment, paying additional personnel, and so forth, but they also encourage compliance because of the prospect that those involved in implementation may obtain a share of the benefits. Thus, resources may create a demand by individuals and groups for participation in, or support for, a new program or innovation. However, fiscal resources alone are rarely sufficient to guarantee implementation success. There are, for example, technical difficulties in the

timing and coordinating of resources if programs change directions. Moreover, in some educational reforms in the United States, it has been suggested that the lure of additional funds may distort planning and implementing change by attracting persons to the change process who do not agree with the objectives of what is planned, but perceive that resources can be used for their individual needs or other social goals.

3. Intervention Factors

Reliable information about the change being planned, the particular educational system, and the relevant external environment is the foundation for implementation planning. The knowledge and information needed may include knowledge of the formal and informal organization of the system, technical knowledge about the innovation itself, knowledge of the implementation process, and knowledge to shape new routines and cope with evolving problems. Adequate information, however, is rarely available in readily interpretable form and may be available or obtainable only with the expenditure of considerable time, effort, and expertise.

Authority is based on position in relation to others, while power (also relative and usually variable) is based on possession of valued resources such as information, prestige, status, competence, or expertise. Power both accompanies authority and exists independently of official position (e.g., the power behind the scene or throne). In some situations, the power of social groups can mitigate the authority of education personnel, as when religious organizations challenge the

schools' use of particular textbooks that they find objectionable.

The significance of communication and participation is given recognition in all planning models. However, two kinds of arguments are made by planning and policy theorists in support of participation. The first, or conceptual argument, is associated with the view of planning as an interactive, political, "social learning" or consensual process. Within these contexts, participation of all major groups is necessary because each group contributes its own knowledge and insights, involvement is an integral part of the process of making educational decisions and choosing between educational alternatives. The second type of argument links participation to planning effectiveness. The belief among planners appears to be widespread that often participation is necessary if implementation is to be successful. Particularly in centrist models, participation, at least at the lower administrative levels, is associated with willingness and ability to carry out specified routines.

Participation of those involved in, or affected by, planned educational change can take several forms differing in level, scope, and impact. These include dissemination of information, open meetings, advisory committees, and polling, or voting (e.g., needs assessment, feedback surveys). Participation can provide information, ideas, and perspectives that might not otherwise be available, a basis for consensus building and commitment, and a vehicle for individual and organization learning (i.e., capacity building). It can also slow the implementation process and provide an opportunity for opponents to dilute or obstruct change.

Consequently, it is not unusual to find community or user participation in implementation planning confined to minor matters or filtered through bureaucratic apparatus so as to minimize its potential disruptiveness. Such tokenism, for example, has been observed in federally sponsored educational change efforts in the United States (Adams, Cornbleth, & Plank, 1988).

The importance of implementers' perceptions, motivation, and actions is increasingly being recognized in the literature of educational change and reform. All models of planning and implementing educational change involve decisions taken by individuals or by groups of individuals. It could thus be argued that studying the cognitive process by which individuals collect, interpret, and use information and researching the sources of individual motivation should be important aspects of implementation research. Ultimately, the extent, timing, and form of implementation rests to a significant degree on individual motivation, decision, and action. Educational reforms and innovations are designed as intentions directed toward and realized through individual and group action. Policy makers, planners, and administrators intend to influence individual action consistently and usually repetitively. Those planning educational change may also seek to prohibit certain types of individual action, alter roles and relationships which in turn influence individual actions, and prescribe training which seeks to change the pattern of individual action.

IMPLEMENTING CHANGE IN EDUCATIONAL QUALITY AT THE CLASSROOM AND SCHOOL LEVELS

U.S. and international research on implementation of qualitative educational innovations at the classroom and school levels identify and further focus many of the factors found in Figure 1. The original and secondary research efforts of such scholars as Bauchner, Eiseman, Cox, and Schmidt (1982), Huberman (1982), Loucks and Cox (1982), and Sirotnik and Oakes (1986) provide a summary of implementation studies associated with major school improvement efforts in the United States. The several from the International School Improvement Project publications identify the factors which constrain and support attempts at qualitative school reforms in Europe. Rondinelli, Middleton, and Verspoor (1990) and Fuller (1986), among others, have examined internationally the in-school and out-of-school factors which influence the success of planned educational change.

Box A, drawing from substantial but fragmented and often not directly comparable cases of research, provides a summary of factors discovered to contribute to success of classroom and school reforms. These factors typically are a combination of insights identified by researchers and perceptions of practitioners or various educational experts. At minimum, such a list helps enrich discussions about improving educational quality. Only in the most tentative of ways is it suggestive of strategic and operational decisions.

Box A. Factors contributing to Success of Classroom and School Change

Change Factors

- Clarity and feasibility of goals
- Credibility of change
- Centrality of change

School and Classroom Factors

- Organizational conditions
- Competent and credible leadership
- High expectations for students
- Strong, instructionally focussed leadership
- Risk-taking management/learning-oriented environment
- Development of long-term perspective
- Information networks
- Focus on curriculum and instruction
- Acceptable content characteristics
- Ongoing staff development
- External technical assistance
- Vision of implemented change by key actors
- Flexible implementers
- Commitment of those affected by change
- Fiscal and material resources to adopt new practice
- Level of staff approval
- Resources (equipment, teacher aides, time, etc.) to adopt the practice
- Skills to adopt the new practices
- Understanding of the new practices
- Materials developed specifically for the new practice
- Emphasis on process as well as outcomes

Process and Intervention Conditions

- Strong system (national, provincial, and local levels) support
- High level of interaction and communication between the individuals and organizations involved
- Participatory (including parental and community) planning and implementation
- Motivation to achieve the purpose of the practice
- Motivation to adopt the practice
- Time devoted to implementation
- Systematic monitoring of performance and achievement

External Context Factors

- Political commitment
- Interest group support
- Political and ideological stability
- Few stakeholders
- Income level of community
- Distribution of income
- Support of higher-level educational authorities
- Number of administrative levels involved

There is no clear distinction between implementing qualitative improvements at the classroom and school levels. As Crandall, Bauchner, Loucks, and Schmidt (1982) note: "The difference between pedagogic and organizational innovations is somewhat artificial and difficult to decouple" (p. 13). School-level outcomes are influenced by instructional and classroom practices and vice versa. Traditionally, in empirical U.S. educational research, a pedagogic focus on classroom activities has received more attention than an organization focus. Moreover, research at the school level appears often to be "softer," i.e., less rigorous, than classroom research.

This section focuses on key aspects of the implementation process at the school and classroom levels: initiating change, sustaining and institutionalizing change, and developing strategies to guide these change processes.

Initiating Change

The literature on improving educational quality at the classroom, school, and system levels often distinguishes the separate but overlapping and nonlinear stages of initiation, implementation, and institutionalization. These stages are themselves embedded within the internal and external environments of the change process, the chosen model(s) of planning educational change, and the individual styles and perceptions of implementers.

Regardless of the scope and focus of the initiation phase, information provides the necessary foundation for choices of action. An information and knowledge base must include an understanding of both organizational properties

242

Continuing and Sustaining Improvement in Quality

Sustaining qualitative changes in classrooms and schools depends on the ability to generate, understand, and utilize information on evolving intervention, performance, and contextual conditions. The information, arguments, and incentives useful to initiate change may not be those which are effective in ensuring its continuation. A few influential and committed individuals may have been sufficient to introduce the new practices; however, sufficient resources, sound planning and development activities, efficient information networks, strong individual commitment, and continually improving technical skills are likely to be necessary during the continuation phase.

Observers of attempts to implement innovations, for example, note that early enthusiasm may rapidly give way to despair as the difficulties and risks become known. The challenge is how to maintain high performance and high morale on the part of those involved. This "dip" in the curve of implementation may be temporary, and, with further understanding and confidence, commitment may reemerge. However, the decline in the intervention support may continue and result in the termination of the innovation.

The instability of changes in quality over time may, of course, reflect a healthy process of naturally occurring school improvement. Irrespective of shifts in motivation and morale, there may be good reasons why innovations which are satisfactory at a particular time may not be appropriate or acceptable at a later time. (Educators in the United States are now beginning to observe that the

effective schools for the 1980s may not be adequate to be effective schools for the 1990s). New research- or experience-based knowledge may suggest foci on different classroom variables. A shift in national, local, and school priorities may require consideration of altered teacher and administrator roles and of new output measures.

Continuation of new classroom practices implies that a school assimilates an innovation into the role and relationships of the teachers and administrators. The modifications are stabilized and the school effectively establishes an institutionalized process of monitoring and feedback which includes continued assessments of the classroom changes and their effects. The culture of the school and classroom has been altered. The definition of continued change requires the insights and reflections of practitioners and reliance on the linking of ongoing classroom research to practice.

That perception of the occurrence of institutionalization should vary among the actors involved in the change process is not surprising. Understandably, teachers emphasize the importance of practice-specific mastery. Teachers as the group "closest to the action" could be also expected to see most clearly the weaknesses in a new practice. Administrators, from their vantage point somewhat removed from the classroom and focussing on management concerns, are more willing to accept plans and commitments as sufficient evidence of institutionalization.

Major improvements in education often take several years and require multiple technologies and a variety of strategies. The "miracle grain" phenomenon of a single technology or strategy having rapid and long-term impact is unlikely to occur in educational improvement projects at the classroom and school levels. Moreover, improving educational quality by a "checklist" approach focussed on a number of discrete classroom modifications is unlikely to be fully satisfactory. The institutionalization of innovations typically requires an integrated approach which may include supporting organizational change, developing new decision processes, engaging in sustained, but flexible, participatory evaluation, and creating effective feedback mechanisms.

Developing Strategies

A strategy is a general guide for institutions and personnel that provides organized direction for efforts to implement qualitative changes at the classroom and school levels. Strategies are built on implicit or explicit assumptions about which conditions and organizing principles embedded in successful change efforts are important. Strategies thus may reflect causal or predictive theories of planning or organizational change, but are more likely to reflect "middle-level" generalizations, propositions, or hypotheses about educational change.

Although at times partly obscured by other language, the twin, sometimes conflicting, strategies of capacity building and accountability, if broadly defined, include most of the more specific strategies identified in international research. Boxes B and C identify many of the actions or programs which fall under these

two headings. The models of planned educational change examined earlier provide perspective on this two-fold classification. By way of example, planned capacity building following the assumptions of a formal expert-driven model of planning would tend to be a top-down process, strongly information based and assessed in rigorous terms of cost efficiency. By contrast, planned capacity building following a view of planning as politics would reflect bargaining and power struggles around major decisions.

The choice and perhaps even the design of a particular strategic program or action may be the result of professional or political considerations or some combination of both. The decisions may be expert driven or participatory and collaborative. In practice, capacity-building efforts are more likely to involve high levels of cooperation among teachers, administrators, and parents than accountability strategies. The latter more often follow the bureaucratic hierarchy with relatively less attention to shared decision making. Some strategies, depending on intent and design, could fit under both headings.

Box B. Capacity Building

A. **CAPACITY BUILDING:**

1. **School Administration and Teaching:**

Administrators' Training

Preservice training
Inservice training
Periodic inservice seminars
Target population: key administrative and professional staff, principals

Teacher Education

Preservice teacher training
Permanent/local/inservice teacher training
Direct/local supervision and support for teachers
"Echo" or "Cascade" training for teachers
Target population: teacher trainers, research and evaluation staff, teachers and assistant teachers

2. **School Organization:**

School Management

Delegation of authority to principals/school managers
Development of school improvement funds

Staff Development

Collective development programs for career leaders
Leaders competence development, if needed jointly with other staff
Opportunities for professional staff development
Staff development program with clear system for assessing performance

Staff Working Conditions

Improvement of teachers' working conditions
Incentive systems: e.g., fellowships for school managers
Teachers' active participation to the reform
Provision of instructional materials and equipment

Teaching Organization

Reorganization and sequencing of curriculum
Adjustment of time allocation
Use of learning packages
Cluster schools
Multiple shifts and multigrade teaching
Multigrade classes
Curricular materials adapted to needs of students and to characteristics of communities
Improved school supervision by new tiers of officials
Incentive to female teachers: e.g., boarding, training, more pay

Box C continued

3. **Incentives To Students/Parents:**

Day care to release young girls from schooling
Special incentives to young girls: e.g., free tuition, stipends, housing, books, medical allowance
Before- and after-school tutoring
Outreach programs to encourage disadvantaged children to enroll
Flexible promotion system
Reduction of cost of education for rural children and girls: e.g., eliminating fees, providing instructional materials, boarding, transportation, feeding programs
Reduction of indirect costs to parents: e.g., revising school year or school day (not to coincide with field work), flexible scheduling

4. **Informal Education:**

Interactive radio instruction
Television programs in local language

5. **Community Organization:**

Parent-teachers association
School open house

Box D. Accountability

B. ACCOUNTABILITY:

1. **Communication and Information Within the Educational Bureaucracy:**

Improving vertical communication, regarding: testing of new curricula, monitoring of classroom experience, feedback from teachers, collection of data from teachers.
Creating special institutions: e.g., advisory committee
Improving horizontal communication
Developing information systems at all levels

2. **Development of National, Regional, and Local Testing Programs:**

Strong testing, monitoring, and evaluation system

3. **Development of Evaluation Systems:**

Informal evaluation by program designers, teachers trainers, and teachers, versus formalized monitoring/evaluation
Ad hoc evaluation by program managers
Clustering of schools

4. **Development of Community-Level Accountability System:**

Developing school PR: e.g., training of teachers and firstline supervisors in community relations
School management committee
Parents-teachers association
Involvement of bureaucrats, politicians, school staff, and community leaders in designing and implementing reforms

Each strategy or coordinated combination becomes operationalized through answering certain basic questions. What questions ask for the purpose, objectives, and scope of the improvement strategy. Who questions specify the individuals and organizations involved—if necessary in order of priority. How is answered by adding appropriate detail to the descriptions of the capacity-building or accountability strategy, e.g., identifying which training option or curriculum change. When refers to the planned time frame and may require a breakdown into phases in order to realize more effectively the outputs of the chosen strategy.

SUMMARY

Some educators appear to be increasingly confident that recent research on educational innovation and professional insights growing out of several U.S. and international reform movements offer guidance for planning and implementing new attempts at improving educational quality. The claims are that the obstacles to success and the conditions and processes which make implementation more likely are now better known.

Other educators are more cautious. They suggest that better questions perhaps can now be asked but many are not easily answered. Educational theory is inadequate, it is argued, to explain many causal linkages in the chain of initiating, sustaining, and institutionalizing change. Moreover, each organizational and environmental context has its own unique character, inhibiting the development of any generalized models of success.

Qualitative educational change is a complex process which is difficult to understand, plan, or manage. Although significant progress can be recorded over the last two decades in recognizing the importance of implementation as a key to successful reform, the path from a stated policy or innovation to the realization of new classroom practices is often long and circuitous. There are, however, two especially promising directions in the international research on educational quality: the trend away from a focus on macro policy concerns to examination of innovations at the school and classroom levels; and the shifting of attention from innovation adoption to a concentration on the interaction of multiple actors within and outside the educational system in interpreting and adapting new programs and practices. These trends have resulted in many new insights into the struggles to resist or encourage change and in a more intimate knowledge of organizational and individual behavior.

A more thorough understanding of the necessary and sufficient conditions and processes for improving educational quality may require multiple models to interpret and evaluate behavior in the classroom and school. Much of existing research on improving educational quality has been guided by what might be termed "technical rationality." That is innovators and reformers have assumed that existing information, knowledge, and skills are sufficient to attain specified objectives. A case can be made that understanding the process of educational change requires a supplementary "social rationality" model. More sophisticated models of planning and implementing educational change are needed which place

inaccessible or irrelevant (e.g., Brause and Mayher, 1991), while researchers lament the lack of attention to and influence of their research findings.

We should clarify that research may be used instrumentally and conceptually in the policy and practice arena. "*Instrumental use* refers to documentable use where the [research-generated] information is explicitly employed in the making of a decision, or the solving of a problem. ... *Conceptual use* refers to uses that influence policy makers' [and practitioners'] thinking about issues" (Cooley and Bickel, 1986, p. 119). That is, an interest in influencing policy and practice does not rule out attention to theory (see Vulliamy, Lewin, and Stephens, 1990). For instance, in his discussion of externally funded, policy-oriented research in "developing" countries, King (1981, p. 349) notes that: "Whatever the record on implementation of the results of such research, it is at least arguable that work of a more theoretical nature may equally be implementable (cf. the work of Freire, which ... has reached and affected many people with responsibility for literacy policy)."

In recent years, primarily in "developed" countries, educational researchers in conjunction with policy makers, administrators, and teachers have sought to employ (and write about) strategies for strengthening the links between research and educational policy/practice. In a sense such efforts subscribe to Dewey's (1929, p. 47) dictum that "there is no way to discover what is 'more truly educational' except by the continuation of the education act itself. The discovery is never made; it is always making." We can identify three general models employed in such efforts: decision-oriented research, collaborative action research, and research as collective praxis. Although proponents of

measurement, data collection, data analysis) are viewed to be activities to be completed prior to (and separate from) the processes of interpreting, writing up, and disseminating the findings. More often than not, such activities are done by researchers (in isolation from policy makers and practitioners) and conference presentations, research reports, articles, or books (targeted primarily to an audience of other researchers) serve as the vehicles of dissemination. Like many social scientists, many educational researchers seem to assume "that good science must eventually lead to improved practice" (Whyte, 1991, p. 8). Gitlin et al. (1992, p. 25), for instance, note that traditional research activities "aim to shed light on or capture the essence of a particular event or intervention. This understanding, it is assumed, will then trickle down to the level of practice and inform practitioners on what to do and what not to do."

Gentile (1994), with his tongue placed firmly in his cheek, has promoted what he terms "inaction research," advising educational researchers: "Don't just do something, sit there -- and think!"[15] However, when research (whether introspective/reflective and/or empirical) is undertaken with the specific intent of influencing decisions about policy and practice to improve educational quality, writing a report or even combining this with making oral presentations to the key policy makers and practitioners may not be enough. Without special attention and effort on the part of researchers (as well as policy makers and practitioners), any insights relevant to policy and practice which are derived from research may not be put to use. It is certainly not uncommon for teachers, administrators, and policy makers to criticize the products of researchers' activity as

collection, and data analysis, remaining somewhat detached from the "professional" and "political" activity of educational policy making and practice (see Whyte, 1991). This is perhaps ironic, because one of the premises of collaborative action research is the "democratic social and political ideal, the ideal of a creative and involved citizenry" (Winter, 1989, p. 4).

The third model, **research as collective praxis**, shares some of the elements with, but is also framed in contrast to, the other two models. In her chapter on "Research as Praxis" Lather (1991, p. 56) comments that: "I am arguing for an approach that goes well beyond the action research concept. ... The vast majority of this work operates from an ahistorical, apolitical value system" (see also Bodemann, 1978; Carr and Kemmis, 1986; Gitlin et al., 1992). Similarly, McTaggert (1991, p. 176) describes a "process of using critical intelligence to inform action, and developing it so that social action becomes praxis through which people may consistently live their social values."[17] Crucial to the model of research as collective praxis is the researcher acknowledging and acting upon her or his political commitments in the context of theorizing and practice with others -- collective praxis -- in a settings including "non-professionals" such as students and community members (Fine, 1989; Gitlin, et al., 1992: Reinharz, 1984; Vio Brossi and de Wit, 1981). In this way the line between "researcher" and "policy maker" or "practitioner" becomes blurred as those who identify (or are typified) primarily as in one of these roles, in fact, play both. Not only do policy makers, administrators, teachers, students, and community members participate in research, but "researchers" become active participants in the settings working with others to understand <u>and</u> change schools and society.

According to Bodemann (1978, pp. 410-411), the "researcher" in this model: 1) "participates fully, freely and self-critically in the setting;" 2) "observes and renders a description of the facts and 'on-goings' of the setting, but in the context of his [or her] biographical position;" and 3) based on his or her "commitment and the evidence, received and theoretically grounded, he [or she] can actively intervene ... with others who partake in a comparable predicament and with all those who identify with this predicament and who are willing to change it."

Conclusions

This paper represents an attempt to identify and discuss some of the choices that researchers face as they engage in classroom-anchored research in connection with efforts to improve educational quality in developing countries. However, in disseminating this paper we are not seeking to impose one or another set of research assumptions, traditions, approaches, strategies, or techniques on colleagues, whether they are connected with the IEQ project or not. Indeed, within the IEQ project and in the context of activities in Ghana, Guatemala, and Mali, the three scientific traditions are being drawn on in different combinations to guide efforts to conduct research <u>and</u> to link it with policy and practice. Neither are we suggesting that the ideas (and references) presented herein are the only ones on which researchers in and outside this project can and should draw. We concur with Vulliamy, Lewin, and Stephens (1990, p.4) that "while some issue of research design, execution and analysis may be generalizable, others are more specific to the cultural and political context of the research setting ... [and] that

impediments to, and supports for, change within the internal (organizational) and external (environmental) contexts. The meaning of perceived contradictions, conflicts, and tensions can then be interpreted as part of a specific ongoing social interaction.

REFERENCES

Adams, D., Cornbleth, C., & Plank, D. (1988). Between exhortation and reform: Recent U.S. experience with educational change. *Interchange 19*(3/4), 121-134.

Bauchner, J.E., Eiseman, J.W., Cox, P.L., & Schmidt, W.H. (1982). *Models of change: A study of dissemination effects supporting school improvement*. Andover, MA: Network of Innovative Schools, Inc.

Berman, P. (1980). Thinking about programmed and adaptive implementation: Matching strategies to situations. In H.M. Ingram & D.E. Mann (Eds.), *Why policies succeed or fail* (pp. 205-227). Beverly Hills, CA: Sage.

Berman, P. (1981). Educational change: An implementation paradigm. In R. Lehming & M. Kane (Eds.), *Improving schools: Using what we know* (pp. 253-286). Beverly Hills, CA: Sage.

Cerych, L., & Sabatier, P.A. (1986). *Great expectations and mixed performance*. Great Britain: European Institute of Education and Social Policy.

Crandall, D.P., Bauchner, J.E., Loucks, S.F., & Schmidt, W.H. (1982). *Models of the school improvement process: Factors contributing to success. A study of dissemination efforts supporting school improvement*. Andover, MA: Network of Innovative Schools, Inc.

Elmore, R. (1983). Forward and backward mapping: Reversible logic in the analysis of public policy. In K. Hanf & T.A.J. Toonen (Eds.), *Policy implementation in federal and unitary systems: Questions of analysis and design* (pp. 33-70). Dordrecht, Netherlands: Martinus Nijhoff.

Fuller, B. (1986). *Raising school quality in developing countries: What investments boost learning?* World Bank Discussion Papers 2. Washington, D.C.: World Bank.

Hargrove, E.C. (1983). The search for implementation theory. In R.J. Zeckhauser & D. Leebaert (Eds.), *What role for government? Lessons from policy research* (pp. 280-294). Durham, NC: Duke University Press.

Huberman, M.A., & Crandall, D.P. (1982). *Implications for action: A study of dissemination efforts supporting school improvement*. Andover, MA: Network of Innovative Schools, Inc.

Loucks, S.F., & Cox, P.L. (1982). *School district personnel: A crucial role in school improvement efforts*. Andover, MA: Network of Innovative Schools, Inc.

Mazmanian, D.A., & Sabatier, P.A. (Eds.). (1981). *Effective policy implementation*. Lexington, MA: Lexington Books.

McLaughlin, M.W. (1987). Learning from experience: Lessons from policy implementation. *Educational Evaluation and Policy Analysis, 9*, 171-178.

Pressman, J.L., & Wildavsky, A. (1984). *Implementation* (3rd ed.). Berkeley, CA: University of California Press.

Rondinelli, D., Middleton, J., & Verspoor, A. (1990). *Planning education reform in developing countries: Contingency approach*. Durham, NC: Duke University Press.

Sabatier, P.A., & Hanf, K. (1985). Strategic interaction, learning and policy evolution: A synthetic model. In K. Hanf & T.A.J. Toonen (Eds.), *Policy implementation in federal and unitary systems: Questions of analysis and design* (pp. 301-333). Dordrecht, Netherlands: Martinus Nijhoff.

Sirotnik, K.A., & Oakes, J. (1989). A contextual appraisal system for schools. *Educational Leadership, 39*(3), 164-173.

Verspoor, A. (1989). *Pathways to change: Improving the quality of education in developing countries*. World Bank Discussion Papers 53. Washington, D.C.: World Bank.

Williams, W. (1980). Implementation in perspective. In *The implementation perspective* (pp. 2-9). Berkeley, CA: University of California Press.

Attachment 4*c*

Choices in Conceptualizing Classroom-Anchored Research and Linking it to Policy/Practice to Improve Educational Quality in 'Developing' Countries

CHOICES IN CONCEPTUALIZING CLASSROOM-ANCHORED RESEARCH AND LINKING IT TO POLICY/PRACTICE TO IMPROVE EDUCATIONAL QUALITY IN "DEVELOPING" COUNTRIES

Mark B. Ginsburg and Leopold E. Klopfer
with
Thomas Clayton, Michel Rakotomanana, Judy Sylvester, and Kit Yasin

Institute for International Studies in Education
School of Education
University of Pittsburgh
Pittsburgh, PA, 15260, USA
Tel: (412) 648-1783
Fax: (412) 648-5911
E-mail: iise@vms.cis.pitt.edu

August 1994

CHOICES IN CONCEPTUALIZING CLASSROOM-ANCHORED RESEARCH AND LINKING IT TO POLICY/PRACTICE TO IMPROVE EDUCATIONAL QUALITY IN "DEVELOPING" COUNTRIES

Abstract

This paper discusses three scientific traditions (positivist, interetivist, and critical) as they inform methodological and strategic choices within a USAID-funded "Improving Educational Quality" project in Ghana, Guatemala, and Mali. These scientific traditions are shown not only to frame choices in posing research questions and selecting data gathering and analysis strategies, but also to orient decision about approaches for linking research to policy and practice and for establishing relationships between researchers and policy-makers and practitioners. Special consideration is given to these issues as they inform classroom-anchored research undertaken by and for educational personnel in "developing" countries.

CHOICES IN CONCEPTUALIZING CLASSROOM-ANCHORED RESEARCH AND LINKING IT TO POLICY/PRACTICE TO IMPROVE EDUCATIONAL QUALITY IN "DEVELOPING" COUNTRIES[1]

Introduction

Educators and policy makers engaged in educational quality improvement efforts face many choices concerning the kind of research and other activities they might undertake to inform their initiatives. For example, colleagues in Ghana, Guatemala, and Mali are conducting research focusing on educational reforms that were identified by educational policy-makers and practioners in their respective countries as important to study. In their efforts to improve educational quality by using different instructional resources (Ghana), refining a multi-grade school model (Guatemala), and enhancing French language instruction in early primary grades (Mali) -- these colleagues encounter methodological choices, including: Should they follow quantitative and/or qualitative research traditions? Should they carry out "true" experiments, assess relationships among variables in a "natural" setting, or develop thick descriptions or cultural analyses of teachers' and students' actions and their meanings? Where should they undertake the research? On what or on whom should the research focus? Who should participate in the research? How should the findings be interpreted and who should be involved in such interpretive work? How can the findings be reported and disseminated, by whom, and to whom, so that they will influence decision making about educational policy and practice?

261

This paper discusses some of the major methodological and strategic choices available to Host Country Research Teams and U.S. Research Support Teams involved in the "Improving Educational Quality" (IEQ) project, funded by USAID. By drawing attention to such choices[2] we hope to encourage participants in this and similar projects to engage in dialogue about how to conduct studies and organize projects that will help in enhancing the quality of education in various settings. We want to encourage dialogues, both about the choices presented herein and about other ideas and approaches that colleagues in various contexts may bring to the discourse based on their academic preparation, their experience, and their perceptions of the institutional and societal contexts in which they work.

This paper is more specifically focused on methodological choices in conducting "classroom-anchored" research, that is, research that takes the classroom as the central focus of investigation and also views the classroom as situated in the context of schools and communities, educational systems and societies. Thus, in part, we concur with Hammersley (1986a, p. ix) that: "if we are to understand the work of schools, and to improve or change their role, then above all we have to understand what occurs in classrooms ... where the real business of education is supposed to take place."[3] However, as discussed in another IEQ project paper (Adams et al., 1993), one can only effectively undertake and adequately understand efforts to improve educational quality if one considers the proximate and remote environments of classroom activity. According to Delamont (1976): "The classroom has to be seen against the background

262

of an on-going educational system operating at the school, local and national level" (p. 38) and "against large scale social and economic processes" (p. 20).

In this paper we will first contrast the assumptions which serve as the foundation for three "scientific" traditions or paradigms of social and educational research: positivist science, interpretivist science, and critical science.[4] These traditions or paradigms serve to organize the choices available to those engaged in classroom-anchored research designed to improve educational quality in developing countries.[5] To illustrate the assumptions we contrast the kinds of research questions that might be asked in a project like ours when working within the three scientific traditions. Next we consider issues about disseminating research findings, the researcher's role in educational change processes, and the roles that school teachers, administrators, and policy makers might play in the research projects designed to inform decisions about how to improve educational quality. And finally, we caution colleagues involved in translating or transforming research traditions employed in "developed" societies for their use in "developing" countries to be duly modest and always open to alternative ideas.[6]

Assumptions Underlying Research Traditions

We outline the assumptions that the different scientific paradigms make about the nature of knowledge and knowing and about the nature of human activity because we believe that any dialogue about research activity should consider carefully what assumptions those involved in educational quality improvement efforts want to make. To ignore the assumptions of different research traditions opens one up to acting in

ways that contradict what one believes. As Ernest Nagel notes in his essay "Philosophy in Educational Research" (1971: 238): "Although no one can be explicitly aware of all the tacit assumptions one is making in the conduct of any inquiry, it is well to realize that one is always operating within some framework of presuppositions, and to be habitually on the lookout for those that are highly questionable" (quoted in Greene, 1981, p. 5). Here we will briefly discuss some of the major assumptions underlying three scientific traditions of research: positivist or quantitative,[7] interpretivist or qualitative,[8] and critical.[9]

The similarities and differences among the three traditions (see Table 1 for summary of key points) indicate that there are real choices in how we approach the process of conducting classroom-anchored research. The differences between positivist

---

Table 1 about here

---

and interpretivist science traditions are strongest with respect to the first two elements: "conception of theoretical knowledge" and "conception of the social world." That is, the positivist science tradition seeks to discover general laws of social phenomena (e.g., causal relations between certain teaching behaviors and children's language learning), while the interpretive science tradition is oriented to illuminating people's actions in and interpretations of particular situations (e.g., classrooms in specific community settings).

Also note that the critical science tradition incorporates work that reflects both positions on both elements.[10] In terms of the "scientist's role in the social world," the clearest distinction is between the critical science tradition and the other two traditions, with the former eschewing notions of the possibility of separating technical or scientific and political or ethical issues and commitments and the latter celebrating such separation as a defining characteristic of "science."

Scholars continue to debate the theoretical and practical possibilities of combining approaches and techniques from the different traditions (e.g., Babbie, 1990; Bogdan and Biklen, 1992; Eichelberger, 1989; Eisner and Peshkin, 1990; Soltis, 1984; Vulliamy, Lewin, and Stephens, 1990). As Hammersley (1986b: xix) comments:

> There seems to be a growing trend for social scientists to become locked into competing "paradigms," and this includes classroom researchers. ... There is no doubt that classroom researchers face difficult methodological problems, whatever the tradition in which they work. ... Given this, it seems essential to approach these problems with some humility, examining the arguments of those in other traditions with an open mind.

We concur with the necessity of keeping an "open mind." Whether one sides with the compatibility or the incompatibility of the traditions, one needs to make informed choices -- by being aware of the alternatives within and among scientific traditions -- on how to conduct classroom-anchored research and on how to inform and influence educational policy and practice.

Asking Research Questions in the Three Traditions

The choice of tradition(s) has implications for or is implied by the way one frames research questions or, as some say, how one formulates the research (or policy or practice) problem.[11] This section discusses this point in two ways. First, we look at the topics of research initially identified in the three core countries in the IEQ project to demonstrate how research questions related to each of these topics could be framed from within the three traditions. Second, we categorize some of the extant classroom-anchored research studies, especially those which have been undertaken in "developing" societies.

The initial topics identified by the IEQ project's Host Country Research Teams in Ghana, Guatemala, and Mali are presented in Table 2 along with some examples of research questions that could be asked from within each scientific tradition. The different

---

Table 2 about here

---

questions highlight that in the **positivist science tradition** the focus is on assessing relationships among variables (seen to be objective and factual); in the **interpretive science tradition** the stress is on exploring what individuals are doing and thinking (without presuming that the categories of analysis can be predetermined); and in the

critical science tradition the concern is to understand how what goes on in classrooms, schools, and communities benefits some social groups and not others.[12]

Another way to clarify how the research questions posed reflect assumptions associated with one or another scientific tradition is to examine existing studies. In Table 3 we classify research questions associated with some potentially relevant classroom-anchored research studies in terms of the scientific traditions with which they are most

---

Table 3 about here

---

closely identified.[13] Again we see how different assumptions about the nature of knowledge and knowing and about the nature of human activity shape the kinds of research (policy and practice) questions which might be posed in different projects.

Connecting Research and Educational Policy/Practice:

The Roles of Researchers and Practitioners

Having completed planning and conducting the research project (or preferably before initiating the investigation),[14] one also needs to consider how to communicate and make use of what can be learned from the experience of disciplined inquiry. Too often, even in research conceived of in relation to efforts to shape or improve educational policy and practice, the processes of planning and conducting (design, sampling,

each model have expressed openness and demonstrated and commitment to drawing eclectically on different research approaches and techniques, it would appear that each seems to be more firmly rooted in one of the three scientific traditions we have been discussing, respectively: positivist, interpretivist, and critical.

In their book on the subject, Cooley and Bickel (1986, p. 3) describe **decision-oriented educational research** (DOER) as "research designed to help educators as they consider issues surrounding educational policy, as they establish priorities for improving educational systems, or as they engage in the day-to-day management of educational systems." A key element in this model from the researcher's standpoint is a "client orientation," operationalized through an "on-going educational dialogue" (p. 27) in which the researcher "works hard at trying to understand the information needs of the client and to meet those needs" (p. 36). The DOER model also stresses the "importance of being methodologically eclectic" (p. 41) and the need for "a continuous activity of data collection and analysis, which we refer to as monitoring and tailoring" (p. 57). However, working within the DOER model the researcher works with a client (usually defined as policy makers or administrators, though there is no logical reason to exclude teachers, students, parents, etc.) to provide information (social facts of both quantitative and qualitative varieties) needed by the client to make certain decisions. The researcher is in dialogue with the client, but each has his or her own specified and fairly distinct role: researcher and policy maker or practitioner. The researchers are not directly engaged in making policy or directly involved in educational practice, and the policy makers and practitioners are not active participants in the research process.

Similar to the DOER model, **collaborative action research** (se Stenhouse, 1975)[16] is concerned with enhancing the use of research policy makers and practitioners. According to Elliot (1982, p. 1):

> Action research might be defined as: the study of a social situat to improving the quality of action within it ... [The] total pr diagnosis, planning, implementation, monitoring effects -- provid link between self-evaluation and professional development. (qu 1989, p. 3)

However, collaborative action research offers some contrasts to the DOE while there is evidence of methodological eclecticism, propone collaborative action research has more affinity to the approaches associated with what we have termed the interpretive science tradition (I and Cuff, 1986; Winter, 1989). Second, and perhaps more importantly, action research model entails not only dialogue about, but also joint research by "researchers" and "teachers" (although there is no logical r educational administrators, policy makers, etc.). This model builds or educational practitioners are normally engage in inquiry and that their p enhanced by making it possible for them to commit more time and ene systematically planned and implemented process of research (Brause a Kincheloe, 1991; Wagner, 1990). Nonetheless, a division of labor stil Even though the "practitioner" assumes rights and responsibilities process, the "researcher" is involved primarily as a collaborator in rese

each model have expressed openness and demonstrated and commitment to drawing eclectically on different research approaches and techniques, it would appear that each seems to be more firmly rooted in one of the three scientific traditions we have been discussing, respectively: positivist, interpretivist, and critical.

In their book on the subject, Cooley and Bickel (1986, p. 3) describe **decision-oriented educational research** (DOER) as "research designed to help educators as they consider issues surrounding educational policy, as they establish priorities for improving educational systems, or as they engage in the day-to-day management of educational systems." A key element in this model from the researcher's standpoint is a "client orientation," operationalized through an "on-going educational dialogue" (p. 27) in which the researcher "works hard at trying to understand the information needs of the client and to meet those needs" (p. 36). The DOER model also stresses the "importance of being methodologically eclectic" (p. 41) and the need for "a continuous activity of data collection and analysis, which we refer to as monitoring and tailoring" (p. 57). However, working within the DOER model the researcher works with a client (usually defined as policy makers or administrators, though there is no logical reason to exclude teachers, students, parents, etc.) to provide information (social facts of both quantitative and qualitative varieties) needed by the client to make certain decisions. The researcher is in dialogue with the client, but each has his or her own specified and fairly distinct role: researcher and policy maker or practitioner. The researchers are not directly engaged in making policy or directly involved in educational practice, and the policy makers and practitioners are not active participants in the research process.

Similar to the DOER model, **collaborative action research** (see Corey, 1953; Stenhouse, 1975)[16] is concerned with enhancing the use of research by educational policy makers and practitioners. According to Elliot (1982, p. 1):

> Action research might be defined as: the study of a social situation with a view to improving the quality of action within it ... [The] total process – review, diagnosis, planning, implementation, monitoring effects – provides the necessary link between self-evaluation and professional development. (quoted in Winter, 1989, p. 3)

However, collaborative action research offers some contrasts to the DOER model. First, while there is evidence of methodological eclecticism, proponents argue that collaborative action research has more affinity to the approaches and techniques associated with what we have termed the interpretive science tradition (Hustler, Cassidy, and Cuff, 1986; Winter, 1989). Second, and perhaps more importantly, the collaborative action research model entails not only dialogue about, but also joint participation in, research by "researchers" and "teachers" (although there is no logical reason to exclude educational administrators, policy makers, etc.). This model builds on the notion that educational practitioners are normally engage in inquiry and that their practice can be enhanced by making it possible for them to commit more time and energy to a more systematically planned and implemented process of research (Brause and Mayher, 1991; Kincheloe, 1991; Wagner, 1990). Nonetheless, a division of labor still seems to exist. Even though the "practitioner" assumes rights and responsibilities in the research process, the "researcher" is involved primarily as a collaborator in research design, data

Similar to the DOER model, **collaborative action research** (see Corey, 1953; Stenhouse, 1975)[16] is concerned with enhancing the use of research by educational policy makers and practitioners. According to Elliot (1982, p. 1):

> Action research might be defined as: the study of a social situation with a view to improving the quality of action within it ... [The] total process -- review, diagnosis, planning, implementation, monitoring effects -- provides the necessary link between self-evaluation and professional development. (quoted in Winter, 1989, p. 3)

However, collaborative action research offers some contrasts to the DOER model. First, while there is evidence of methodological eclecticism, proponents argue that collaborative action research has more affinity to the approaches and techniques associated with what we have termed the interpretive science tradition (Hustler, Cassidy, and Cuff, 1986; Winter, 1989). Second, and perhaps more importantly, the collaborative action research model entails not only dialogue about, but also joint participation in, research by "researchers" and "teachers" (although there is no logical reason to exclude educational administrators, policy makers, etc.). This model builds on the notion that educational practitioners are normally engage in inquiry and that their practice can be enhanced by making it possible for them to commit more time and energy to a more systematically planned and implemented process of research (Brause and Mayher, 1991; Kincheloe, 1991; Wagner, 1990). Nonetheless, a division of labor still seems to exist. Even though the "practitioner" assumes rights and responsibilities in the research process, the "researcher" is involved primarily as a collaborator in research design, data

each model have expressed openness and demonstrated and commitment to drawing eclectically on different research approaches and techniques, it would appear that each seems to be more firmly rooted in one of the three scientific traditions we have been discussing, respectively: positivist, interpretivist, and critical.

In their book on the subject, Cooley and Bickel (1986, p. 3) describe **decision-oriented educational research** (DOER) as "research designed to help educators as they consider issues surrounding educational policy, as they establish priorities for improving educational systems, or as they engage in the day-to-day management of educational systems." A key element in this model from the researcher's standpoint is a "client orientation," operationalized through an "on-going educational dialogue" (p. 27) in which the researcher "works hard at trying to understand the information needs of the client and to meet those needs" (p. 36). The DOER model also stresses the "importance of being methodologically eclectic" (p. 41) and the need for "a continuous activity of data collection and analysis, which we refer to as monitoring and tailoring" (p. 57). However, working within the DOER model the researcher works with a client (usually defined as policy makers or administrators, though there is no logical reason to exclude teachers, students, parents, etc.) to provide information (social facts of both quantitative and qualitative varieties) needed by the client to make certain decisions. The researcher is in dialogue with the client, but each has his or her own specified and fairly distinct role: researcher and policy maker or practitioner. The researchers are not directly engaged in making policy or directly involved in educational practice, and the policy makers and practitioners are not active participants in the research process.

Endnotes

1. This is an abridged version of a manuscript developed in the context of the Improving Educational Quality Project. This project is being undertaken under contract (No. DPE-5836-C-00-1042-00) with the U.S. Agency for International Development by a consortium including the Institute for International Research (prime contractor), Institute for International Studies in Education of the University of Pittsburgh, and Juarez and Associates. The constructive criticisms provided on earlier drafts of this manuscript by Don Adams, Yetilu Baessa, Ray Chesterfield, and Jane Schubert are gratefully acknowledged.

2. That there are choices in how one goes about doing research is certainly not a new idea. For example, the point was made centuries ago by Aristotle (in De Anima [On the Soul]): "if there is no single and general method for solving the question of essence, our task becomes still more difficult; in the case of each different subject we shall have to determine the appropriate process of investigation" (quoted in Shulman, 1981, p. 8). The focus of this paper is not on the "soul" or "essence" of human beings, but studying "educational quality" may present some of the same challenges identified by Aristotle. As Adams (1993, p. 4) has argued in another IEQ project paper, "even under intense scrutiny the concept of educational quality has remained somewhat elusive, and many persistent questions surround any attempt at definition."

3. Although some progress has been made since the time of Pfau's (1986: 293) writing this, it still is unfortunately the case that "social scientists have only vague ideas about what occurs in the classrooms of most countries of the world and how classroom behaviors vary from one part of the world to another." The IEQ project is committed to expanding and deepening our understandings of classrooms (in context), while also focussing on developing effective strategies for linking classroom-anchored research to on-going efforts directed at improving educational quality.

4. We assume that many readers are familiar with the debates among researchers representing the three scientific traditions. Thus, our discussion here is relatively brief. By providing some illustrations of research questions and identifying references to more in-depth discussions of these issues, we hope to help the reader who may have less previous exposure to such methodological and epistemological discourses. We focus somewhat more on the choices in linking research and policy/practice, because we believe less has been written on these issues.

5. Of course, there are additional choices to be made even if one chooses to undertake investigations solely within one scientific tradition or paradigm. In a more extended discussion (Ginsburg et al., 1993), for example, we outline of some of the main strategies, techniques, and issues associated with doing classroom-

different circumstances lead to different constraints and possibilities concerning the process of research."

We are acutely aware of the problem of "cultural imperialism" through research and other processes (Vulliamy, Lewin, and Stephens, 1990, p. 212). As Diambomba (1981, p. 355) articulates, there is a real problem if research activity in projects similar to IEQ are reduced to:

> a mere exercise in the re-creation of 'Western research environments' in the Third World. ... [Such a] drive to recreate Western research appears to be one of the reasons why potential African [etc.] researchers may not do research; fear of non-acceptance of their work by peers overseas or by their local representatives reduces them to almost total inaction.

Our intent in sharing some of what we can distill from different scientific traditions is to encourage colleagues working in various contexts to engage in a dialogue (with each other and with us) about how to conduct research and how to link it with educational policy and practice. We believe that this dialogue will be enriched if the ideas presented here are considered together with ideas that other colleagues bring to the conversation from a variety of other written sources and experiences. We share Shaeffer's (1981) desire to promote informed flexibility and imagination in research activities in the "developing" and "developed" world. Our hope is that such dialogue will not only be helpful to them and their work, but that we may also learn from the ideas about research that are generated through this process.

15. In his discussion about "inaction research," Gentile (1994) questions not only questions the value of researcher working closely with practitioners and policy makers, but also empirical research activity in general. He provides a useful criticism of researchers who have become so immersed in collecting, analyzing, and reporting data that they fail to really reflect on their scholarship. We would argue, however, that in addition to spending more time reflecting about the phenomena under inquiry, researchers should also become more engaged in dialogue and action in relation to such phenomena.

16. Although Stenhouse (1975) and his colleagues at the University of East Anglia in England popularized and legitimized collaborative action research in education, Corey (1953), drawing on ideas of Dewey (1947) and Lewin (1946) – who coined the term, action research, may have been the first to promote this approach in education through his book, *Action Research to Improve School Practices*. Proponents of collaborative action research go beyond the Richardson's (1994, p. 5) conclusion that "practical inquiry undertaken by practitioners in improving their practice ... is more likely than formal research [undertaken to contribute to an established and general knowledge base] to lead to immediate classroom change" to argue that practical inquiry should be undertaken by researchers as well as practitioners (and policy makers).

17. Although McTaggert (1991, p. 171) labels this process "participatory action research," he is careful to distinguish his approach from those informed by interpretive and positivist sciences, neither of which have "an explicit politics ... [or] express an interest which is ... emancipatory."

Douglas, 1976; Ely, 1991; Erickson, 1986; Geertz, 1973; Glaser and Strauss, 1967; Goetz and LeCompte, 1984; Hammersley and Atkinson, 1983; Lincoln and Guba, 1985; Miles and Huberman, 1984; Mishler, 1986; Patton, 1990; Reinharz, 1984; Smith, 1979; Spradley, 1979 and 1980; Tesch, 1990; Wolcott, 1990; Wood, 1986).

9. The critical science tradition has a long history but only in recent years has had much visibility in educational research. Those identifying with this tradition "reject the idea of value-free research into human social, political, and educational phenomena as a myth and stress the need for inquiry that takes into account the historical-ideological moment we live in and the influence it has on us" (Soltis, 1984, p. 7). As Popkewitz (1981, p. 15) observes about the critical science tradition: "A critical social science is, at root, normative and substantive as well as formal. ... Conventional distinctions between fact and value, philosophy, politics, and science are not maintained. ... The function of critical [science] is to understand the relations among value, interest, and action and ... to change the world, not [merely] to describe it. There are a number of sources discussing approaches to conducting research in the critical science tradition (e.g., see Anderson, 1989; Lather, 1991; Masemann, 1976; Reinharz, 1992; Roberts, 1981; Simon and Dippo, 1986; Thomas, 1983).

10. Later in this paper we will not discuss separately methodological issues (i.e., sampling, data collection, data analysis) for the critical tradition because of this fact that the critical science tradition includes approaches (e.g., quantitative and qualitative) associated with the other two traditions.

11. The differences in posing research questions -- as well as determining research designs, sampling, measurement, data collection, and data analysis -- are illustrated as well in a range of volumes offering *post hoc* accounts of the research experience (e.g., see Burgess, 1984; Golden, 1976; Hammond, 1964; Roberts, 1981; Shaffir, Stebbins, and Turowetz, 1980; Stubbs and Delamont, 1976; Vulliamy, Lewin, and Stephens, 1990; Walford, 1993).

12. Research within the critical science tradition often focuses on concerns about unequal relations between gender, racial/ethnic, social class, and national groups. Feminist, liberationist, marxist, and dependency or neo-colonial theoretical approaches may serve to underpin research in the critical science tradition.

13. Readers may also wish to consult these and similar studies for details about how the researchers proceeded to collect and analyze data to address these research questions.

14. See Ginsburg et al. (1993) for a discussion about technical, strategic, and tactical questions in conducting classroom-anchored research within different scientific traditions, specifically concerning research design, sampling, measurement, data collection, and data analysis.

Campbell, D. and Stanley, J. (1963) "Experimental and Quasi-Experimental Designs for Research on Teaching." Pages 171-246 in N.L. Gage (ed.) *Handbook of Research on Teaching*. Chicago: Rand McNally.

Carr, W. and Kemmis, S. (1986) *Becoming Critical: Education, Knowledge and Action Research*. London: Falmer Press.

Cooley, William and Bickel, William (1986) *Decision-Oriented Educational Research*. Boston: Kluwer-Nijhoff Publishing.

Corey, Stephen (1953) *Action Research to Improve School Practices*. New York Teachers College Press.

Crossley, M. (1984) "Strategies for Curriculum Change and the Question of International Transfer." *Journal of Curriculum Studies* 16 (1): 75-88.

Davidman, Leonard (1978) "Formative Evaluation of the Unified Science and Mathematics Curriculum in Elementary Schools." Pages 389-410 in George Willis (ed). *Qualitative Evaluation: Concepts and Cases in Curriculum Criticism*. Berkeley, CA: McCutchan Publishing.

Delamont, Sara (1976) *Interaction in the Classroom*. London: Methuen.

Denzin, N. (1971) "The Logic of Naturalistic Inquiry." *Social Forces* 50 (December): 166-82.

Dewey, John (1929) *Sources of a Science of Education*. New York: Liveright.

Diambomba, Miala (1981) "Research and External Aid: A View from the Recipient's Side." *Prospects: Quarterly Review of Education* 11 (3): 352-359.

Dobbert, Marion (1982) *Ethnographic Research: Theory and Applications for Modern Schools and Societies*. New York: Praeger..

Douglas, Jack (1976) *Investigative Social Research: Individual and Team Research*. Beverly Hills: Sage.

Eichelberger, R. Tony (1989) *Disciplined Inquiry: Understanding and Doing Educational Research*. New York: Longman.

Eisner, E. and Peshkin, A. (1990) *Qualitative Inquiry in Education: The Continuing Debate*. New York: Teachers College Press.

References

Adams, Don (1993) "Defining Educational Quality." IEQ project paper. Washington, D.C.: Institute for International Research.

Adams, Don et al. (1993) "Implementing Change in Educational Quality." Draft of IEQ project paper, University of Pittsburgh, June.

Agar, Michael (1986) *Speaking of Ethnography*. Beverly Hill: Sage Publications.

Anderson, Gary (1989) "Critical Ethnography in Education: Origins, Current Status, and New Directions." *Review of Educational Research* 59 (3): 249-70.

Avalos, B. (1986) (ed.) *Teaching Children of the Poor: An Ethnographic Study in Latin America*. Ottawa, Canada: International Development Research Centre.

Babbie, Earl (1990) *Survey Research Methods*. Belmont, CA: Wadsworth Publishing.

Bascone, Jeannette and Novak, Joseph (1985) "Alternative Instructional Systems and the Development of Problem-Solving Skills in Physics." *European Journal of Science Education* 7 (3): 253-61.

Becker, Howard (1958) "The Problems of Inference and Proof in Participant Observation." *American Sociological Review* 23 (6): 652- 60.

Biraimah, Karen (1982) "Different Knowledge for Different Folks: Knowledge Distribution in a Togolese Secondary School." Pages 161-175 in Philip Altbach, Robert Arnove, and Gail Kelly (eds.) *Comparative Education*. New York: Macmillan.

Bodemann, Y. (1978) "The Problem of Sociological praxis." *Theory and Society* 5: 387-420.

Bogdan, Robert and Biklen, Sari (1992) *Qualitative Research for Education: An Introduction to Theory and Method*, second edition. Boston: Ally and Bacon.

Borg, Walter and Gall, Meredith (1989) *Educational Research: An Introduction*, 5th edition. New York: Longman.

Brause, R. and Mayher, J. (eds.) (1991) *Search and Research: What the Inquiring Teacher Needs to Know*. Bristol: Falmer Press.

Burgess, Robert (ed.) (1984) *The Research Process in Educational Settings*. Lewes, England: Falmer.

Greene, Maxine (1981) "Response to a Predecessor." *Educational Researcher* 10 (3): 5-6.

Grindal, B. (1972) *Growing Up in Two Worlds: Education and Transition Among the Sisala of Northern Ghana*. New York: Holt, Rinehart and Winston.

Hammersley, Martin (1986a) "Introduction." Pages ix-xvi in M. Hammersley (ed.) *Case Studies in Classroom Research*. Milton Keynes: Open University Press.

Hammersley, Martin (1986b) "Introduction." Pp. x-xxi in M. Hammersley (ed.) *Controversies in Classroom Research*. Milton Keynes: Open University Press.

Hammersley, Martin and Atkinson, Paul (1983) *Ethnography: Principles and Practice*. London: Tavistock.

Hammond, P. (ed.) (1964) *Sociologists at Work: The Craft of Social Research*. New York: Doubleday.

Heyneman, S. and Jamison, D. (1980) "Student Learning in Uganda: Textbook Availability and Other Factors." *Comparative Education Review* 24 (1): 206-220.

Hollander, Myles and Wolfe, Douglas (1973) *Nonparametric Statistical Methods*. New York: John Wiley and Sons.

Hustler, D., Cassidy, A., and Cuff, E. (1986) *Action Research in Classrooms and Schools*. London: Allen and Unwin.

Irwin, D. Michelle and Bushnell, M. Margaret (1980) *Observational Strategies for Child Study*. New York: Holt, Rinehart, and Winston.

Jaeger, R. (1988) "Survey Methods in Educational Research." Pages 301-338 in R. Jaeger (ed.) *Complementary Methods for Research in Education*. Washington, D. C.: American Educational Research Association.

Kincheloe, J. (1991) *Teachers as Researchers: Qualitative Inquiry as a Path to Empowerment*. Bristol: Falmer Press.

King, Kenneth (1981) "Dilemmas of Research Aid to Education in Developing Countries." *Prospects: Quarterly Review of Education* 11 (3): 343-351.

Lather, Patti (1991) *Getting Smart: Feminist Research and Methodology With/in the Postmodern*. New York: Routledge.

Leinhardt, Gaea, Seewald, Andrea, and Engel, Mary (1979) "Learning What's Taught: Sex Differences in Instruction." *Journal of Educational Psychology* 71 (4): 432-440.

Elliot, John (1982) "Action-Research: A Framework for Self-Evaluation in Schools." Working paper No. 1, *Teacher-Pupil Interaction and the Quality of Learning*. London: Schools Council (mimeo).

Ely, Margot (1991) *Doing Qualitative Research: Circles Within Circles*. New York: Falmer.

Erickson, Fred (1986) "Qualitative Methods in Research on Teaching." Pages 119-161 in M. Wittrock (ed.) *Handbook of Research on Teaching*. New York: Macmillan.

Fine, Michelle (1989) "The Politics of Research and Activism." *Gender and Society* 3 (4): 549-558.

Galton, Maurice (1978) *British Mirrors: A Collection of Classroom Observation Systems*. Leicester, England: University of Leicester

Geertz, Clifford (1973) "Thick Description: Toward an Interpretive Theory of Culture." Pages 3-30 in *The Interpretation of Culture*. New York: Basic Books.

Gentile, J. Ronald (1994) "Inaction Research: A Superior and Cheaper Alternative for Educational Researchers." *Educational Researcher* 22 (5): 30-32.

Gibson, M. (1991) "Ethnicity, Gender, and Social Class: The School Adaptation Patterns of West Indian Youth." Pages 169-203 in John Ogbu and Margaret Gibson (eds.) *Minority Status and Schooling*. New York: Garland.

Ginsburg, Mark and Klopfer, Leopold (with Thomas Clayton, Michel Rakotomanana, Judy Sylvester, and Kit Yasin) (1993) "Choices in Conducting Classroom-Anchored Research to Improve Educational Quality in 'Developing' Countries." Draft of IEQ project paper, University of Pittsburgh, February.

Gitlin, A., Bringurst, K., Burns, M., Cooley, V., Meyers, B., Price, K., Russell, R., and Tiess, P. (1992) *Teachers' Voices for School Change: An Introduction to Education Research*. New York: Teachers College Press.

Glaser, Barney and Strauss, Anselm (1967) *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago: Aldine.

Goetz, Judith and LeCompte, Margaret (1984) *Ethnography and Qualitative Design in Educational Research*. New York: Academic Press.

Golden, M. Patricia (ed.) (1976) *The Research Experience*. Itasca: Peacock.

Gorden, Raymond (1980) *Interviewing: Strategy, Techniques, and Tactics*, 3rd edition. Homewood, IL: Dorsey Press.

281

Popkewitz, T. (1981) "The Study of Schooling: Paradigms and Field-Based Methodologies in Educational Research and Evaluation." Pages 1-26 in T. Popkewitz and R. Tabachnick (eds.) *The Study of Schooling: Field Based Methodologies in Educational Research and Evaluation*. New York: Praeger.

Porter, A. (1988) Comparative Experiments in Educational Research." Pages 391-414 in R. Jaeger (ed.) *Complementary Methods for Research in Education*. Washington, D. C.: American Educational Research Association.

Punch, Maurice (1986) *The Politics and Ethics of Fieldwork*. Beverly Hills: Sage.

Reinharz, Shulamit (1984) "Dimensions of an Experiential Sociological Method." Pages 308-68 in *On Becoming a Social Scientist*. Brunswick, NJ: Transaction Books.

Reinharz, Shulamit (1992) *Feminist Methods in Social Research*. New York: Oxford University Press.

Richardson, Virginia (1994) "Conducting Research on Practice." *Educational Researcher* 23 (5): 5-10.

Roberts, Helen (ed.) (1981) *Doing Feminist Research*. London: Routledge and Kegan Paul.

Shaeffer, S. (1981) "Increasing National Capacity for Educational Research." *Prospects: Quarterly Review of Education* 11 (3): 326-342.

Shaffir, William, Stebbins, Robert, and Turowetz, Allan (eds.) (1980) *Fieldwork Experience: Qualitative Approaches to Social Research*. New York: St. Martin's Press.

Shulman, Lee (1981) "Disciplines of Inquiry in Education: An Overview," *Educational Researcher* 10 (6): 5-12, 23.

Simon, Roger and Dippo, Donald (1986) "On Critical Ethnographic Work." *Anthropology of Education Quarterly* 17 (4): 195-202.

Smith, Lou (1979) "An Evolving Logic of Participant Observation." Pages 316-377 in Lee Shulman (ed.) *Review of Research in Education*. Itasca, IL: Peacock.

Soltis, J. (1984) "On the Nature of Educational Research." *Educational Researcher* 13 (10): 5-10.

Spradley, James (1979) *Ethnographic Interviewing*. New York: Holt, Rinehart, and Winston.

Spradley, James (1980) *Participant Observation*. New York: Holt, Rinehart, and Winston.

Lewin, Kurt (1946) "Action Research and Minority Problems." *Journal of Social Issues* 2 (1): 34-46.

Lincoln, Y. and Guba, E. (1985) *Naturalistic Inquiry*. Newbury Park, CA: Sage.

Lockheed, M., Vail, S., and Fuller, B. (1986) "How Textbooks Affect Achievement in Developing Countries: Evidence from Thailand." *Educational Evaluation and Policy Analysis* 8 (4): 379-92.

Manalang, P. (1977) *A Philippine Rural School Its Cultural Dimension*. Quezon City: University of Philippines Press.

Masemann, Vandra (1986) "Critical Ethnography in the Study of Comparative Education." Pages 11-26 in P. Altbach and G. Kelly (Eds.) *New Approaches to Comparative Education*. Chicago: University of Chicago Press.

McTaggert, Robin (1991) "Principles for Participatory Action Research." *Adult Education Quarterly* 41 (3): 168-87.

Meyer, B. and Freedle, R. (1984) "Effects of Discourse Type on Recall." *American Educational Research Journal* 21 (1): 121-143

Miles, M. and Huberman, A. (1984) "Drawing Valid Meaning from Qualitative Data: Toward a Shared Craft." *Educational Researcher* 13 (May): 10-20.

Mishler, Elliot (1986) *Research Interviewing: Context and Narrative*. Cambridge, MA: Harvard University Press.

Moser, C. and Kalton, G. (1972) *Survey Methods in Social Investigation*. New York: Basic Books.

Nash, Roy (1973) *Classrooms Observed: The Teacher's Perception and the Pupil's Performance*. London: Routledge and Kegan Paul.

Oppenheim, A.N. (1966) *Questionnaire Design and Attitude Measurement*. New York: Basic Books.

Patton, M. (1990) *Qualitative Evaluation and Research Methods*. Newbury Park, CA: Sage.

Pfau, Richard (1986) "The Comparative Study of Classroom Behaviors." Pages 293-307 in P. Altbach and G. Kelly (eds.) *New Approaches to Comparative Education*. Chicago: University of Chicago Press.

TABLE 1: KEY ELEMENTS OF THREE SCIENTIFIC TRADITIONS

ELEMENTS	Conception of Theoretical Knowledge	Conception of the Social World	Scientist's Role in the Social World
Positivist Science	universal, context free, "objective"	causal relations among variables (social facts)	neutral, detached, objective inquirer
Interpretivist Science	context-dependent; orientation to "grounded theory"[1]	web of meaning and action, continually being socially constructed	"empathetic neutrality,"[2] involved subjectively to collect and interpret data
Critical Science	either	either	committed and engaged; seeks understanding to foment progressive social change

[1]See Glaser and Strauss (1967).
[2]See Patton (1990)

Stenhouse, Lawrence (1975) *Introduction to Curriculum Research and Development*. London: Heinemann.

Stubbs, Michael and Delamont, Sara (eds.) (1976) *Explorations in Classroom Observation*. London: Wiley.

Sudman, S. (1982) *Asking Questions: A Practical Guide to Questionnaire Design*. San Francisco: Jossey-Bass.

Tesch, R. (1990) *Qualitative Research: Analysis Types and Software Tools*. New York: Falmer.

Thomas, J. (1983) "Toward a Critical Ethnography: A Reexamination of the Chicago School Legacy." *Urban Life* 11 (4): 477-490.

Tuckman, Bruce (1972) *Conducting Educational Research*. New York: Harcourt, Brace Jovanovich.

Vio Brossi, G. and de Wit, R. (eds.) (1981) *Investigación Participativa y Praxis Rural*. Lima: Mosca Azul.

Vulliamy, Graham, Lewin, Keith, and Stephens, David (1990) *Doing Educational Research in Developing Countries*. London: Falmer Press.

Wagner, J. (1990) "Administrators as Ethnographers: Schools as a Context for Inquiry and Action." *Anthropology and Educational Quarterly* 21 (3): 195-221

Walford, Geoff (ed.) (1993) *Doing Sociology of Education*. Lewes, England: Falmer.

Whyte, William Foote (1991) "Introduction." Pages 7-15 in W. F. Whyte (ed.) *Participatory Action Research*. Newbury Park, CA: Sage Publications.

Winter, R. (1989) *Learning from Experience: Principles and Practice in Action-Research*. London: Falmer Press.

Wolcott, Harry (1990) *Writing Up Qualitative Research*. Newbury Park, CA: Sage.

Wood, Peter (1986) *Inside Schools: Ethnography in Educational Research*. London: Routledge and Kegan Paul.

Yarrow, M. (1960) "Interviewing Children." Pages 561-602 in P. Mussen (ed.) *Handbook of Research on Child Development*. New York: Wiley.

TABLE 3: RESEARCH QUESTIONS POSED IN RELEVANT STUDIES IN THE THREE SCIENTIFIC TRADITIONS

Scientific Tradition	Research Questions from Cited Studies
Positivist	Which of two instructional approaches (systems) is more effective in developing Venezuelan students' skills in solving textbook problems in science or mathematics? (Bascone and Novak, 1985) What is the effect of different types of rhetorical organization on the second language reading comprehension of non-native speakers of English in the United States? (Meyer and Freedle, 1984) What impact does textbook availability have on student learning in Uganda? (Heyneman and Jamison, 1980) What factors account for the effect that textbook use has on student mathematics achievement in Thailand? (Lockheed, Vail, and Fuller, 1986)
Interpretivist	What do elementary school students in the United States learn in an instructional program designed to develop their ability to confront and solve meaningful, real-world problems? (Davidman, 1978) How is a school-centered curriculum innovation, which was originally conceptualized in a "developed" society, implemented in a secondary school in a "developing" country like Papua New Guinea? (Crossley, 1984) How are traditional educational practices combined with "modern" Western-style schooling in a community in Ghana and what aspects of the situation are viewed positively and negatively by students, teachers, and parents? (Grindal, 1972) How do school administrators, teachers, and community members understand and evaluate school-focused efforts to promote rural community development in the Philippines? (Manalang, 1977)
Critical	What are the differences between the instruction girls and boys receive in reading and mathematics in elementary school classrooms in the United States? Did the differences in instruction correspond with girls' relatively higher verbal achievement and boys' relatively higher quantitative achievement on school examinations? (Leinhardt, Seewald, and Engel, 1979) What gender role messages are sent in the official curriculum (e.g., textbooks) and the hidden curriculum (e.g., school's authority structure, teachers' attitudes and classroom interaction) and which are received and internalized by male and female secondary school students? What implications does this have for the social and cultural reproduction of gender relations in the African society of Togo? (Biraimah, 1982) How is school failure accomplished through teacher-student in Bolivia, Colombia, Peru, and Venezuela, and what implications does this have for the perpetuation of poverty in Latin American societies such as these? (Avalos, 1986) How are students' identities as members of gender, racial, and social class groups drawn upon by them, their teachers, and their parents in socially constructing 'successful" and "unsuccessful" school careers in St. Croix, West Indies? (Gibson, 1991)

TABLE 2. EXAMPLES OF RESEARCH QUESTIONS IN THREE SCIENTIFIC TRADITIONS

Country	GHANA	GUATEMALA	MALI
Topic / Tradition	Instructional Resources	Multi-grade Schools	French literacy
POSITIVIST	1. Does more frequent use of textbooks increase student (math, etc.) achievement? 2. Are textbooks more effective than other instructional resources in promoting on-task behavior of students in school?	1. Which instructional practices in multi-grade schools promote cognitive and socio-emotional development? 2. Do some curricular materials promote creativity more than others?	1. Are reading and literacy levels enhanced by bilingual (versus immersion) instruction? 2. Which instructional materials promote more positive attitudes toward French language?
INTERPRETIVIST	1. How are texts used by teachers and students in classrooms? 2. How do students and teachers view the instructional value and content of texts?	1. What happens in multi-grade schools and how do teachers and students view these experiences with respect to cognitive, socio-emotional, and creativity development?	1. How do teachers and students socially construct French literacy lessons? 2. How do students interpret and develop strategies for taking reading tests?
CRITICAL	1. Are male or female students more likely to benefit from texts being used during instruction? 2. Does the content of texts critique or legitimate existing social inequalities?	1. Do multi-grade schools promote "development" for some groups at the expense of others? 2. Is liberation or social control more closely tied to the way creativity is defined in classrooms?	1. Which ethnic or linguistic groups are (dis)advantaged by introducing French in the early grades? 2. What messages about the value of African cultures are conveyed in French lessons?

Attachment 4*d*

Documentation of the Research-Policy/Practice Link in IEQ

Documentation Questions on Research-to-Policy/Practice Linkages

1. Which policy makers, practitioners, researchers, and other people (at school, local, district, national, and international levels) are potential users of research findings?

2. What strategies are employed to disseminate research findings or to involve policy makers and practitioners in a dialogue about the interpretation(s) and implications of the research findings?
   a. What kinds of written means of communication are used?
   b. What kinds of audio-visual means of communication are used?
   c. What kinds of (individual, small group, or large group) face-to-face meetings are employed? In what settings? For what length of time?
   d. What kinds of information is exchanged through dissemination or dialogue?
   e. How often does dissemination or dialogue occur?
   f. How do the various dissemination/dialogue participants evaluate the processes?

3. Which policy makers/practitioners and researchers are involved in the various strategies to disseminate research findings or to foster a dialogue about the interpretation(s) and implications of the research findings?
   a. Who participates in conceiving and planning these strategies?
   b. Who is involved in implementing these planned strategies?
   c. Who decides what information should be disseminated or what the focus for the dialogue should be?
   d. Who is part of the audience for dissemination or who participates in the dialogue?

4. What do the various policy makers/practitioners (and researchers) do with the information they obtain from the dissemination or dialogue?
   a. Do their views or ideas about educational policy/practice change as a result?
   b. Do they seek more information for themselves?
   c. Do they share the information obtained with others?
   d. Do they change the way they perform their role?
   e. Do they propose that others change the way they preform their roles?
   f. Do they work with or assist others in changing the way they perform their roles?

5. Which of the following facilitates or inhibits policy makers/practitioners (and researchers) in making use of the information obtained from the dissemination or dialogue:
   a. Quality of the information provided?
   b. Clarity of the information provided?
   c. Relevance of the information provided to the policy and practice arenas in which they are involved?
   d. Support or nonsupport of colleagues, superordinates, or subordinates in seeking to make changes envisioned or desired?
   e. Financial or material resources needed for implementing such changes?
   f. Skill, knowledge, values and customs of those whose behavior may need to change?
   g. Laws or policy regulations?

6. Are the changes in policy/practice sustained over time and why or why not?
   a. Do new policies/practices get adopted, how, and by whom?
   b. Do these policies/practices remain in place over time?
   c. What facilitates or constrains these policies/practices being adopted, implemented, and sustained?

Documentation Questions on Policy/Practice-to-Research Linkages

1. Which policy makers, practitioners, researchers, and other people (at school, local, district, national, and international levels) could potentially shape the nature of research in IEQ?

2. How are planning decisions made about each of the following aspects of research in IEQ:
   a. Research questions?
   b. Theoretical perspective?
   c. Methodological approach or paradigm?
   d. Sampling districts, schools, classrooms?
   e. Data collection collection procedures?
   f. Data Analysis?
   g. Interpretations of findings?
   h. Implications of findings for policy/practice?

3. Which policy makers, practitioners, researchers, and other people (at school, local, district, national, and international levels) are involved and in what ways in shaping or making the above-noted decisions about research in IEQ? Why or why not?

4. How is the research conducted (with respect to elements 2d-h above)?

5. Which policy makers, practitioners, researchers, and other people (at school, local, district, national, and international levels) are involved and in what ways in conducting the research in IEQ? Why or why not?

6. How do the various participants and non-participants evaluate the process of deciding about and conducting research in IEQ?

7. How do the various participants and non-participants evaluate the quality and relevance of the research conducted? Why?

8. What constrains or facilitates the participation of various groups in planning <u>and</u> conducting the research?

DOCUMENTATION OF THE RESEARCH-POLICY/PRACTICE LINK IN IEQ

This brief paper outlines the documentation research questions related to IEQ project goal 1.2. This focus is based on the assumptions a) that of the four project goals, the first (1.1) is being addressed fairly well through the on-going classroom-anchored research being conducted by HCRTs in Ghana, Guatemala, and Mali and b) that of the other three goals, 1.2 is the most important for which to develop a documentation study, especially in relation to cross-national comparisions and knowledge building.

This paper starts from a somewhat different position on the notion of linkage than previously articulated in IEQ project goal 1.2: "to demonstrate a process whereby IEQ classroom research on improving educational quality is utilized in the education system." In an earlier paper this **unidirectional focus** on the research-practice is delineated: "Documentation of the linkages of research to practice analyzes the procedures, networking, informational exchanges, training programs by which IEQ attemps to initiate sustainable processes of improving educational quality at the levels of classroom, school and broader educational system." However, in this paper it is proposed that we examine the links between research and practice as a **two-way process**. Rather than only focusing on how research findings are disseminated and how they inform the policy and practice plans and actions of various individuals and groups, we would also focus on how policy/practice concerns of various individuals and groups shape the research questions, research designs, sampling, data collection and measurement procedures, data analysis approaches, and interpretation of findings. We probably would devote more attention to the research-to-policy/practice direction than the policy/practice-to-research direction of the relationship, but the latter direction seems worthy of study as we have discussed the IEQ process as cyclical, iterative, or dialectical.

This paper also assumes a somewhat broader notion of linkage, as indicated above, in that research is seen as potentially connected with both **policy <u>and</u> practice**. As has been discussed in the "Implementation" project paper, policy and practice are not always congruent. For a variety of reasons national-, local/regional-, or school-level policies may not be followed in practice. It may be that research has a greater influence on policy than on practice, at least over the short term. It may also be that policy concerns have a greater impact on the conduct of research than do concerns about practice. Another way to say this is that policy makers may shape the research agenda more so than practitioners (administrators and teachers). Regardless, it is proposed that we attend to the bi-directional links between research and policy as well as between research and practice. It should be noted that such an approach also puts IEQ in a position to reflect on the links between policy and practice -- an issue of central concern in the studies of implementation (as well as policy formation).

Below we list documentation questions relevant to 1) the research-to-policy/practice link and 2) the policy/practice-to-research link. Policy and practice distinctions will not be broken out into separate sections of questions, although this may be a useful necessary step. It may not be possible for IEQ to design a documentation study to address all of the documentation questions listed below. However, such a list (perhaps augmented by additional questions) can serve as a guide in determining priorities in the context of budgetary and other constraints.

Attachment 4*e*

Cross-Country Comparisons, Documentation, and Knowledge Building in IEQ

CROSS-COUNTRY COMPARISONS, DOCUMENTATION, AND KNOWLEDGE BUILDING IN IEQ: EXAMINING POLICY-PRACTICE-RESEARCH CYCLES[1]

Mark B. Ginsburg
IISE, University of Pittsburgh

Introduction

This paper focuses on three strands of work within IEQ: cross-country comparisons, documentation, and knowlege building. Are these strands related and is it possible -- and advantageous -- to combine (or at least more carefully integrate) these strands? I believe that these questions can be answered in the affirmative. In order to undertake cross-country comparisons we will need to engage in documentation of the IEQ project, and by carrying out these activities we will be building knowledge.

But the question remains as to what kind of knowledge we desire and have the resources to build. In this paper I suggest a framework and set of research questions as a starting point to guide our collective activity as we approach the end of the third year in the project. In a sense, there is nothing new in this paper, but hopefully looking anew at the various discussions we have had since the project began may prove helpful.

I approached writing this paper with a nagging concern: Who would be interested in the results of comparing the classroom resources, instructional activities, student behavior and achievement/development across three (non-randomly selected) countries? That is, why should we seek to compare the data being collected (and analyzed) in conjunction with the important investigations being conducted by HCRTs in Ghana, Guatemala, and Mali?

Questions such as this led me initially to focus attention instead on the possibilities and value of comparing the links between research and policy/practice in the three country settings. Such comparisons seemed promising, in that (local, regional, national, and international) policy makers and researchers would likely be interested in similarities and differences in approaches and accomplishments in efforts to link research and policy/practice.

The perceived value of such comparisons would seemingly be enhanced if we also were able to a) illuminate the links between educational policy and practice and b) draw on details of HCRT-collected classroom level data to examine the links between research and practice and between policy and practice. In this way we can focus on IEQ's important contribution -- classroom-anchored research -- as a key component of our

---

[1] This paper was prepared for the IEQ meeting of 5-7 July in Washington, D.C. It draws on a number of other texts previously produced in the IEQ project and has been informed by a range of conversations with participants in IEQ. Particular acknowledgment is due to Don Adams, Thomas Clayton, Richard Donato, Martha Mantilla, Michel Rakotamanana, Judy Sylvester, and Yidan Wang at the University of Pittsburgh.

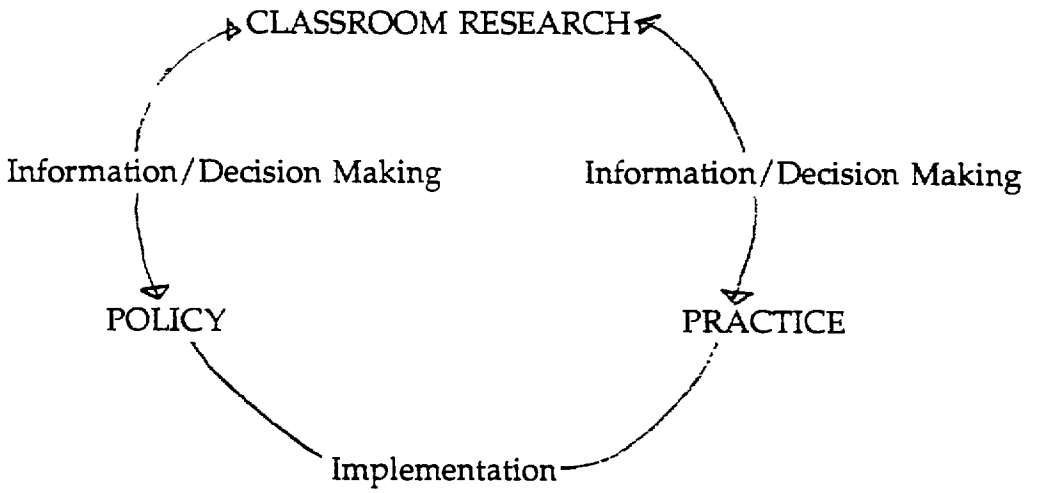
293

comparisons without seeming to try to replicate IEA-type studies with a smaller sample of countries.

The Policy-Practice-Research Cycle

Thus, I propose that the unit of analysis for our cross-country comparisons be the policy-practice-research cycle. A rough graphic representation of the policy-practice-research cycle is presented in Figure 1:

Figure 1: Diagram of Policy-Practice-Research Cycle



Since each IEQ country site will have at least two such cycles, we can compare cycles over time within a given country as well as compare cycles across countries. This would entail describing and analyzing each "step" in the cycle (policy, practice, and research) as well as the links between each pair of "steps." Note, that as illustrated in Figure 1, we will want to examine the bi-directional links between research and policy and between research and practice.

Research Questions and Data Needs

In general the cross-country comparative research will address the question: What are the similarities and differences in policy-practice-research cycles across countries (and across time or settings within countries)? We need to decide, however, what aspects of such cycles we want to study. And once we make this decision, we need to determine what kinds of data need to be collected, which subset of this data is already being collected by various IEQ project members, which members would be responsible for collecting the other needed data, and who will take leadership in compiling and analyzing these data for purposes of cross-country comparisons, documentation, and knowledge building.

The more specific within cycle and within country research questions presented below are meant as stimuli for discussion about *what kind of data need to be collected.*[2] Note that the questions are organized under three headings -- policies, practices, and research, which are the key steps in the policy-practice-research cycle. Many of the questions subsumed under each heading link issues about the respective step to another step in the cycle.

Research Questions About Policies
(During Each Cycle in Each Country)

1. What are the goals and proposed strategies of the national level "reform," "innovation," or intervention planned in each country at different points in time? How is the IEQ project perceived to be related to the national reform, innovation, or intervention by individuals, groups, and organizations in the country?

2. What individuals, groups, and organizations have been involved in shaping or defining the policy for the "innovation," "reform," or intervention (international organizations, U.S.-based bilateral agencies and their hired consultants, national government officials with education or other portfolios, regional or district level administrators, local or school level administrators, national teacher organizations, local groups of school teachers, parents or other community members, students)?

3. What information influences (manifestly and latently) the policy and planning decisions (economic situation, political situation, informal views of what takes place in schools and classrooms, findings from classroom-anchored research)?

4. What classroom-based interventions are associated with the planned "reform" or "innovation." What specific instructional resources, pedagogical approaches, curriculum content, and student behavior and achievement/development are suggested by the plans?

5. How is educational quality conceived and/or operationalized (in policy documents or otherwise) by policy makers?

---

[2] In addition to identifying research questions, we also need to concern ourselves with issues of collecting or compiling data as well as analyzing these data to answer these questions. Here I only outline some of the possible research questions we may wish to ask; I leave for later discussions issues of data collection and data analysis. In our decision making about which research questions to include in our cross-national study(ies) we will obviously need to consider the feasibility (including time and other cost factors) of collecting and analyzing the requisite data.

Research Questions about Classroom Practice
(During Each Cycle in Each Country)

1. What instructional (or other material) resources are available in different classrooms? How, if at all, are these used by teachers and/or students?

2. How many teachers or other adults are involved in a given classroom, and what is their background and training?

3. What is the nature of the adult's (or adults') activity (lecturing, managing behavior, asking content questions, discussion, giving tests, giving feedback)? How regularly are teachers in attendance and how much of their time in classrooms is invested in various activities in various subject areas?

4. How many students are involved in a given classroom, and what is their backgrounds and socio-economic circumstances?

5. What is the nature of students' activities (individual, small group, or large group; competitive or cooperative; speaking, writing or nonverbal in what languages; sitting, standing, or moving around)? How regularly are students in attendance and how much of their time in classrooms is invested in various activities in various subject areas? Are there gender differences in students' attendance and involvement in certain types of classroom activities in given subject areas?

6. What roles (training, supervising, evaluating, rewarding, punishing, constraining, enabling) do school, district, or national level administrators play in relation to what teachers and students do in classrooms?

7. What roles to parents play in relation to what teachers and students do in classrooms?

8. What roles do IEQ researchers play in relation to what teachers and students do in classrooms? Does the process of research influence the classroom environment and/or do the findings from research shape classroom practice?

9. What is the curriculum (goals, content, and organization) and how are students' achievement and development evaluated in relation to this curriculum?

10. What levels of achievement or development do students evidence at different points in time? What is the average level of achievement/development, how much variation is there among students, and to what extent is that variation associated with students' social background, gender, teacher characteristics, teacher behavior, etc.?

11. How do various people (school administrators, teachers, parents, students) conceive of and/or recognize educational quality?

Research Questions About Research
(During Each Cycle in Each Country)

1. How are planning decisions made about each of the following aspects of classroom-anchored research in IEQ:
   a. identifying research questions?
   b. adopting theoretical perspectives?
   c. using methodological approaches or paradigms?
   d. sampling districts, schools, classrooms?
   e. measurement and data collection procedures?
   f. analyzing data?
   g. interpreting findings?
   h. determining implications of findings for policy and practice?
   i. disseminating findings to policy makers and practioners involved at various levels of the educational system?

2. Which policy makers, practitioners, researchers and other people (at school, local district, national, and international levels) are involved in what ways in shaping or making the above noted decision about research in IEQ? What information (policies, informal ideas about practice, previous IEQ or other research studies) do they draw on in making such decisions?

3. How is the research conducted with respect to the above-noted aspects (1a-1i) and what does this imply about the nature of educational quality?

4. Which policy makers, practitioners, researchers and other people (at school, local district, national, and international levels) are involved in what ways in conducting research in IEQ?

5. How do the various participants and non-participants evaluate the processes of deciding about and conducting research in IEQ?

6. How do the various participants and non-participants evaluate the quality and relevance of the research conducted in IEQ?

7. What constrains or facilitates the participation of various groups in planning and conducting the research in IEQ?

257

8. What strategies (written documents, audiovisuals, meetings) are employed to disseminate research findings <u>or</u> to involve policy makers and practitioners in a dialogue about the interpretation(s) and implications of the research findings? Who is involved in planning and participating in the dissemination or dialogue? What information is exchanged via dissemination or dialogue? How often? How do participants and non-participants evaluate the process?

9. Which of the following facilitates or inhibits policy makers, practitioners, and researchers in making use of the information obtained from the dissemination or dialogue:
   a. quality of the information?
   b. clarity of the information?
   c. relevance of information to policy and practice arenas?
   d. timeliness of the dissemination or dialogue?
   e. support or nonsupport of colleagues, superordinates, subordinates in seeking to make changes envisioned or desired?
   f. financial or material resources needed for implementing such changes?
   g. skill, knowledge, values and customs of those whose behavior may need to change?
   h. laws or policy regulations?

258

Attachment 4*f*

Cross-Country Comparisons of the Policy-Practice-Research Cycles

CROSS-COUNTRY COMPARISONS OF THE POLICY-PRACTICE-RESEARCH CYCLES

Introduction

The IEQ project can make a significant long term contribution to educational policy making and reform by documenting, comparing and analyzing the attempt to develop a research-based, ongoing, sustainable, education-improving process.

Each IEQ country site will have at least two policy-practice-research-policy (PPRP) cycles. Thus, we can compare cycles over time within a given country as well as compare cycles across countries. This would entail describing and analyzing each "step" in the cycle as well as the links between each pair of "steps." Note that, as illustrated in **Figure 1**, we will want to examine the bi-directional links between research and policy and between research and practice.

Sample (General) Research Questions

1. What are the goals and proposed strategies of the national level "reform," "innovation," or intervention planned in each country at different points in time? How is the IEQ project perceived to be related to the national reform, innovation, or intervention by individuals, groups, and organizations in the country?

2. What individuals, groups, and organizations have been involved in shaping or defining the policy for the "innovation," "reform," or intervention (international organizations, U.S.-based bilateral agencies and their hired consultants, national government officials with education or other portfolios, regional or district level administrators, local or school level administrators, national teacher organizations, local groups of school teachers, parents or other community members, students)?

3. What information influences (manifestly and latently) the policy and planning decisions (economic situation, political situation, informal views of what takes place in schools and classrooms, findings from classroom-anchored research)?

4. What classroom-based interventions are associated with the planned "reform" or "innovation." What specific instructional resources, pedagogical approaches, curriculum content, and student behavior and achievement/development are suggested by the plans?

5. How is educational quality conceived and operationalized by policy makers?

Further sample questions may be found in Mark Ginsburg, ***"Cross-Country Comparisons, Documentation and Knowledge Building in IEQ: Examining Policy-Practice-Research Cycles,"*** and Don Adams, et. al., ***Initiating and Sustaining Educational Change."***

Research Team: Coordinators: Mark Ginsburg and Don Adams
Researchers: Judy Sylvester, ...

Research Approach

1. A draft of the research design and research questions with approval of IEQ management will be sent to each HCRT for comments.

2. A survey of existing relevant data and information sources will be undertaken. Particular attention will be given to trip reports, semi-annual and annual reports, and field documentation.

3. Interview data will be collected from knowledgeable U.S.-based IEQ personnel and, as possible, host country personnel. Key informants will include HCRTs and the U.S. support team (Jane, Abi, Rick, Ray, Josh, Oso, and Aida). If feasible, a researcher from each country will share design, data gathering and data analysis responsibilities. (An attempt will be made to provide resources for Judy Sylvester to make one trip to each core IEQ site.)

4. At two points in time a questionnaire will be distributed in each core country to a sample of researchers, administrators, teachers, parents and policy makers.

5. The products from analysis of the research will be in multiple forms, including: a research monograph, a publishable paper, and a brief IEQ paper for wide distribution.

Schedule

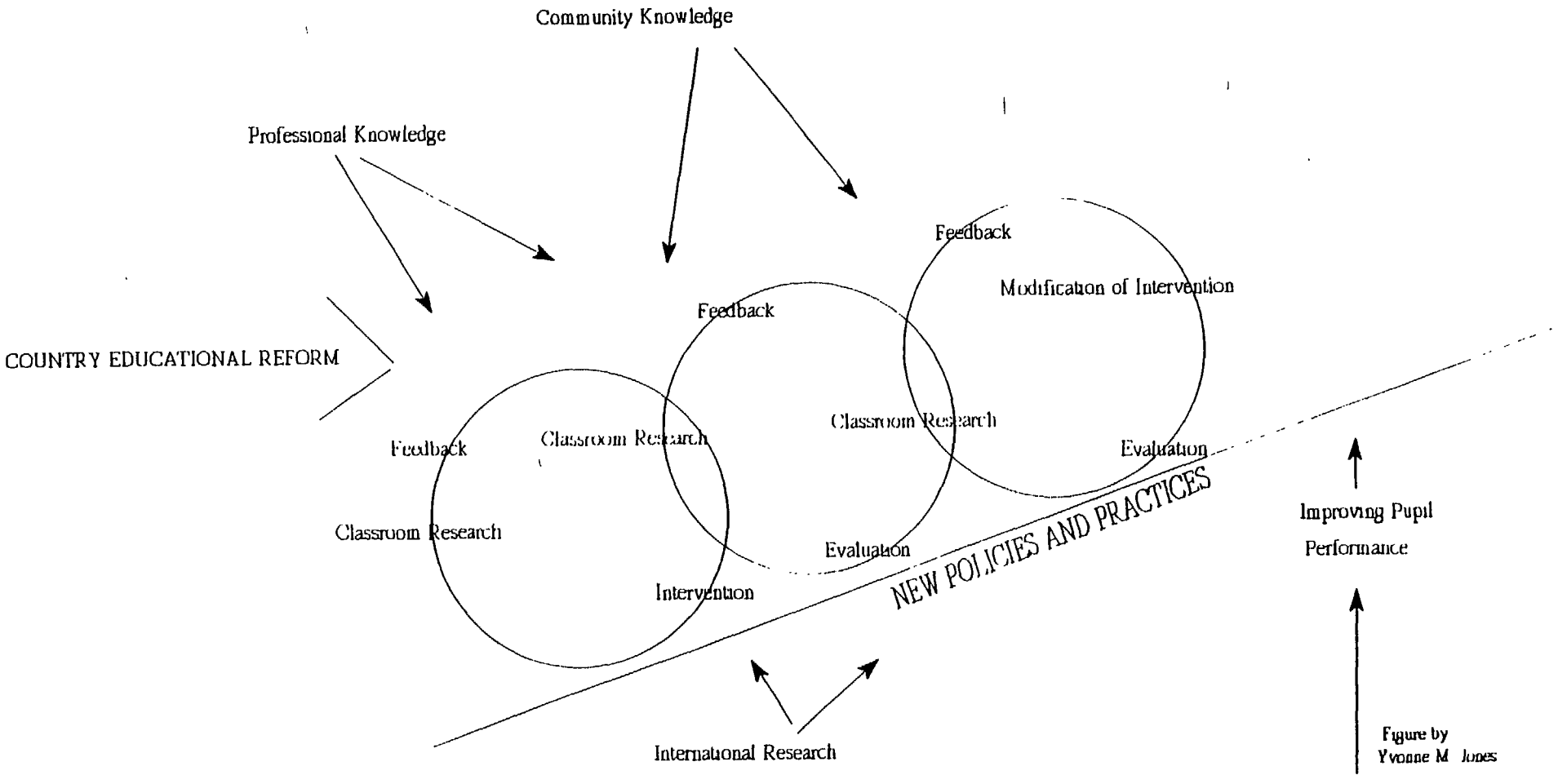
Sept./Nov.	94 - Literature review; review of IEQ documentation
December	94 - Draft full research design
Jan./Feb.	95 - Refinement of questionnaire/interview instrument
"	95 - Interview IEQ personnel
April	95 - Trip to field
June	95 - Questionnaire #1 : Data collection
Summer	95 - Data analysis and projection of new data to be collected
Fall	95 - Report on initial cycles (article possible)
Jan./Feb.	96 - Brief follow-up interviews
March	96 - Questionnaire #2 : Continued data collection
April/May	96 - Data analysis
June/Sept	96 - Preparation of monograph and articles based on initial and later cycles.

Expenses: Most of the expenses incurred in instrument preparation and data analysis will be covered through the previously proposed Pitt subcontract. IEQ communication channels will need to be used for contacting HCRTs. Estimated cost for one field trip to visit all three core countries (travel and per diem): $5,000.

30

FIGURE 1

INITIATING AND SUSTAINING IMPROVEMENT IN EDUCATIONAL QUALITY



Attachment 4*g*

Improving Educational Quality: A New Approach

PREDRAFT August 30

IMPROVING EDUCATIONAL QUALITY : A NEW APPROACH

Don Adams

with Mark Ginsburg, Yidan Wang and Judy Sylvester

[**DA's note:** At a meeting of IEQ management personnel in late Spring, a recommendation was made that a "publishable" paper be prepared describing IEQ within the context of relevant international research. The idea, as I recall, was to help stimulate continued debate and perhaps build consensus within the IEQ team, and, additionally, to let the larger world know about the distinctively meritorious features of IEQ. I waited for several weeks but detected no rush to computers by my IEQ colleagues to generate such a product. With reluctant enthusiasm and with the assistance of Yidan and Judy -- and a paragraph by paragraph thorough critique by Mark, who hasn't yet fully despaired of the limitations of my professional knowledge and the blandness of my ideology -- a PREDRAFT has emerged.

At this point in addressing the recommended task, several possible solutions immediately come to mind: (1) an academic solution -- we can disavow ever promoting the idea in the first place; (2) a free market solution -- we can commission several competitive papers addressing the topic and assume the good will drive out the bad; (3) a bureaucratic solution -- we can turn the task over to a committee; or (4) we can proceed with all deliberate speed in the general direction of this beginning, under the coordination of Pitt but with **extensive** collaborative (including field) assistance, subject it to review as revised and developed.

In reading the Predraft be aware that its incompleteness extends to all sections. The * (...) indicate endnotes or footnotes yet to be developed. And, I have aggressively plagiarized all available printed material prepared by persons associated with IEQ.]

Introduction

The 1980s and 1990s have seen increased international concern for educational quality. *(some indicators of such

BEST AVAILABLE COPY

304

concern). Dissatisfaction with costs of rapid expansion of educational systems, disillusion with the apparent growing lack of fit between schooling and the world of work, and a general concern over the low level of basic cognitive skills, even among those completing programs of basic education, have given impetus to the search for new, more effective models of education. The increased interest in educational quality, typically defined in terms of student achievement, has been further stimulated by ripples of optimism flowing from a body of empirical research which, in developing countries, suggests that certain manipulable school inputs can significantly affect student achievement, and which, in industrialized countries, seems to conclude that the characteristics of high quality schools are not only known, but to a degree, are common across a range of cultures. This renewed attention on quality to some extent has shifted the focus of educational debates and reforms from educational growth and efficiency to the discovery of those combinations of inputs, processes, and outputs which are assumed to define or cohere to improved patterns of education. The Jomtien World Conference on Education for All in 1990, and the subsequent national colloquia it fostered, helped to further focus rhetoric and stimulate debates on educational quality, its meaning, and its social and individual benefits.

There is, however, another international trend which, although not exclusively concerned with educational quality, is

influencing educational policies and strategies for improving educational quality. Partly in response to the perceived weaknesses of top-down policies and attempts at expert-driven, programmatic development of educational reform, there has been increased experimentation with various forms and meanings of educational decentralization and center-local partnerships. *(note other interpretations, e.g. saving money, subtle control). These experiments often have been accompanied, in descending order of frequency, by changing responsibilities with respect to the financing of basic education, new choices in curriculum and school community relationships, and, least frequently, personnel decisions. This downward shift in responsibilities has meant increased involvement of lower governmental echelons, school administrators and, at times, teachers and parents, as participants in educational decisions.

Related to these two trends is the emergence of two correlative ideas. The first idea links conceptually to the action research tradition. There is an increasingly accepted proposition that lasting improvements in educational quality, if defined in terms of pupil performance, must begin with an in-depth understanding of the current conditions at the classroom and school levels. National reforms emanating from the center can facilitate major adjustments in the design, scope and delivery of educational services, but rarely are sufficient to foster fundamental changes in teaching and learning. *(research

BEST AVAILABLE COPY

documentation). Action research, a concept and methodology which resists precise definition, usually refers to classroom research which involves teachers as researchers and serves, among other goals, the professionalization of teachers by helping them develop and validate their knowledge. *(elaboration and references). However, action research, in addition to commitment on the classroom and awareness of the limitations of externally driven reform, is directed toward improving educational quality through the iterative process of research and practice. Action research is expected to lead to action planning.

The second and related idea is signaled to some extent by the international trend away from an exclusive reliance on detailed educational plans and mandates from the center and is associated with a reconceptualization of the process of planning educational change. There is an emerging view of educators that rejects technicist approaches to change which emphasize the traditional linear planning sequence (i.e., goal setting--needs assessment--program specification--target identification--evaluation) and is redefining the process of initiating and sustaining educational change as an iterative, participatory process which involves, and preferably begins with, critique, evaluation, analysis and feedback at the school and local levels.

The Improving Educational Quality project (IEQ), initiated

in 1991, is a five year, USAID supported, project whose main objective is to identify practical ways to improve learning in classrooms and schools within the context of national educational reforms in selected developing countries. *(more detail-s, mgt.length..). Another objective of the project is the enhancement of country research capacity and application. In the three core countries of Ghana, Guatemala, and Mali, IEQ has formed partnerships with one or more host-country institutions to collaboratively design and implement classroom research at the primary school level and link findings to practice in the larger educational systems. Feedback to teachers, headteachers, and district level educators is integral to the research process; and, as appropriate, teachers from other regions and officials from the Ministry of Education become actively involved in reviewing and analyzing the process and results. *(Can a case be made that IEQ represents a cost-effective style of development cooperation?).

The conceptualization and the operationalization of IEQ is embedded in, and reflects, the trends and ideas of the 1980s and 1990s. IEQ is first and foremost concerned with research, analysis and intervention at the classroom and school levels. By having one of its focii on improving pupil cognitive performance, IEQ shares a central thrust of the international trends. In its commitment to a process of integrating new, research-based knowledge into the ongoing operation of all levels of the

countries' educational systems, IEQ reflects the emerging reconceptualization of the planning or guiding of educational change as a locally-initiated, flexible, participatory, action-oriented, process.

The remainder the paper is devoted to elaborating the relationships between IEQ and the international trends and ideas identified above. The first section briefly reviews the objectives and findings of recent international research on educational quality. The second section attempts to summarize the fundamental features of initiating and sustaining educational change. The third and main section of the paper concentrates on the goals, assumptions, main activities and potential contributions of IEQ as the project has evolved in the three core countries.

Patterns of Research on Educational Quality

Research on educational quality may be categorized roughly in two methodological and conceptually distinct groups. The first group of studies focuses on the effect of various environmental and school resource inputs on student achievement. The second group of studies, largely developed during the late 1970s and 1980s, focuses more on the internal social processes and educational practices of schools. Both categories of

research have been extensively and competently reviewed. The purpose here in discussing this research is only to sketch the broader research context in which IEQ has been developed.

Studies of the Effects of Schooling [Label???]

Basically these studies, often using a large sample size, attempt to examine the impact of a number of variables hypothesized to be significant determinants of student achievement. Selected in-school variables often include per-pupil expenditure, instructional facilities, class size, and teacher background. Common out-of-school variables are educational level of parents and family income. Typically, this model assumes a linear and additive relationship between a set of independent variables and a standardized measure of students' achievement outcomes. Usually multiple regression techniques are employed to determine the proportion of variance in achievement explained by student background and and school related resource inputs. This approach to the study of educational quality is built on the assumptions that: (1) many educational objectives are the same from one school to another and even from one country to another, and (2) much of the educational process linking inputs to student performance is universal rather than situation specific. *(Heyneman & White 1986; etc). Under these assumptions, results from empirical studies, replicated in multiple countries, warrant generalization and thereby have both theoretical and policy implications.

Many of these studies carried out in industrialized countries concluded that existing variation in in-school factors, as compared to student background characteristics, explained little of the variance in pupil achievement. These results led to a questioning of the wisdom of investment in education. In contrast, research in developing countries seemed to suggest that certain in-school factors could be important, a finding which led to encouragement by international and national agencies of particular educational policies emphasizing one or more school inputs. For the last several years one of the favorite inputs for external support has been textbooks, or more generally, instructional materials.

The conceptual and methodological criticisms of studies on effects of schools fills many volumes. *(major critiques). The major distinctions between these studies and IEQ research lie in the attention given by the latter to differences in school cultures and environments and to the complexities of the schooling process. For example, the focus on instructional materials in studies on the effects of schooling, in contrast to IEQ research, has been on production and distribution, e.g., making textbooks and teachers' manuals available at the school level, and has largely ignored school organization and the dynamics of instruction and learning through which such instructional materials are (or are not) used.

Effective Schools Studies

Perceived limitations of the model of research reviewed above and the widespread belief among educators that some schools are demonstrably more successful than others stimulated interest in a school focused approach to the study of pupil achievement and performance. Commonly known as effective schools research, **this approach** reflects an underlying assumption that the organization and culture of the school and the behavior of the teachers and administrators do affect student performance. Performance remains mostly defined as achievement on standardized tests although some attention is given to curriculum-based assessments. Studies of the relative effectiveness of schools, initiated in the U.S. and England(?) and subsequently introduced to (other countries in) Europe and to other regions of the world, led to the generation of many lists of characteristics of the effective school. Factors of effectiveness typically included: instructional leadership by the principal, an emphasis on basic skill areas(i.e., reading and mathematics), high expectations of teachers and students, duration of learning time, an orderly school environment, and frequent assessment of pupil progress. *(major references).

Effective schools research pushed analysis beyond the static characteristics of educational environment to examination of the more complex and interactive process of schooling. However, the emphasis of these studies tended to be on factors outside the

312

classroom, to managerial abilities rather than teacher behavior and motivation. Moreover, using school level indicators, or aggregating student data to the school level, critics have noted, can mask differential effects of factors on different groups of students. *(trend toward multi-level analysis).

The research on effective schools is rich with suggestions of the conditions and relationships associated with school effectiveness. The more sophisticated studies in this body of research also provide a number of cautions that educators and policy makers involved in reform would do well to bear in mind. However, the effective schools research, in spite of implications of some of the researchers to the contrary, is unlikely to provide prescriptions readily adaptable across societies, regions or school sites. Moreover, and more importantly, in the context of our comparisons with IEQ -- and in spite of much misunderstanding -- the effective schools research says little directly about the process of improving education, that is, implementing the policies and practices derived from such research activities.

Rethinking the Process of Initiating and Sustaining Educational Change

Paralleling, and reinforced by, the frequently unsuccessful attempts to translate studies of educational quality and

effectiveness into policies and programs has been an attempt to reconceptualize the process of initiating and sustaining educational change. Those who sought to build a new model tried to avoid what they saw as weaknesses of past approaches to planned educational innovations and reform which included:

(1) top-down or centrist-led reform by itself usually does not come to grips with basic issues of how learning takes place;

(2) reform exclusively defined at the national level may successfully demand compliance but often fails to acquire commitment from administrators and teachers, let alone students and parents; and

(3) under such reforms lower echelon administrators and teachers are asked to follow without question the educational and political agendas and interpretations of a few policy makers, fostering what has been called a "culture of dependence." *(Footnote, Senge).

The new approach to initiating and sustaining educational change is based on the following assumptions:

(1) lasting improvement in educational quality requires knowledge and insights of those professionals closest to the processes of teaching and learning, i.e., teachers, headteachers, local supervisors;

(2) local level personnel and institutions by themselves lack resources to effect continuing change;

(3) sustained improvement in educational quality requires

involvement of actors from different levels of the system; and,

(4) parental and community involvement are necessary in both the planning and implementation of successful educational change.

Traditional planning of educational change has tended to ignore uncertainties and complexities and to focus instead on simplifying and standardizing innovations for quick dissemination. The newer approach gives more recognition to the complexity of developing viable change and less attention to rigid plans or outcomes. Successful educational change is assumed to "begin with a few readiness principles" *(Fullan p.32) and require "pressure" (from below), "support" (from above) and "continuous negotiation between system levels)" *(Fullan p.38). Specific, centralized plans are devalued as initial guides because "plans follow culture" and "mission follows (rather than precedes) enactment of principles." *(Ibid)

Evolvement of the IEQ Project

The IEQ project seeks to contribute directly to improving educational quality in a sample of countries already engaged in educational reform. In accomplishing this objective the project also seeks to add to the international research-based knowledge on improving educational quality at the classroom and

school levels. The gerund [participle??] "improving" is significant. This objective has been interpreted to mean that research related to educational quality should become part of a dialogue between researchers, practitioners, and policy makers that eventuates in changes in policy and practice in selected schools; that is, IEQ has an obligation, at minimum, to demonstrate a process whereby classroom research becomes integral to the process of initiating and sustaining educational improvement.

????--FACT BOX ON EACH COUNTRY-- GIVING ORGANIZATION OF IEQ, QUALITY PROBLEMS, RESEARCH FOCUS, INTERVENTION, METHODS AND STRATEGIES FOR LINKING RESEARCH TO POLICY AND PRACTICE-----?????

During the first three years of the IEQ project, there have been many commonalities in its implementation across countries, yet the project also has proceeded somewhat differently in each of the core countries. In all participating countries classroom research is the heart of the IEQ project. *(Footnote Pat). In Ghana, Mali and Guatemala during the first phase the focus of the project research has been on classrooms, children, and teachers. Researchers have observed the language of instruction, availability of instructional materials, materials usage, forms of student engagement, and pupil-pupil interchanges. Researchers, teachers and headteachers have collaborated in planning, reviewing and interpreting research findings. *(how and

BEST AVAILABLE COPY

how much). Feedback of IEQ work has been regularly discussed among a range of education officials.

---A BOX FOR EACH CORE COUNTRY DESCRIBING

'TYPICAL' CLASSROOM ----?????

In order to integrate IEQ efforts with other innovations in educational quality which are part of national reform efforts supported by the Governments and international donors, the research focus was narrowed in Ghana and Mali to give a central focus to language learning, particularly to factors affecting oral and reading comprehension, in selected primary grades. In Guatemala, classroom research focused on language instruction, mathematics instruction, the socio-emotional development of pupils and in the identification of those classroom factors and conditions influencing language and mathematics achievement and growth in socio-emotional development. The project seeks, at minimum, to assess pupil performance at two points in time subsequent to interventions. Changes or improvements over time will consider the effects of interventions on lower ability pupils as well as on those of higher ability.

In Ghana and Mali collaboration in the choice of interventions extended not only to higher level administrators but also to teachers and local administrators and to

representatives of parents' groups. In Guatemala, by contrast, the intervention was, in effect, a given; that is, the national government asked IEQ to evaluate a particular innovation, i.e., the comparative impact on pupil performance of the NUEVA ESCUELA UNITARIA and the ESCUELA UNITARIA. For other differences between countries in the evolvement of IEQ in the field see Box X.

---------- [TABLE OR BOXES TO ILLUSTRATE DIFFERENCES- # of RESEARCH INSTITUTIONS, # OF MAKE-UP OF RESEARCH TEAMS, ROLE OF U.S. RESEARCH SUPPORT TEAMS ---------- ?????]

Table 1 summarizes the evolution of major activities of IEQ in each of the three core countries. Training and capacity building efforts, although crucially important, are too numerous to identify in a brief table. A list of such activities is found in endnote X. The brevity of this presentation, of course, can hardly begin to capture the professional and personal problems and successes which arose as the project evolved:

(1) the technical and cultural difficulties of communication;

(2) the complexity of decision processes in research design and instrumentation, research interpretation, and choice of intervention;

(3) the changes in personnel involved in the project in the U.S. and host countries;

BEST AVAILABLE COPY

Table 1

ILLUSTRATIVE SUMMARY OF IEQ PROJECT

Country	Country Reform	Classroom Research and Intervention	Integrating New Knowledge Into Educational System	Networking	Problems/Issues
Ghana	Primary Reform Education Program (PREP) Supported by Government of Ghana and USAID.	Phase I (- Dec '93) - Studies of availability, source and use of instructional materials in sample, primary schools. Phase II (In Progress) - Use and assessment of new methods and materials in teaching oral and written language. Phase III (Planned) - Expansion of cycle of research - intervention - practice	Phase I - Meetings of research team, head teachers, teachers and circuit supervisors. Communication schedule with national bodies and international donors. Country conference on primary education. Phase II - Continue liaisons with all levels of system and country conference on primary education. Phase III - Extension of cycle of education improvement by Ghanaian educators	Research coordinators participate in workshops in Swaziland. IEQ presentation at conference of Comparative and International Education Society (CIES), San Diego, March, 1993	Extent to which research team should be involved in design and implementation of strategies for improvement Technical difficulty of communication between U.S. team and HCRT Timing of the phasing-in of complete country ownership of project.
Guatemala	Basic Education Strengthening (BEST) Project. A classroom level initiative developed on a regional basis. Nueva Escuela Unitaria (Sub-project of BEST) funded by Government Guatemala and USAID	Phase I - ( ) - Study and Compare classroom in sample NEU and EU schools Phase II (In Progress) - Continue studying and evaluating effects of active learning model on language and math. Phase III (Planned) - Feedback, policy and practice recommendations to teachers, administrators, system officials.	Phase I - Seminars of NEU teachers, parents and students in each region. Phase II - HCRT meetings with EU developers. HCRT meetings with Minister of Education Phase III - National conferences, teacher workshops on NEU	Presentations at CIES Annual Conference. Regional Conference on NEU findings	In May 1993 political problems paralyzed the whole country, making data collection impossible
Mali	Basic Education Expansion Project (BEEP) Supported by Govern-ment of Mali and USAID	Phase I - Studies of teaching methods and pupil behavior in sample primary schools. Phase II - Analysis of findings from Phase I Development of quality improvement interventions. Phase III - Further develop and implement pedagogical and extra curricular strategies for improved learning of French languages.	Phase I - 1st National IEQ Seminar to discuss findings and a pilot intervention. Phase II - 2nd National IEQ Phase III	Presentations at CIES annual conference.	Selecting institutions to coordinate IEQ activities Coordination between the two chosen collaborating institutions Tenuous links between classroom observations and choice of inter-vention

(4) the sometimes ephemeral nature of consensus in decision making;

(5) the uncertainty of long term fiscal viability;

(6) the demands on the limited resources, time, energy and talent of the overworked researchers and other IEQ personnel in the field;

(7) the painfully slow development of a collaborative process involving, in varying degrees, the research team, the teachers, the local administration, and the MOE;

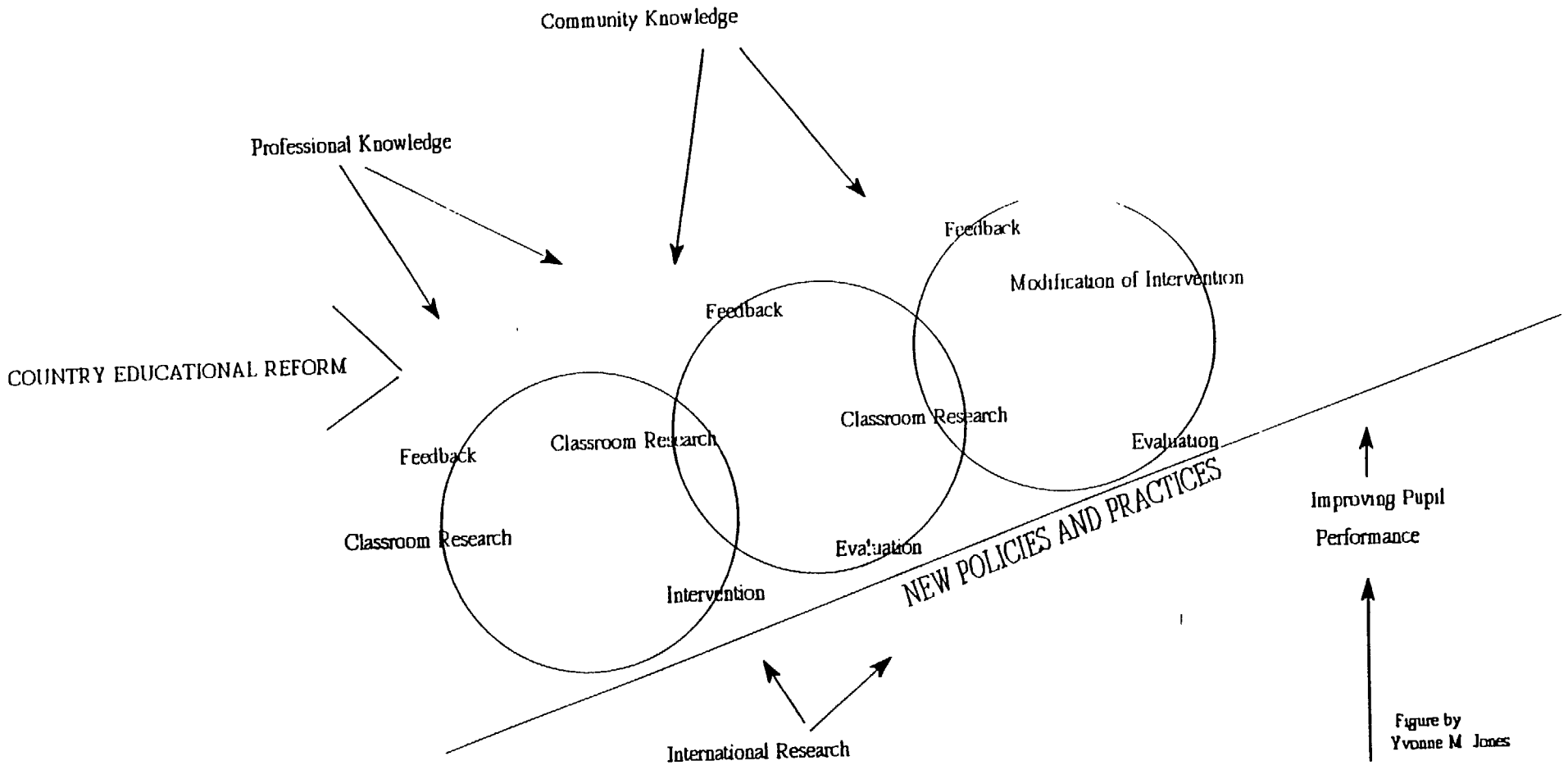
(8) the ambiguous process (in Ghana and Mali) of defining the intervention ; and

(9) the subtleness of achieving professional and political consensus and commitment in sustaining the "improving" cycle by convincing teachers and administrators, pressuring the key decision makers in the system, informing the MOE, recognizing stakeholders, making adaptations in the interventions, building new relationships within the educational system, and finding new fiscal and professional support.

Figure 1 serves to complement Table 1 by adding further conceptualization and description to the planning and development of the project. Figure 1 is supposed to represent a spiraling sequence of flexible, interactive planning and decision processes the nature of which can not be precisely determined in advance. A summary of the roles played and the information exchanged clarifies this sequential, but iterative, process of educational improvement. After the negotiation of the country contract, the

FIGURE 1

INITIATING AND SUSTAINING IMPROVEMENT IN EDUCATIONAL QUALITY



choice of country research teams, and definition of U. S. backstopping technical support, the research parameters were roughly defined. *(elaboration). The country research teams provide leadership in the design, initiation of classroom observation and research, and in the evaluation of the interventions. The teams participate in the identification and definition of interventions and throughout the research and intervention processes give ongoing face-to-face and written feedback to teachers. Additionally, the teams, through official channels, interact with educational officials from the local level to the Ministries of Education and with international and bilateral organizations. Teachers and headteachers participate in the design of the classroom intervention and have the basic responsibility for carrying out the interventions. Teachers and headteachers also have ongoing face-to-face interaction with supervisors exchanging information and sharing problems. *(Endnote: importance of face-to-face.... Parents have occasional [CHECK] face-to-face discussion with teachers and periodic face-to-face discussions with supervisors and with the research team and are involved in discussions about all major plans to improve educational quality, including the choice of intervention (TRUE????). Local or district supervisors participate in the definition and development of the intervention, provide resources for the needed local technical assistance and provide resources for staff development. The supervisors receive from the research team and schools

32

information on research and intervention results and work in progress, communicate to teachers though writing and through face- to-face meetings, and develop plans and schedules for capacity building seminars and workshops. Regional education officials review the progress of the research and intervention, participate in organizing staff development and acquiring needed resources, and in disseminating information on the results of interventions to higher echelons of officials. Regional and local officials have a further responsibility to coordinate research and intervention with national reform efforts. The national level officials from the Ministries of education and other related ministries receive from local and regional officials periodic reports and action plans, and provide resources and oversight on dissemination and implementation of innovations into the larger system. Ministerial officials communicate policies and advice to lower echelons, and provide periodic face-to-face communication with groups of teachers and researchers. [TRUE ???]

As IEQ evolves, external research and technical support is expected to remain significant to its continued success. However, project evolvement should also imply increasing self-reliance on local teachers, headteachers, and supervisors in conducting evaluations and making appropriate adaptations to ongoing interventions. The long-term goal is a blurring of distinction between instruction and assessment.

During the process of change (See Figure 1) new definitions and new indicators of quality are expected to emerge. For example, research and interventions will probably extend to curriculum areas other than language and mathematics. In addition to a concern concentrated on basic cognitive skills, more attention in the future will be given to higher order skills and advanced problem solving. As the external demands on schools change, new issues of equity and relevancy impact on the meaning of quality, requiring new policies and new classroom practices. Language fluency and simple mathematical skills will persist in utility. However, the curriculum may have to undergo radical adjustments in order to accommodate to new societal opportunities for females and to the demands of such post schooling options for both males and females as self employment.

A number of outputs or products have thus far resulted from the work of IEQ, and many more are expected over the life of the project. The classroom research in each country can, in a sense, stand alone and already is beginning to generate new important insights into the development and use of language materials in basic education and development of new instruments for the evaluation of such materials. The style of IEQ research results in large amounts of data on individual students, classrooms and schools thus presenting opportunities for a number of comparative studies. Cross-country research is planned in a number of areas including: instructional strategies, discourse analysis and health and nutrition.

Contributions to the international professional literature on implementing educational change are also expected to result from examining each subprocess of the project, including: the choices of research strategies, the planning and results of the interventions, the design and functioning of the feedback loops, and the interactions, compromises, and negotiation necessary to sustain the ongoing education-improving process, the applications of the collaborative model of project management, and the development of training and quality controls in doing research in multi-country, multi-site, multi-method programs such as IEQ.

Potentially, however, the most significant long-term contribution of the IEQ project to educational policy making and planning in developing countries can result from the leanings which obtain from documenting and analyzing the totality of the attempt to develop a research-based, ongoing, sustainable, education-improving process. Sustaining a process of improving the quality of education in classrooms and schools depends on the ability to develop ways of relating researchers and policy makers and practitioners at various levels. This process further depends on the continued ability of decision makers at all levels to understand and utilize accurate quantitative and qualitative information on evolving interventions, performance and contextual conditions.

Summary

Fiscal constraints, the failure of rapidly expanding

educational enrollments to achieve national economic aspirations, the crisis in many countries over unemployed school leavers, the stark reality that little meaningful learning takes place in many schools, may combine to make the 1990s a decade of focus on educational quality in developing countries. Concurrently, a more realistic approach to effecting educational change that relies less exclusively on massive, centrally-planned efforts and gives more attention to center-local partnerships involving researchers, policy makers and practitioners provides a new context for improvement in educational quality at the classroom and school levels.

The pioneering research on the effects of schooling distinguished the comparative strength of a broad range of factors on influencing student achievement. The effective schools research helped refocus attention on characteristics of schooling and the central roles of teachers and administrators. Both bodies of research attempted, without full success, to be prescriptive and offer meliorative policies and strategies. However, if evaluated for their potential for generating hypotheses or identifying innovations to be monitored and assessed, these studies were highly successful. Findings of such studies provided starting points for IEQ is choosing what to observe in classrooms, what data to seek at the school level and how to assess pupil performance. Additionally, research on educational quality provided the broader context within which IEQ country and cross country findings could be examined ,compared

and contrasted.

The IEQ project is an attempt to demonstrate, in three countries, a research-based, classroom-focused, participatory process of initiating and sustaining new instructional and learning approaches which result in improved pupil performance Now three years old, IEQ has begun to generate valuable insight and products on the characteristics of classrooms in Ghana, Guatamala, and Mali, on their potential for improvement, and on the organization, technology, resources, and capacity building necessary for sustaining an improving process. Two of the several challenges of the future are to continue and deepen in each country the whole cyclical and iterative process of research, intervention, and evaluation, without necessarily imposing a unified model of the process, and to begin to implement the decisions, as they evolve throughout the cycle, within the larger national educational systems. A second challenge is to document and study further cross-country comparisons and contrasts of project development and outcomes. Such cross-country analyses include not only classroom-based research but also studies of the collaboration of researchers, policy makers, and practitioners. Successfully meeting these two challenges extends the possibility that the work of IEQ will have widespread implications for educational policies and strategies in other developing countries and will contribute significantly to the international knowledge base on improving educational quality.

Endnotes and References:

Mark observes -- and I agree -- that there is too little self-criticism, e.g., To what extent and in which decision processes is there collaboration and ongoing dialogue? In some of the descriptions is hope sometimes substituted for "reality?"

Mark also notes that the reviews of literature and interpretations of trends are "mainstream" or conservative. More critical analyses could be offered, e.g., decentralization may mean increased central control as the national govt. co-opts the local bodies. And why did USAID create IEQ --to save money, or is it a change of ideology? I favor identifying to the extent possible ranges of interpretations but would like to avoid organizing content around a typology of ways of knowing ?????

* Lengthy endnotes and references are expected. These will elaborate and give qualifications to statements in the text; provide more detail on IEQ; add information on each IEQ core project; list training and other capacity-building efforts; reference IEQ documentation; identify the variety of meanings of educational quality; identify major sources of research on educational quality and research into practice; identify sources on planning change, etc; provide further explanation as necessary -etc...;

Attachment 4*h*

Selected Bibliography of Effective Schools and Educational Quality

5/16/94

A SELECTED BIBLIOGRAPHY ON EFFECTIVE SCHOOLS AND EDUCATIONAL QUALITY *

Acland, H. (1973). Social determinants of educational achievement: An evaluation and criticism of research. Ph.D. Thesis, University of Oxford.

Acton, T. A. (1980). Educational criteria of success: Some problems in the work of Rutter, Maughan, Mortimore, and Ouston. Educational Research, , 22, 163-169.

Adams, D. (1988). Extending the educational planning discourse: Conceptual and paradigmatic exploration. Comparative Education Review. 32 (4) Chicago, IL.: University of Chicago Press.

Adams, D. Cornbleth, C. and Plank, D. Between exhortation and reform: Recent U. S. experience with educational change. Interchange. 19 (3/4).

Adams, D. K. and Boediono, M. (1992). Developing effective educational systems. In D. K. Adams and M. Boediono (Eds.) Education, economics, and social development.

Adams, Marilyn Jager. (1990). Beginning to read: Thinking and learning about print. Champagne, Illinois: University of Illinois at Urbana.

Ahadzie, William. (1989, November). Institutional and policy assessment of primary education in Ghana. USAID.

Ahmed, A., with Cheng, Kai Ming, A. K. Jalalulddin, & K. Rama Chandran (1991). Basic education and national development - lesson from China and India. New York: United Nations Children Fund.

Ainsworth, M. E. and Batten, E. J. (1974). The effects of environmental factors on secondary educational attainment in Manchester: A Plowden follow-up. London: Macmillan.

Airasian, P.W. (1979). Concepts of school effectiveness as derived from research strategies: Differences in the findings.

---

* This bibliography primarily includes English sources. It was compiled by Yidan Wang and Emin Karip, University of Pittsburgh

Aitken, M., Bennett, S. N. and Hasketh, J. (1981). Teaching styles and pupil progress: A re-analysis. British Journal of Educational Psychology. 51, 170-186.

Aitkin, M. and Zuzovsky, R. (1992). New paradigm for the analysis of hierarchically structured data in school effectiveness studies. Paper presented at the American Research Association Annual Meeting, San Francisco.

Aitkin, Murray and Nicholas, Longford (1986). Statistical modeling issues in school effectiveness studies. The Journal of the Royal Statistical Society Series A (general), 149 (1) : 1-43.

Alexander, K. L., & Griffin, L. J. (1976). School district effects on academic achievement. American Sociological Review, 41(1), 144-152.

Alexander, L., and Simon, J. (1975). The determinants of school achievement in developing countries: The education production function. Washington, DC: World Bank.

Ali, A., and Akubue, A. (1988). Nigerian primary schools' compliance with Nigeria national policy on education: An evaluation of continuos assessment practices. Evaluation Review, 12(6) : 625-637.

Allen, R., Bettis, N., Kurfman, D., Maacdonald, Walter, Mullis, Ina V.S., & Salter, C. (1990, February). The geography learning of high school seniors. Prepared by the Educational Testing Service, for the National Assessment of Educational Progress (NAEP), The National Center for Education Statistics.

Allington, R. (in press). Reading instruction provided readers of differing abilities. Elementary School Journal.

Altbach, P. (1983). Key issues of textbook provision in the Third World. Prospects: Quarterly Review of Education, 13(3): 315-25.

Amarel, M. (1981, April). Literacy: The personal dimension. A paper presented at the annual meeting of the American Educational Research Association, Los Angeles.

American Association of University Women Educational Foundation & National Education Association. (1992). The AAUW report: How schools shortchange girls. Washington, DC: Author.

American Association of University Women. (1991, January). Shortchanging girls, shortchanging America. Washington, DC: Author.

American Institute for Research . (1985, December). SISCOM-Co-learning and computers (AIR-440100, for the Women's Educational Equity Act Program, U.S. Department of Education). Palo Alto: Author.

American Institute for Research (1986). Competing voices- the administrative challenge. Palo Alto: Author.

American Institute for Research (1986). Competing voices- the administrative interview. Palo Alto: Author.

American Institute for Research (1986). Competing voices- the administrative interview. Palo Alto: Author. [Video]

American Institute for Research (1986). The SISCOM solution [Video]. Palo Alto, California: Author.

American Institute for Research (1986, August) Future school administrations: Resume preparation. Palo Alto, California: Author, Center for Educational Equity.

American Institute for Research Activities to combat stereotyping in career choice.

Amos, N. G. and Moody, L. (1981). The relationship of school district size and cost factors to achievement of fourth and eighth grade students. Mississippi State University, Mississippi State, Bureau of Educational Research.

Anderson, C. S.. (1982). The search for school climate: A review of the research. Review of Educational Research, 52(3), : 368-420.

Anderson, L. (1981, April). Student responses to seat work: Implications for the study of students' cognitive processing. A paper presented at the annual meeting of the American Educational Research Association, Los Angeles.

Anderson, L., Evertson, C., and Brophy, J. (1979). An experimental study of effective teaching in first grade reading groups. Elementary School Journal, 79(4), 193-233.

Anderson, L., Jenkins, L. B., Leming, J., Macdonld, Walter B., Mullis, I. V. S., Turner, M. J., & Wooster, J. S. (1990, April). The civics report card- Trends in achievement from 1976 to 1988 at age 13 and 17; achievement in 1988 at Grade 4, 8, and 12. Prepared by the Education Testing Service,

for the National Assessment of Educational Progress (NAEP), The National Center for Educational Statistics.

Anderson, Levitt, K. (1981, April). Memory and talk in teachers' interpretations of student behavior. A paper presented at the annual meeting of the American Educational Research Association, Los Angeles.

Anderson, M. B. (1986, February). The gender manual serials: gender issues in basic education and vocational educational training. Washington, DC: U. S. Agency for International Development.

Andrews, J. H. M., Housego, I.E. and Thomas, D. C. (19). Effective in-service programs in developing countries: A study of expert opinion.

Andrews, R. L. and Soder, R. (1987). Principal leadership and student achievement. Educational Leadership. Vol. 4, No. 6, 9-11.

Andros, K., and Freeman, D. (1981, April). The effects of three kinds of feedback on math teaching performance. A paper presented at the annual meeting of the American Educational Research Association, Los Angeles.

Archer, M. Brock, C. and Tulasiewicz, W. (Eds.). (1981). Politics and educational change. London: Croom Helm.

Armitage, J., Batista, J., Harbison, R. W., Holsinger, D. B., & Helio, R. (1986). School quality and achievement in rural Brazil. Washington, DC: The World Bank, Education and Training Department.

Aronson, E., Blaney, N., Stephan, C., Sikes, J., and Snapp, M. (1978). The jigsaw classroom. Beverly Hills, Calif.: Sage Publications.

Arriagada, A. (1981). Determinants of sixth grade student achievement in Colombia. Unpublished document. Washington, DC: The World Bank, Education Department.

Arriagada, A. (1983). Determinants of sixth grade student achievement in Peru. Unpublished document. Washington, DC: The World Bank, Education Department.

Artley, A. (in press). Individual differences and reading instruction. Elementary School Journal.

Au, K. (1977). Cognitive training and reading achievement. Paper presented at the meeting of the Association for the Advancement of Behavioral Therapy. Atlanta, Georgia.

Au, Kathryn H., and Jordan, C. (1980). Teaching reading to Hawaiian children: Finding a culturally appropriate solution. In Henry T. Trueba, Grace P. Guthrie, and Kathryn H. Au. Rowley (Eds), Culture and the Bilingual Classroom. Mass.: Newbury House.

Austin, G. R. (1978). Process evaluation: A comprehensive study of outliers. Baltimore: Maryland Department of Education.

Austin, G. R. (1979). Exemplary schools and the search for effectiveness. Educational Leadership, 37(1): 10-14.

Avalos, B. (1986). Teacher effectiveness: An old theme with new questions. Paper presented at the International Movement Toward Educational Change (IMTEC) Seminar on the Quality of Teaching in the Lesser Developed Countries. Bali, Indonesia.

Avalos, B. (1991, September). Approaches to teacher education : initial teacher training. Quality in basic education background/policy paper. Volume 2. London: Commonwealth Secretariat.

Avalos, B., & Haddad, W. (1981). A review of teacher effectiveness research. Ottawa: International Development Research Center.

Averch, H. A., Carroll, S. J., Donaldson, T. S., Kiesling, H. J. and Pincus, J. (1972). How effective is schooling? A critical review and synthesis of research findings. Santa Monica, Calif.: Rand Corporation.

Bacchus, K; Aziz, A.A.; Ahmad, S.H.; Bakar, F. A.; & Rodwell, S. (1991, September). Curriculum reform. Quality in Basic Education Background/Policy Paper. Volume 1. London: Commonwealth Secretariat.

Baker, V. (1988). Blackboard in the jungle: Formal education in disadvantaged rural areas. A Sri Lanka Case. Delft, The Netherlands: Eburon.

Balderston, J., Wilson, A., Freire, M., & Simonen, M. (1981). Malnourished children of the rural poor. Boston: Auburn House.

Bamberger, R. (Ed.). (1991, August). Developing leaders for restructuring schools - New habits of mind and heart. Washington, D. C: Office of Educational Research and Improvement, National Leadership Network, Study Group on Restructuring Schools.

Bard, E. (1990, fall). Indicators of educational quality : Creating and accountability system for Arkansas' public schools. SEDL Focus Paper. Austin, TX: Southwest Educational Development Laboratory.

Barker, R. G. and Gump, P. V. (1964). Big school, small school. Stanford, California: Stanford University Press.

Barnes, J. H. and Lucas, H. (1974). Positive discrimination in education: Individuals, groups and institutions. In T. Leggatt (Ed.), Sociological theory and survey research. London: Sage.

Barr, R., & Dreeben, R. (1983). How schools work. Chicago: University of Chicago Press.

Bauchner, J. D. et al (1982). Modes of change. A study of dissemination effects supporting school improvement, people, policies and practices. Andover, Mass.: The Network.

Beaudry, J.; Sinatra, R.; Pizzo, J.; & Geisert, G. (1992, April). Multisite evaluation of a computer-assisted semantic mapping approach to improving narrative writing of at-risk student. Paper presented at the annual conference of the American Education Research Association, San Francisco.

Becker, W. C., and Englemann, S. (1978). Analysis of the achievement data on six cohorts of low-income children from the 20 school districts in the University of Oregon direct instruction follow through model [Technical Report T8-1]. Eugene, Ore.: University of Oregon, Follow through Program.

Becker, W., and Gersten, R. A (1982). Follow-up of follow through: The later effects of the direct instruction model on children in fifth and sixth grades. American Educational Research Journal, 19, 75-92.

Beckerman, T. M. and Good, T. L. (1981). The Classroom ratio of high and low-aptitude students and its effects on achievement. American Educational Research Journal, 18(3), : 317-327.

Beebout, H. (1972). The production surface for academic achievement: An economic study of the Malaysian secondary education. Unpublished doctoral dissertation, University of Wisconsin, Madison.

Behrman, J., & Birdsall, N. (1983). The quality of schooling: Quantity alone is misleading. American Economic Review, 73, 928-946.

Benavot, A. (1982, April). Secondary schooling and the impact of vocational education on economic development. Paper read at the annual meeting of the Midwest Sociological association, Des Moines, IA.

Benavot, Aaron and David Kamens (1989). The curricular content of primary education in developing countries. World Bank policy, planning, and research work paper WPS-237. Washington DC: World Bank, Education and Employment Division.

Bennett, N. (in press). Time and space: Curriculum allocation and pupil involvement in British open schools. Elementary School Journal.

Bennett, Neville, with Jordan, Joyce; Long, George; and Wade, Barbara. (1976). Teaching styles and pupil progress. Cambridge, Mass.: Harvard University Press.

Bennett, S. N. (1978). Recent research on teaching: A dream, a belief and a model. British Journal of Educational Psychology, 48, 127-147.

Bereiter, C., and Englemann, S. (1966). Teaching disadvantaged children in the preschool. Englewood Cliffs, N. J: Prentice-hall.

Berg, R. Van Den and Vandenberghe, R. (1987). Strategies for large-scale change in education: Dilemmas and solutions. Leuven, Amersfoort: ACCO.

Berla, N. (1991, September). Parent involvement at the middle school level. The ERIC Review 1.: 2-6.

Berlin, D. F. & White, A. L. (1991, September). A network for integrated science and mathematics teaching and leaning. Columbus, OH: the National Center for Science teaching and Learning.

Berliner, D. (1977). Impediments to measuring teacher effectiveness. In G. Borich and K. Fenton (Eds.), The appraisal of teaching: Concepts and process. Reading, Mass.: Addison-Wesle

Berliner, D. (1979). Tempus educare. In P. Peterson and H. Walberg (Eds.), Research on teaching: Concepts, findings, and implications. Berkeley, Calif.: McCutchan Publishing Corporation.

Berliner, David C. Knowledge is power. In David C. Berliner and Barak Rosenshine (Eds.), Talks to Teachers, New York: Random House.

Berman, P. & M.W. Mclaughlin (1977). Federal programs supporting educational change: Factors affecting implementation and continuation. Santa Monica, CA: Rand Corparation.

Berman, P. (1978). The study of macro- and micro-implementation. Public Policy. 26, 2 (Spring).

Berman, P. (1980). Thinking about programmed and adaptive implementation: Matching strategies to situations. In Helen, M. Ingram and Dean, E. Mann, (Eds.). Why policies succeed or fail. Beverly Hills, CA.: Sage.

Berman, P. (1981). Educational change: An implementation paradigm. In R. Lehming, and M. Kane (Eds.). Improving schools. Beverly Hills, CA.: Sage.

Berman, P., and McLaughlin, M. (1978). Implementation of educational innovation. Educational Forum, 40(3).

Bernstein, B. (1970). Education cannot compensate for society. New Society, 387, 344-347.

Bhumirat, C., Kidchanapanish, S., Arunrungrueng, P., and Shinatrakool, R. (with assistance of Sirigiral, V.) (1987). Research and evaluation on the quality of primary education in Thailand. Bangkok: Office of the National Education Commission.

Bianchi, P., Carnoy, M., and Castells, M. (1988). Economic reform and technology transfer in China. Stanford, Calif.: Stanford University, Center for Educational Research at Stanford (CERAS).

Bickel, W. E. (1983). Effective schools: knowledge, dissemination, inquiry. Educational Researcher. 12 (4), pp. 3-5.

Bickel, W. E. (1990). The Effective schools literature: Implications for research and practice. In Handbook of School Psychology. New York, Wiley & Sons.

Biddle, B. (1979). Role theory: Expectations, identities and behaviors. New York: Academic Press.

Bidwell, C. E. and Kasarda, J. D. (1980). Conceptualizing and measuring the effects of school and schooling. American Journal of Education, 88, 401-430.

Bidwell, C.E. and Kasarda, J. D. (1975). School district organization and student achievement. American Sociological Review, 40, 55-70.

Biniaminov, I. and Glasman, M.S. (1983). School determinants of student achievement in secondary education. American Educational Research Journal, 20(2) .

Biwy, J., & Peil, M. (1974). Secondary education in Ghana: Private enterprise and social selection. Sociology of Education, 47, 399-418.

Black, Sir D. (Chairman). (1980). Inequalities in health. London: Department of Health and Social Security.

Bloom, Benjamin, S. (1980). The new direction in educational research: alterable variables. In MESA Seminar, The State of Research on Selected Alterable Variables in Education. Chicago: Department of Education, University of Chicago.

Blumberg, A. and Greenfield, W. (1980). The effective principal: Perspectives on school leadership. Boston: Allyn and Bacon.

Boisseere, M., John B. Knight and Richard H. Sabot (1985). Earnings, schooling, ability and cognitive skills. American Economic Review, 75 (5): 1016-30.

Bonnett, K. R. (Ed.) (1981, December), Quality education: Achievement and equity-proceeding of the regional forum, San Francisco: Far West Laboratory for Educational Research and Development.

Borko, H., Cone, R., Russo, N., and Shavelson, R. (1979). Teachers' decision making. In P. Peterson and H. Walberg (Eds.), Research on teaching: Concepts, findings, and implications. Berkeley, Calif.: McCutchan Publishing Corporation.

Boskener, R. J. and Scheerens (1989). Criterion choice, effect size and stability: Three fundamental problems in school effectiveness research. In B. P. M. Creemers and Reynolds (Eds.) School effectiveness and school improvement. Netherlands: Lisse, Swets and Zeitinger.

Bossert, J.T., Dwyer, D. C., Rowan, B., and Lee, G. V. (1982). The instructional management role of the principal. Educational Administration Quarterly, 18(3): 34-64.

Bossert, S. (1979). Task and social relationships in classrooms: A study of classroom organization and its consequences. American Sociological

Association, Arnold and Caroline Rose Monograph Series. New York: Cambridge University Press.

Bossert, S. T. (1985). Effective elementary schools. In R. M. J. Kyle (Ed.), Research for excellence: An effective schools sourcebook. Washington, DC: National Institute of Education, The Institute.

Botswana Ministry of Finance and Development Planning (1984). Botswana education and human resources sector assessment. Washington, DC: USAID.

Bottani, N. & Tuijnman, A. The OECD project on education indicators: Procedures and some results. Paris: Organization for Economic Co-Operation and Development.

Bowles, S. (1971, March). Unequal education and the reproduction of the social division of labor. Review of Radical Political Economics, Reprinted in Karabel, J. and Halsey, A. H. (Eds.) (1977). Power and ideology in education. New York: Oxford University Press.

Bowles, S. S. (1970). Towards an educational production function. In Hansen, W. L.(Ed.), Education, Incomes, and Human Capital. New York: Columbia University Press.

Bowles, S. S. and Levin, H. M. (1968). The determinants of scholastic achievement: An appraisal of some recent evidence. Journal of Human Resources, 3(1): 393-400.

Boyle, P. (1988, November 16). Socio-economic and gender issues in policy based development assistance shifting cash transfer in Latin America. Paper presented at the LAC Bureau Regional Workshop on Gender Consideration in Development, Antigua, Guatemala.

Brandt, R. (1982). The new catechism for school effectiveness. Educational Leadership, 40(3): 3.

Brandt, R. (1990, March). On teaching reading: A conversation with Ethna Reid. Educational Leadership. pp. 78-81.

Braun, C. (1976). Teacher expectation: Socio-psychological dynamics. Review of Educational Research, 46, 185-213.

Bridge, R. G., Judd, C. M.. and Moock. P. R. (1979). The determinants of educational outcomes: The impacts of families, peers, teachers, and schools. Cambridge. MA: Ballinger Publishing Co..

BRIDGES (1988). Determinants of effective schools. Thailand Country Research Review. Education Development Discussion Paper No. 1 of BRIDGES (Basic Research and Implementation in developing Education Systems) a Project of Harvard Institute for International Development. Cambridge, MA: HIID.

Brimer, A., Madaus, G., Chapman, B., Kellaghan, T. and Wood, R. (1978). Source of differences in school achievement. Slough, Bueks.: NIER.

Brookover, W. B. and Lezottee. L. W. (1979). Changes in school characteristics coincident with changes in student achievement. East Lansing: Michigan State University, Institute for Research on Teaching (ED 181 005).

Brookover, W. B. and Schneider, J. M. (1975). Academic environments and elementary school achievement. Journal of Research and Development in Education, 9: 82-91.

Brookover, W., Beady, C., Flood, P., Schweitzer, J. and Wisenbaker, J. (1979). School social systems and student achievement: Schools can make a difference. New York: Praeger.

Brookover, W., Schweitzer. J., Schneider, J., Beady, C., Flood, P., and Wisenbaker, J. (1978). Elementary school social climate and school achievement. American Educational Research Journal, 15, 301-318.

Brophy, J. (1979a). Teacher behavior and its effects. Journal of Educational Psychology, 71, 733 - 750.

Brophy, J. (1981). On praising effectively. Elementary School Journal, 81, 269-278.

Brophy, J. (1982). Research on the self-fulfilling prophecy and teacher expectations. A paper presented at the annual meeting of the American Educational Research Association, New York City.

Brophy, J. and Evertson, C. M. (1976). Learning from teaching. Boston: Allyn & Baecon.

Brophy, J. and Putnam, J.(1979). Classroom management in the elementary grades. In D. Luke (Ed.), Classroom management. The 78th Yearbook of the National Society for the Study of Education, Part II. Chicago: University of Chicago Press.

Brophy, J. E. (1979b). Advances in teacher effectiveness research. Institute for Research on Teaching Occasional Paper No. 18. East Lansing, Mich.: Michigan State University.

Brophy, J., and Good, T. (1970). Teachers' communication of differential expectations for children's classroom performance: Some behavioral data. Journal of Educational Psychology, 61, 365-374.

Brophy, J., and Good, T. (1974). Teacher-student relationships: Causes and consequences. New York: Holt, Rinehart and Winston.

Brophy, J., Evertson, C., Anderson, L., Baum, M., and Crawford, J.(1981). Student characteristics and teaching. New York: Longman, Inc..

Brophy, Jere E., and Good, Thomas L. (1986). Teacher behavior and student achievement. In Merlin C. Wittrock (Ed.), Handbook of Research on Teaching, 3d ed., New York: Macmillan.

Brown, Byron W. and Danial H. Saks (1987). The microeconomics of the allocation of teachers' time and student learning. Economics of Education Review, 6 (4): 319-332.

Burkhead, J., Fox, T. G., and Holland, J. W. (1967). Input and output in large-city high schools. Syracuse, N. Y.: Syracuse University Press.

Burnauer, J. A. (1991). Variation in achievement among urban schools and implications for state education policy. Doctoral Dissertation, University of Pittsburgh.

Burton, Christine. (1992). Defining family-centered early education: Beliefs of public school, child care, and head start teachers. Early Education and Development(Vol. 13, No. 1).

Burton, Christine. (1992). Family as a focus for early education reform: The implications of public school teacher beliefs. Milwaukee. University of Wisconsin- Milwaukee.

Busick, Kathy. (1991, March). Improving student reading: San Vicente elementary school. Northwest Regional Educational Laboratory _ Portland, Oregon.

California State Department of Education (1985). Model curriculum standards -- grades nine through twelve. Sacramento: Author.

California State Department of Education.(1977). Program evaluator's guide - The evaluation improvement program. Princeton, New Jersey: Educational Testing Service.

Campbell, Donald T., and Stanley, Julian C. (1963). Experimental and quasi-experimental designs for research on teaching. In N. L. Gage (Ed.), Handbook of Research on Teaching. Chicago: Rand McNally.

Carew, J., and Lightfoot, S. (1979). Beyond Bias. Cambridge: Harvard University Press.

Carloni, A .S. (1987, April). Women in development: A. I. D's Experience, 1973-1985 - Synthesis paper. Volume 1. A. I. D. Program Evaluation Report No. 18. Washington DC: U. S. Agency for International Development.

Carnoy, M. (1971). Family background, school inputs, and students' performance in school: The case of Puerto Rico. Unpublished document, Stanford University, Palo Alto, CA.

Carnoy, M., & Thias, H. (1974). Second Tunisia education research project. Unpublished document. Washington, DC: The World Bank.

Carrasco, R. (1979, April). Expanded awareness of student performance: A case study in applied ethnographic monitoring in a bilingual classroom (Social Linguistic Working Paper No. 60), Austin, Tex.: Southwest Educational Development Laboratory.

Carroll, John B. (1989). The Carroll model: A 25-year retrospective and prospective view, Educational Researcher 18, no. 1: 22-31.

Carron, Gabriel and Chau, Ngoc Ta (1992). The quality of primary schools in different development contexts. International Institute for Educational Planning, UNESCO Paris.

Central Advisory Coucil for Education. (1967). Plowden Report. London, England.

Chase, C. (1990). Releasing the gifted potential of children "at-risk." In H. Levin (Ed.), Accelerating the education of at-risk students. New York: The Falmer Press.

Cheng, (1994). School effectiveness and school-based management: A mechanism for education quality and school development. A paper presented at the 7th International Congress for School effectiveness and improvement, Melbourne, Australia.

Chira, S. (1992, January 7). Schools vie in a marketplace: more choice can mean less. New York Times.

Clark, C., and Yinger, R. (1980, April). The hidden world of teaching: Implications of research on teacher planning. Paper presented at the annual meeting of the American Educational Research Association, Boston.

Clark, Christopher M., and Peterson, Penelope L. (1986). Teachers' thought processes. In Merlin C. Wittrock (Ed.), Handbook of research on teaching, 3d ed., New York: Macmillan.

Clark, Christopher M.; Gage, N. L.; Marx, Ronald; Peterson, Penelope L.; Stayrook, Nicholas; and Winne, Philip. (1979). A factorial experiment on teacher structuring, soliciting, and reacting, Journal of Educational Psychology ,71 : 534-552.

Clark, D. (1983). How secondary school graduates perform in the labor market: A study of Indonesia (Staff Working Paper No. 615). Washington, DC: The World Bank.

Clark, D. L. (1980). An analysis of research development, and evaluative reports: On exceptional urban elementary schools. Phi Delta Kappan.

Clark, D. L., Lotto, L. S.. and McCarthy, M. M.(1980). Factors associated with success in urban elementary schools. Phi Delta Kappan. 61, 467-70.

Clark, T. (1983, September). An equal education. Bill of Rights in Action. Volume 17, Number 3.

Clark, T. A. and McCarthy, D. P. (1983). School improvement in New York City: The evolution of a project. Educational Researcher, 12(4): 17-24.

Clegg, A. and Megson, B. (1968). Children in distress. Harmondsworth, Middx.: Penguin Books.

Cohen E. (1986). Designing group work. New York: Teacher's College Press.

Cohen, M. (1983). Instructional, management, and social conditions in effective schools. In Allan Odden and L. D. Webb (Eds.), School Finance and School Improvement: Linkages in the 1980's. Cambridge, MA: Ballinger.

Cohn, E. and Millrnan. S. D.(1975). Input-output analysis in public education. Cambridge, MA: Ballinger.

Cohn, E.(1968). Economies of scale in Iowa high school operations. The Journal of Hurnan Resources, 3(4), 422-434.

Cohn, E., & Rossmiller, R. (1987). Research on effective schools: Implications for less developed countries. Comparative Education Review, 31(2), pp. 377-399.

Cohn, M. (1981). Effective schools: What the research says. Today Education, pp. 46-48.

Coladarci, Theodore, and Gage, N. L. (1984). Effects of a minimal intervention on teacher behavior and student achievement, American Educational Research Journal . 21: 539-555.

Colbert, V. and Arboleda, J.(1989). Universialization of primary education in Colombia - The new school program. Paper presented at the World Conference on Education for All, Jomtien, Thailand.

Colbert, V., Chiappe, C., and Arboleda, J. (Revised, 1990). La Escuela Nueva: More and better primary education for children in rural areas. Paper prepared for the World Bank Conference on Effective Schools, 1989.

Cole, M., & Griffin, P. (1987). Improving science and mathematics education for minorities and women - contextual factors in education. Madison, Wisconsin: University of Wisconsin, Wisconsin Center for Education Research.

Coleman, J. S. (1991, June). Policy perspectives: Parental involvement in education. Washington DC: U. S. Department of Education , Office of Educational Research and Improvement.

Coleman, J. S., Hoffer, T. and Kilgore, S. (1982). Cognitive outcomes in public and private schools. Sociology of Education. Spring, 55, pp. 65-76.

Coleman, J., Campbell, E., Hobson, C., McPartland, J., Mood, A., Weinfield, F., and York, R. (1966). Equality of educational opportunity. Washington, D. C.: Superintendent of Documents, U. S. Government Printing Office.

Comer, J. J. (1980). School Power. New York: The free press. Edmonds, R. (1979). Effective Schools for the Urban poor. Educational Leadership, 37(1): 15-24.

Conable, B. B. (1991). Reflection on Africa - The priority of Sub-Suharan Africa in economic development. Washington DC: World Bank.

Confrey, J., and Lanier, P. (1980). Students' mathematics abilities: Improving the teaching of general mathematics. School Science and Mathematics, 80, 549-556.

Connecticut Department of Education (1984). Handbook for use of the Connecticut school effectiveness: interview and questionnaire. Hartford, CT.

Connelly, F., and Ben-Peretz, M. (1980). Teachers' roles in the using and doing of research in curriculum and development. Journal of Curriculum Studies, 12, 95-107.

Cook, Thomas D., and Campbell, Donald T.(1979). Quasi-experimentation: Design and analysis issues for field settings. Chicago: Rand McNally.

Cooley, W. W. & Lohnes, P. R.(1971). Multivariate data analysis, New York: John Wiley & Sons, Inc.

Cooley, W. W. and Bickel, W.(1986). Decision-oriented educational research. Boston: Kluwer-Nijhoff Publishing.

Cooley, W. W.(1979). Explanatory observational studies. Educational Researcher, 7(9), 9-15.

Cooley, W.W. & Lohnes, P. R.(1976). Evaluation Research in Education. NY: Irvington Publishers, Inc.

Cooley, William W., and Leinhardt, Gaea. (1976). The Application of a model for investigating classroom processes. Pittsburgh: Learning Research and Developmental Center, University of Pittsburgh.

Coombs P H (985). The World crisis in education: The view from the Eighties. Oxford, New York.

Coons, John and Steven Sugarman (1978). Education by choice. Berkley, CA: University of California Press.

Cooper, H., and Baron, R. (1977). Academic expectations and attributed responsibility as predictors of professional teachers' reinforcement behavior. Journal of Educational Psychology, 69(4), 409-418.

Cooper, H., and Good, T. (in progress). Pygmalion grows up: Studies in- the expectation communication process. New York: Longman.

Cope, J., Denning, C., and Ribeiro, L. (1989). Content analysis of reading and mathematics textbooks in fifteen developing countries. London: Book Development Council. Processed.

Copeland, W. (1979). Student teachers and cooperating teachers: An ecological relationship. Theory Into Practice, 3, 194-199.

Copperman, P. (1978). The literacy hoax: The decline of reading, writing and learning in the public schools and what we can do about it. New York: Wm Morrow.

Copple, C. E., & Rota, M. L. (1991, November). Education and employment research and policy studies - Annotated bibliography, 1987-91 (Document No. PHREE/91/41). Washington, DC: World Bank, Population and Human Resources Department.

Corcoran, T. B. (1985). Effective Secondary Schools. In R. M. J. Kyle, (Ed.) Reaching for excellence: An effective schools source book. National Institute of Education, Washington, DC: The Institute.

Corno, Lynn. (1979). A Hierarchical analysis of selected naturally occurring aptitude treatment interactions in the Third Grade. American Educational Research Journal 16: 391~09.

Corrigan, D. C. and Haberman, M. (19). The Context of teacher education. Handbook of Research in Teacher Education. pp. 195-213.

Costa, A. L. (Ed.). (1985). Developing minds- A research book for teaching thinking. Alexandria, Virginia: Association for Supervision and Curriculum Development.

Costa, M. (1977). School outputs and the determinants of scholastic achievement: An econometric study of urban schools in Sao Paulo. Stanford, CA: Stanford University.

Cotton, K. (1991, March). Educating urban minority youth: research on effective practices. Northwest Regional Educational Laboratory - Portland, Oregon.

Cradler, J. & Mead-Mezzetta. (1987, January). Development of TIC Project for History -social science. Social Education. pp. 46-47.

Cradler, J. & Montgomery, G. Monterey model technology school project - effective site and teacher -based planning. CTP. pp. 22-23.

Cradler, J. (1985). CompuTHINK and Criteria for Selecting software. In Arthur L. Costa (Ed.). Developing minds: A resource book for teaching thinking. pp. 256-265. Alexandria, VA: ASCD Publications.

Cradler, J. (1989, October). Funding for education technology. Thrust. pp. 17-21.

Cradler, J. (1991, Spring). Education technology summit. California Technology Project Quarterly 2: 46-47.

Cradler, J. Increased accountability for educational technology - Evaluating the impact of school based educational technology grants. CTP. pp. 6-7.

Cradler, J. Local assistance program. California Technology Project Quarterly. Volume 2, No. 1, pp. 12-13.

Cradler, J. Policy recommendations for program improvement with education technology in California Schools. Redwood City, CA: Policy Analysis for California Education (PACE).

Crandall, D. P. and Associates (1982). People, policies and practices: Examining the change of school improvement. Volumes I to X. Andover, Mass.: The Network.

Crandall, D. P. and Loucks, S. F. (1982). Preparing facilitators for implementation : Mirroring the school improvement process. Paper presented at the AERA meeting, New York. Andover, Mass.: The Network.

Crandall, D. P., Bauchner, J. E. Loucks, S. F. and Schmidt, W. H. (1982). Models of the school improvement process: Factors contributing to success. A study of Dissemination effort supporting school improvement. Andover, Mass.: The network.

Crawford, John; Gage, N. L.; Corno, Lyn; Stayrook, Nicholas; and Mitman, Alexis. (1978). An experiment on teacher effectiveness and parent assisted instruction in the Third Grade, vols. 1-3. Stanford, Calif.: Program on Teaching Effectiveness, Center for Educational Research, Stanford University. ERIC ED 160 648.

Creemers, Bert, Ton Peters and David Reynolds, (Eds.) (1990). School effectiveness and school improvement. Amsterdam: Swets and Zeit.

Crites, A., Stritzel, K., & Wortman, R. (1981, September). Equity based activities for early childhood education (AIR-87401-9/81-TR3, for the U.

S. Department of Education, Contract No. 300-80-0689). Palo Alto, California: American Institute for Research, FOCUS Project.

Crites, A., Stritzel, K., & Wortman, R. (1982, November). First focus: Equity (AIR-87403-11/82, for the U. S. Department of Education, Contract No. 300-800-0689). Palo Alto, California: American Institute for Research, FOCUS.

Crocker, Robert K., and Brooker, Gwen M. (1986). Classroom control and student outcomes in Grades 2 and 5, American Education Research Journal 23: 1-1 1 .

Cronbach, L. J. (1976). Research on classroom and schools: Formulations of questions design and analysis. Occasional paper. Stanford, CA: Stanford Evaluation Consortium.

Crosson, V., and Olson, David R. (1969). Encoding ability in teacher-student communication games. Paper presented at the Annual Meeting of the American Educational Research Association, Los Angeles.

Cuban, L.(1983). Effective schools: A friendly but cautionary note. Phi Delta Kappan, 64(10), 695-696.

Cuban, L.(1984). Transforming the frog to a prince: Effective schools research, policy and practice at the district level. Harvard Educational Review, 54, 129-151.

Cuban, L.(1985, September). Conflict and leadership in the superintendency. Phi Delta Kappan 67: 28-30.

Cuban, Larry. (1984). How teachers taught: Constancy and change in American classrooms 1890-1980. New York: Longman.

Culver, C. M. and Hoban, G. J. (Eds.).(1973). The power to change: Issues for the innovative educator. New York: MeGraw-Hill.

Cummings, W., Gunawardens, G. B. and Williams, J. H. (1992). The implementation of reforms: The case of Sri Lanka. Cambridge, MA.: Project BRIDGES, Harvard Institute for International Development.

Cummings, Williams (1986). Low-cost primary education: Implementation an innovation in six nations. Ottawa, Canada: International Development Research Center.

Cunningham, L. L. (1985, September). Leaders and Leadership: 1985 and beyond. Phi Delta Kappan 67: 17-20.

Cuttance, Peter (1985). Frameworks for research on the effectiveness of schooling. in David Reynolds (Ed.), Studying school effectiveness. Philadelphia: The Falmer Press.

D'Amico, J.(1982). Using effective schools studies to create effective schools: No recipes yet. Educational Leadership, 40(3), 60-62.

Dahl, Rene Fukuhara (1989). Organizational factors affecting the continuation of an instructional innovation for heterogeneous populations. Paper presented at the Annual Meeting of the AERA, San Francisco, CA, March 27-31.

Dale, R. R. (1874). Mixed or single-sex school~ Vol. 111: Attainment, attitudes and overview. New York: Humanities Press; London: Routledge and Kegan Paul.

Daly, P. (ND). How large are secondary school effects in Ireland? School effectiveness and school improvement. The International Journal of School Effectiveness and School Improvement, 2, pp. 262-285. Swets and Zeitlinger, Lisse: The Netherlands.

Darlington, R. B., Royce, J. M., Snipper, A. S., Murray, H. W. and Lazar, I. (1980). Preschool program and later school competence of children from low income families. Science. 208, 202 - 204.

Davie, R., Butler, N. and Goldstein, H. (1972). From birth to seven: A report of the National Child Development Study. London: Longman.

De Groot, A. D. (1951). War and the intelligence of youth. Journal of Abnormal Social Psychology, 46, 596 - 597.

Deal, T. E. and Nolan, R. R.(1978). Alternative schools: Ideologies, realities, guidelines. Chicago: Nelson-Hall.

Deaux, K. (1984, February). From individual differences to social categories - Analysis of a decade's research on gender. American Psychologist 39: 105-116.

Denby, S., & Ross, M. (1983, June). The effective principal: Achieving equity and excellence in schools. Washington DC. The American University , Mid-Atlantic Center for Race Equity for the U. S. Department of Education.

Denham, C., and Lieberman, A. (Eds.). (1980). Time to learn. Washington, D. C.: U. S. Department of Education.

RAPPORT TECHNIQUE SUR LA QUESTION DE LANGUE ET LE PAQE

I OBJECTIF ET RATIONNEL

Un des objectifs principaux du Projet pour l'Ameliorisation de la Qualite d'Education (PAQE) est d'initier une serie d'interventions pedagogiques destinee a ameliorer l'apprentissage du francais dans les deux premieres annees d'ecole. Le rationnel pour cet objectif vient de trois sources. Premierement, les resultats de l'evaluation des rendements scolaires (IPN, 1992, 1993) par des eleves dans la 2ieme annee indiquent que la performance en francais de ces eleves est basse. Plus precisement, parmi les cinq categories des competences linguistiques testes (identification visuelle des lettres, des syllabes, et des mots; correspondance visuo-auditive; comprehension des textes ecrits et oraux; dictee; traduction de la langue nationale en francais) nul eleve n'a pu atteindre la critere etablie de 75%.

Deuxiemement, et directement lie a la premiere observation, le francais est a la fois un moyen et une matiere d'enseignement dans la plupart des ecoles publiques au Mali. C'est-a-dire, tout apprentissage chez l'eleve dans ces deux premieres annees depend dans une grande mesure de sa capacite d'operer dans le context scolaire en une langue qui n'est pas encore la sienne proprement dite. Donc, le prealable pour un fort rendement academique est une maitrise de la langue d'ecole - une langue etrangere pour la vaste majorite d'eleves dans les premieres annees d'ecole.

Troisiement, la premiere phase de l'etude PAQE etait consacree a identifier plusieurs facteurs des rendements scolaires parmi lequels l'utilisation de la langue nationale jouait un role important. Dans cette etude, l'equipe PAQE a trouve que dans certain cas il y avait un emploi abusif de la langue nationale, dans d'autres cas une interdiction totale de l'utiliser. Dans le premier cas, on aboutit a une pauvrete de l'input linguistique; dans le second cas l'eleve ne comprenait pas du tout la langue d'enseignement.

II PAQE PAR RAPPORT AU BILINGUISME FONCTIONEL

Quoique PAQE cherche a investiguer et ameliorer les conditions d'apprentissage du francais, le projet n'ignore pas l'importance des innovations pedagogiques destinees a l'alphabetisation en des langues nationales (par exemple, la Methodologie Convergente). En fait, PAQE reconnait l'importance de valoriser pleinement la langue nationale comme instrument du developpement cognitif et socioculturel de l'enfant. En outre, un principe sur lequel le travail de PAQE reste est de construire un apprentissage base sur l'enfant tel qu'il est. Donc, il va de soi qu'une consideration des pre-acquis linguistiques de l'enfant est primordiale.

III LE ROLE DE LA LANGUE NATIONALE DANS PAQE

Pour des raisons et des conclusions citees citees ci-dessus, PAQE vise a introduire et a developper par ses sessions de formations, un emploi strategique de la langue nationale en tant que facilitateur de l'acquisition du francais. Au lieu d'accepter l'avis que l'emploi de la langue nationale est un obstacle a l'apprentissage d'une langue seconde ou un simple defaut pedagogique des enseignants, PAQE veut rechercher systematiquement les effets d'utiliser d'une facon reflechie et appropriee la langue nationale dans les cours de francais.

Cette utilisation s'effectue dans trois situations precises:

1) Pour debloquer le sens de la langue ou faciliter l'introduction des concepts trop compliques a communiquer au debutant en francais.

2) Pour preparer les eleves a mieux comprendre les textes qu'ils ecouteront ou liront.

3) Pour verifier la comprehension des textes ecoutes ou lus.

IV UNE PEDAGOGIE ACTIVE POUR UN APPRENTISSAGE DES LANGUES NATIONALES ET ETRANGERES

Les interventions proposees par PAQE s'appliquent globalement a l'apprentissage des langues soit une languge maternelle, soit une langue etrangere. Ces interventions comprennent l'utilisation d'une pedagogie des grands groupes, l'utilisation optimale du materiel didactique, et l'introduction des contes et des legendes comme textes de base pour des lecons langagieres. Ces pratiques pedagogiques existent deja dans la Methodologie Convergente et d'autres approches communicatives destinees a developper une competence fonctionelle chez l'eleve en une langue nationale ou etrangere. De cette facon, il existe une coherence d'approche entre PAQE et d'autres initiatives qui cherchent a introduire une pedagogie active de langue nationale et etrangere. Cette similitude se revele dans le but commun de creer dans les classes un contexte de communication authentique dans lequel l'eleve peut construire et negocier avec l'enseignant et d'autres eleves le sens des textes oraux et ecrits.

Malgre le fait que le bilinguisme ne se trouve pas directement parmi nos objectifs, "etre bilingue" signifie une connaissance de deux langues dont le francais fait partie. Pour cette raison, PAQE contribuera carrement aux efforts pedagogiques qui, tout en valorisant la langue nationale, visent aussi a developper et a maintenir la capacite d'eleve en francais en tant que matiere et moyen d'enseignement. Si le biliguisme fonctionnel devient une realite pour tous les enfants, PAQE jouera un role important et complementaire dans cette nouvelle pedagogie et ses nouveaux buts educatifs.

Attachment 4*i*

Rapport Technique sur la Question de Langue et le PAQE

Department of Health and Social Security. (1974). The family in society: Preparation for parenthood. London: Her Majesty's Stationery Office.

Development Associates. (1990, December). Collaboration in teaching and learning - Findings from the innovative approaches research project. Arlington, VA: Author.

DeVries, D., and Slavin, R. (1978). Teams-games-tournaments (TGT): Review of ten classroom experiments. Journal of Research and Development in Education, 12, 28-38.

Dorman , A. & Fulford, N. (Eds.). (1990). Teacher incentives from the inside : Five studies by teacher researchers. Oak Brook, Illinois: The North Central Regional Educational Laboratory.

Dove, L. (1986). Teachers and teacher education in developing countries. London: Croom Helm.

Doyle, W. (1977). Learning the classroom environment: An ecological analysis. Journal of Teacher Education, 28, 51-55.

Doyle, W. (1979). Classroom tasks and students' abilities. In P. Peterson and H. Walberg (eds.), Research on teaching: Concepts, findings, and implications. Berkeley, Calif.: McCutchan Publishing Corporation.

Doyle, W. (1980).Student mediating responses in teaching effectiveness (NIE-G-76-0099 Final Report). Denton: North Texas State University.

Doyle, Walter (1985). Effective secondary classroom practices. In R. Kyle (Ed.) Reaching for excellence: An effective schools sourcebook(p. 100). Washington, DC: National Institute of Education, The Institute.

Dreeben, R. and Barr, R. (1988). Classroom composition and the design of instruction. Sociology of Education. 61, 129-142.

Dubois P.A. & Schubert, Jane G. (1986, March). Do your school policies provide equal access to computer? Are you sure? Education Leadership. pp. 41-44.

Dubois, R. W., and Brook, R. H. (1988). Assessing clinical decision making: Is the ideal system feasible? Inquiry 28 : 59-84.

Duffy, G. G. (1992, April). The new school reform: Implications for literacy instruction. Draft paper presented at the annual conference of the American Education Research Association, San Francisco.

Duignan, P.(1986). Research on effective schooling: some implications for school improvement. The Journal of Educational Administration, 26(1), 59-73.

Duke, D. L. (1978). The retransformation of the school: The emergence of contemporary alternative schools in the United States. Chicago: Nelson-Hall.

Dunkin, M. J. (in press). Comparative and International Studies in Teaching and Teacher Education. In N. Postlethwaite and T. Husen (Eds.) The international encyclopedia of education. Oxford, U. K.: Pergamon Press.

Durojaiye, M. (1974). The role of non-cognitive factors in school learning of Uganda secondary school pupils. West African Journal of Educational and vocational Measurement, 2(1), 35-39.

Dusek, J. (1975). Do teachers bias children's learning? Review of Educational Research, 45, 661-684.

Dwyer, D. C., Lee, G. V., Rowan, B., and Bossert, S. T.(1982). The principals' role in instructional management Five participant observation studies of principals in action. San Francisco: Far West Laboratory.

Dyer, H. S.(1968). School factors and equal educational opportunity. Harvard Educational Review, 38(1), 39-56.

Dyson, Anne H. (1989). Multiple worlds of child writers. New York: Teachers College Press.

Ebmeier, H. and Good, T.(1979). The effects of instructing teachers about good teaching on the mathematics achievement of fourth-grade students. American Educational Research Journal, 16, 1-16.

Ebmeier, H., Good, T., and Grouws, D. (1980, April). Comparison of ATI findings across two large-scale experimental studies in elementary education. A paper presented at the American Educational Research Association Annual Conference, Boston.

Eder, D. (1981). Ability grouping as a self-fulfilling prophecy: A micro-analysis of teacher-student interaction. Sociology of Education, S4, 151-173.

Edmonds, R. (1979). Effective schools for the urban poor. Educational Leadership 37, 15-18.

Edmonds, R. R. & Frederikson, J. R.(1979). Search for effective schools: The identification and analysis of city schools that are instructionally effective for poor children.

Edmonds, R. R.(1979, a). Some Schools Work and More Can. Social Policy. 9(5), 28-32.

Edmonds, R. R.(1979, b). Effective schools for the urban poor. Educational Leadership, 37, 15-27.

Edmonds, R. R.(1982). Programs of school improvement: An overview. Educational Leadership, 40(2), 4-11.

Education Department Center, Inc., (1981, October). American schools: Today and tomorrow - A summary of eighteen key research projects. Newton, MA: Author.

Educational Research Service. (1978). Class size: A summary of research. Arlington, Va.: Educational Research Service.

Educational Research Service. (1980). Class size research: A critique of recent meta-analyses. Arlington, VA.: Educational Research Service.

Eigerman, H. (1980). School education and social equality. Review of Education, 6, 187-201.

Eisemon, T. O. & Schwille, J. (1988). Examinations policies to strengthen primary schooling in African countries. Paper presented for World Bank Seminar on Using Examinations and Standardized Testing to Improve Educational Quality, Lusaka, Zambia.

Eisemon, T. O. & Schwille, J. (forthcoming). Should schools prepare students for secondary education or for self-employment? Addressing a dilemma of primary schooling in Burundi and Kenya. Elementary School Journal.

Eisemon, T. O. & Schwille, J. , and Prouty, R. (forthcoming). What language should be used for teaching? Language policy and school reform in Burundi. Journal of Multilingual and Multicultural Development.

Eisemon, T. O. & Schwille, J. , and Prouty, R., Ukobizoba, F., Kana, D., and Manirabona, G. (1990). Empirical results and conventional wisdom: Primary school effectiveness in Burundi. Project BRIDGES, Michigan State University, East Lansing, Michigan. Processed.

Eisemon, T. O. (1989). Becoming a modern farmer: The impact of primary schooling in Kenya and Burundi In D. M. Warren, L. J. Slikkerveer, and S. O. Titilola (Eds.), Indigenous knowledge system: Implications for

agriculture and international development. Ames, Iowa: Iowa State University.

Eisner, Elliot W. (1984). Can educational research reform educational practice? Phi Delta Kappan 66 : 447-452.

Ekholm, M. and Trier, U. (1987). The concept of institutionalization. Some remarks. In Miles, M. B. Ekholm, M. and Vandenberghe, R. (Eds.). Lasting school improvement. Exploring the process of institutionalization. OECD Publication. Leuven: ACCO, 7-20.

Ellis, Nancy E. and Lotan, Rachel A. (1991). Looking in mirror: Teachers doing, seeing, knowing. Paper presented at the Annual Meeting of the American Educational Research Association. Chicago, IL, April 3-7.

Elmore, R. F. (1978). Organizational models of social program implementation. Public Policy, 26(2).

Epstein, J. (1986). Parent involvement: What research says to administrators. Education and Urban Society. 193 (2): 119-136.

Epstein, J. L. (1988). Homework practices, achievement and behavior of elementary school students. Washington D. C.: Office of Educational Research and Improvement (ERIC Documentation Reproduction Services No. ED 301 322)

Epstein, J. L. and Scott-Jones, D. (1990). School-family-community connections for accelerating student progress in the elementary and middle grades. In H. M. Levin (Ed.). Accelerating the education of at-risk students. New York: Falmer Press, Forthcoming.

Erickson, F. (1977). What makes school ethnography "ethnographic"? Council on Anthropology and Educational Quarterly, 8(2).

Erickson, Frederick. (1986). Qualitative methods in research on teaching." In Handbook of Research on Teaching, 3rd ed., edited by Merlin C. Wittrock. New York: Macmillan.

Erlwanger, S. (1975). Case studies of children's conceptions of mathematics—Part I. Journal of Children's Mathematical Behavior, 1, 157-283.

Eubanks, E. E. and Levine, D. U. (1983). A first look at effective schools projects in New York City and Milwaukee. Phi Delta Kappan, 64, (10), 697-702.

Evertson, C. (in press). Differences in instructional activities in average- and low-achieving junior high English and math classes. Elementary School Journal.

Evertson, C., Anderson, C., Anderson, L., and Brophy, J. (1980). Relationships between classroom behaviors and student outcomes in junior high mathematics and English classes. American Educational Research Journal, 17, 43 -60.

Farrell, J. P. (1982). Educational expansion and the drive for social equality. In Altbach, P G, Arnove, R. F., Kelly, G. P. (Eds.), Comparative Education. Macmillan, New York.

Farrell, J. P., Heyneman, S. P. (Eds.). (forthcoming). Economic and

Farrell, J., & Schiefelbein, E. (1974). Expanding the scope of educational planning: The experience of Chile. Interchange, 5, 18-30.

Felton Mark K. (1990). The effective schools movement: A review of its research and implementation. Unpublished Senior Thesis, Honors Program in Education: Stanford University.

Fenstermacher, G. (1980, a). Learning from teaching from teachers. Journal of Teacher Education, 31(5), 63.

Fenstermacher, G. (1980, b). On learning to teach effectively from research on teacher effectiveness. In D. DeVries and A. Lieberman (Eds.), Time to learn. Washington, D. C.: U. S. Department of Education.

Fenstermacher, Gary D. (1979). A philosophical reconsideration of recent research on teacher effectiveness. In Lee Shulman (Ed.). Review of Research in Education, vol. 6, Itasca, Ill.: Peacock.

Finlayson, D. F. and Loughran, J . L. (1976). Pupils' perceptions in high and low delinquency schools. Educational Research, 18, 138-145.

Finn, C. (1983, June). Toward strategic independence: Policy considerations for enhancing school effectiveness (Final report). Washington, D. C.: NIE.

Fisher, C., Filby, N., Marliave, R., Cahen, L., Dishaw, M., Moore, J., and Berliner, D. (1978).Teaching behaviors, academic learning time and student achievement (Final Report of Phase III-B, Beginning Teacher Evaluation Study). San Francisco: Far West Laboratory.

Fisher, Charles W., and Berliner, David C., (Eds.). (1985). Perspectives on instructional time. White Plains, N. Y.: Longman

Fitzpatrick, Kathleen A. (1981). A Study of the effect of a secondary classroom management training program on teacher and student behavior. Doctoral dissertation, University of Illinois.

Flaxman, E. & Inger, M. (1991, September). Parents and schooling in the 1990's. The ERIC Review 1: 2-6.

Floden, Robert E. (1985). The role of rhetoric in changing teachers' beliefs, Teaching and Teacher Education I : 19-32.

Florio, S. (1979). The problem of dead letters: Social perspectives on the teaching of writing, Elementary School Journal, 80(1), 1-7.

Fraser, B. J., Walberg, H. J. Welch, W. W. ,and Hattie, J. A. (1987). Syntheses of educational productivity research. International Journal of Educational Research, 11 (2): 145-252.

Frechtling, J. A.(1982). Alternative methods for determining effectiveness: Convergence and divergence. Paper presented at the annual meeting of the American Educational Research Association. New York.

Friedkin, N. E. and Necochea, J. (1988). School system size and performance: A contingency perspective. Educational Evaluation and Policy Analysis, 10, (3), 237-249.

Friedman, Mordechai, and Stomper, Connie. (1983). The effectiveness of a faculty development program: A process-product experimental study," Review of Higher Education 7: 49-65.

Fullan, M. (1982). The meaning of educational change. New York: Teachers College Press, Columbia University.

Fuller, B. (1985, September). Raising school quality in developing countries: What investments boost learning? Discussion Paper, Education and Training Series (Report No. EDT&). Washington, DC: The World Bank.

Fuller, B. (1986a). Defining school quality. In J. Hannaway & M. Lockheed, The contributions of the social sciences to educational policy and practice: 1965-1985 (pp. 33-70). Berkeley, CA: McCutchan.

Fuller, B. (1986b). Is primary school quality eroding in the Third World? Comparative Education Review, 30, 491-507.

Fuller, B.(1987). What school factors raise achievement in the Third World? Review of Educational Research, 57, 255-292.

Fuller, B., and Snyder, C. Jr. (1989). Vocal teachers, silent pupils? Life in Botswana classrooms. Paper presented at the annual meeting of the Comparative and International Education Society, Boston, Massachusetts.

Fuller, B., Edwards, J., & Gorman, K. (1986). When does education boost economic growth? Sociology of Education, 59, 167-181.

Fuller, B., Gorman, K. and Edwards, J. (19). School Quality and Economic Growth in Mexico. Educational Quality and Economic Growth.

Fuller, Bruce & Habte, Aklilu (Eds.). (1992). Adjusting educational policies - Conserving resources while raising school quality. Washington, DC: World Bank Discussion Papers, Africa Technical Department Service.

Fuller, B. and Clarke, P. (1993). Raising school effects while ignoring culture? Local meaning of classroom tools, social rules, and pedagogy. Paper presented at the Comparative and International Society meeting, March, 1993 Kingston.

Fuller, W., & Chantavanich, A. (1976). A study of primary schooling in Thailand: Factors affecting scholastic achievement of the primary school pupils. Bangkok: Office of the National Education Commission.

Furtwengler, W. J. (1986). Reaching success through involvement--implication strategy for creating and maintaining effective schools. Paper presented at the Annual Meeting the American Educational Research Association. San Francisco, California.

Gage, N. L. (1978). The Scientific Basis of the Art of Teaching. New York: Teachers College Press.

Gage, N. L. (1979). The generality of dimensions of teaching. In Penelope L. Peterson and Herbert J. Walberg (Eds.), Research on teaching. Berkeley, Calif.: McCutchan.

Gage, N. L. (1984). What do we know about teaching effectiveness?" Phi Delta Kappan 66: 87-93.

Gage, N. L., and Needels, Margaret C. (1989). Process-product research on teaching: A review of criticisms, Elementary School Journal 89: 253-300.

Gage, N. L.; Belgard, Maria; Rosenshine, Barak V.; Unruh, W. R.; Dell, Daryl; and Hiller, Jack H. (1971). Explorations of the teacher's effectiveness in lecturing. In Ian Westbury and Arno A. Bellack (Eds.), Research into classroom processes. New York: Teachers College Press.

Gage, N., and Giaconia, R. (1980). The causal connection between teaching practices and student achievement: Recent experiments based on correlational findings (Tech. Rep.). Stanford, Calif.: Stanford University, Center for Educational Research at Stanford.

Gall, M., Fielding, G., Schalock, D., Charters, W., and Wiczinski, J. (1984). Involving the principal in teachers' staff development: Effects of the quality of mathematics instruction in elementary schools. Eugene OR: Center for Educational policy and Management, University of Oregon.

Galloway, D. (1976). Site of school, socio-economic hardship, suspension rates and persistent unjustified absence from school. British Journal of Educational Psychology. 46, 40-47.

Gamora, A. (1991). Schooling and achievement: Additive versus interactive models. In R. W. Raundenbush and J. D. Williams School, classrooms and pupils: International studies of schooling from multilevel perspective. Academic Press: Harcourt Brace Joanovich.

Garbarino, J. (1980). Some thoughts on school size and *its* effects on adolescent development. Journal of Youth and Adolescence, 9, 19-31.

Garrison, James W., and Macmillan, C. J. B. (1984). A philosophical critique of process product research on teaching, Educational Theory 34: 25~274.

Gath, D., Cooper, B., Gattoni, F. and Rockett, D. (1977). Child guidance and delinquency in a London borough. Maudsley Monographs No. 24. London: Oxford University Press.

Gauthier, W. E., Pecheone, R.L., and Shoemaker, J.(1985). Schools can become more Effective. Journal of Negro Education, 54(3), 388-408.

Gibboney, Richard A. (1989). The unscientific character of educational research, Phi Delta Kappan 71: 225-227.

Gilbert, John P., and Osteller, Frederick. (1972). The urgent need for experimentation. In Frederick Mosteller and Daniel P. Moynihan (Eds.), On equality of educational opportunity. New York: Vantage Books.

Glasman, N. S. and Biniaminov, I.(1981). Input- output analyses of schools. Review of Educational Research, 51(4), 509-539.

Glasman, N. S. (1984). School achievement and the school principal. Educational Evaluation and Policy Analysis. 6 (3). pp. 283-296.

Glass, G. V and Smith, M. L. (1978). Meta-analysis of research on the relationship of class size and achievement. San Francisco, Calif.: Far West Laboratory for Educational Research and Development.

Glenn, B. C. (1981). What works? An examination of effective schools for poor black children. Cambridge, Mass.: Center for Law and Education, Harvard University.

Goldman, N. (1961). A socio-psychological study of school vandalism. Crime and Delinquency, 7, 221 -230.

Goldstein, Harvey. (1987). Multilevel Models in educational and social research. New York: Oxford University Press.

Good, T. (1979). Teacher effectiveness in the elementary school: What do we know about it now? Journal of Teacher Education 30, 52-64.

Good, T. (1981). A decade of research on teacher expectations. Journal of Educational Leadership, 38, 415-423.

Good, T. (1982, February). Classroom research: What we know and what we need to know (Tech. Rep. No. 9118). Austin: University of Texas, The Research and Development Center for Teacher Education.

Good, T., and Brophy, J. (1972). Behavioral expression of teacher attitudes. Journal of Educational Psychology, 63, 617-624.

Good, T., and Brophy, J. (1978). Looking in classrooms (2nd ed.). New York: Harper and Row.

Good, T., and Brophy, J. (1980). Educational psychology: A realistic approach (2nd ed.). New York: Holt, Rinehart and Winston.

Good, T., and Brophy, J.(1973). Looking in classrooms (lst ed.). New York: Harper and Row.

Good, T., and Grouws, D. (1979). The Missouri mathematics effectiveness project: An experimental study in fourth grade classrooms. Journal of Educational Psychology, 71, 355-362.

Good, T., and Grouws, D. (1981, May). Experimental research in secondary mathematics classrooms: Working with teachers (NIE-G-79-0103 Final Report).

Good, T., and Power, C. (1976). Designing successful classroom environments for different types of students. Journal of Curriculum Studies, 8, 45-60.

Good, T., and Stipek, D. (1983). Individual differences in the classroom: A psychological perspective. In G. Fenstermacher and J. Goodlad, (Eds.), NSSE yearbook, forthcoming.

Good, T., Biddle, B., and Brophy, J. (1975).Teachers make a difference. New York: Holt, Rinehart and Winston.

Good, T., Cooper, H., and Blakey, S. (1978). Classroom interaction as a function of teacher expectations, student sex, and time of year. Journal of Teacher Education, 29, 85-90.

Good, Thomas (1983). Classroom research: A decade of progress. Educational Psychologist, 18 (3), 127-144.

Good, Thomas (1983). Research on classroom teaching. In Shulman, L. S. and Sykes, G.(Eds.), Handbook of Teaching and Policy. New York: Longman.

Good, Thomas and Brophy, J.E. (1986). School effects. In Wittrock, M. (Eds.), Handbook of research on teaching. (3rd). N. Y.: MacMillan.

Good, Thomas L., and Grouws, Douglas A. (1979). The Missouri mathematics effectiveness project: An experimental study in fourth-grade classrooms, Journal of Educational Psychology 71: 35~362.

Goodlad, J. I. (1975). The dynamics of educational change: Towards responsive schools. New York: McGraw-Hill.

Gottfredson, G. D.(1984). The effective school battery: Teacher questionnaire. Odessa, FL: Physiological Assessment Resources, Inc.

Government of Pakistan (1983). Draft comprehensive report: Primary education report. Islamabad, Pakistan.

Gray D. A. and Thomas, M. A. (1989). Effective schools and effective. Teachers: Allyn and Bacon Boston.

Gray, G., Smith, A. and Rutter, M.(1980). School attendance and the first year of employment. In L. Hersov and I. Berg (eds.), Out of school: Modern

perspectives in truancy and school refusal. Chichester: Wiley, p. 343-370.

Gray, J. and Satterly, D. (1981). Formal or informal? A reassessment of the British evidence. British Journal of Educational Psychology, 51,187-196.

Greee, Barbara A; Royer, James M.; & Anzalone Stephen. (1990). A new technique for measuring listening and reading literacy in developing countries. International Review of Education 36(1) 57-68.

Gregory, L. L. (1980). Synthesis of the case studies. In Why do some urban school succeed? Phi Delta Kappan.

Gulliford, Andrew. (1985, September). The one-room school lives. Principle. pp. 6-12.

Gump, P. V. (1980). The school as a social situation. Annual Review of Psychology, 31, 553 - 582.

Guthrie, G. (19). To the defense of traditional teaching in lesser-developed Countries.

Gutierrez, R. & Slavin, R. E. (1992, April). Achievement effects of the nongraded elementary school: A retrospective review. Paper presented at the annual conference of the American Education Research Association, San Francisco.

Haddad, W. (1978). Educational and economic effects of promotion and repetition practices. World Bank Staff Working Paper no. 319. Washington, D. C.

Haddad, W. (1978). Educational effects of class size. Washington, DC: The World Bank.

Haddad, W. (1978). Educational effects of class size. World Bank Staff Working Paper no. 280. Washington, D. C.

Hall, G. E., Hord, S. M., Huling, L. L., Rutherford, W. L. and Stiegebauer, S. M. (1983). Leadership variables associated with successful school improvement. Paper presented at the annual meeting of American Educational Research Association, Montreal.

Hallak, Jacques (1992). Managing schools for educational quality and equity: finding the proper mix to make it work. IIEP Contributions No. 9, 15p.

Hallinan, M. T. (1979). Structural effects on children's friendships and cliques. Social Psychology Quarterly, 42, 43-54.

Halsey, A. H., Heath, A. F. and Ridge, J. M. (1980).Origins and destinations: Family, class and education in modern Britain. Oxford: Clarendon Press.

Hameyer, U. and Loucks-Horsley, S. (1985). Planning school improvement strategies. In Velzen, W., Miles, M. B., Ekholm, M., Hameyer, U. and Robin, D. Making school improvement work. A conceptual guide to practice. An OECD Publication. Leuven: ACCO, 97-122.

Hameyer, U. and Loucks-Horsley, S. (Eds.). Supporting the implementation of New technologies. Policies and practices for school improvement. (provisional title) OECD publication. ACCO: Leuven.

Hamish, D. L.(1987). Characteristics Associated with effective public high schools. Journal of Educational Research, 80(4), 233-241.

Hannan, M. T., Freeman, J. H., & Meyer, J. W. (1976). Specification of models for organizational effectiveness. American Sociological Review, 41(1), 136-143.

Hanushek, E. (1986). The economics of schooling: Production and efficiency in public schools. Journal of Economic Literature 24(2): 1141-1177

Hanushek, E. (1981). Throwing money at schools. Journal of Policy Analysis and Management, 1(1), t9-41.

Hanushek, E. A.(1972). Education and race: An analysis of the educational production process. Lexington, MA.: Lexington Books.

Harbison, R., and Hanushek, E. (1989). Educational performance of the poor: Lessons from rural Northeast Brazil. Washington, DC: World Bank processed.

Hargreaves, D. N. (1967). Social relations in a secondary school. London: Routledge and Kegan Paul.

Hargrove, E. C. (1983). The search for implementation theory. In R. J. Zeckhauser and Leebaert (Eds.). What role for government? Lessons from policy research. Durham, NC.: Duke University Press.

Harman, D. and Brim, O. G. (1980). Learning to be parents: Principles, programs and methods. Beverly Hills: Sage Publications.

Harnish, D. L. (1987). Characteristics associated with effective public schools. Journal of Educational Research. 80 (4), 233-241.

Harnqvist, K. (1968). Relative changes in intelligence from 13 to 18. Scandinavian Journal of Psychology, 9, 50-82.

Haron, 1. (1977). Social class and educational achievement in a plural society: Peninsular Malaysia. Unpublished doctoral dissertation, University of Chicago.

Harrison, J., Strauss, H., and Glaubman, R. (In press). The impact of open and traditional classrooms on achievement and creativity: The Israeli case. Elementary School Journal.

Hartley, M., and Swanson, E. (1984). Achievement and wastage. An analysis of the retention of basic skills in primary education. In M. Hartley and E. Swanson , The International study of the retention of the literacy and numeracy: An Egyptian case study [Final Report]. Washington, DC: World Bank RPO (671-55).

Hauser, R., Sewell, W. and Alwin, D. (1976). High school effects on achievement. In W. Sewell, R. Hauser, and D. Featherman (Eds.), School and academic achievement in American society. New York: Academic Press.

Havelock, R. and Huberman, A. (1977). Solving educational problems: The theory and reality of innovation in developing countries. Paris: UNESCO.

Heal, K. H. (1978). Misbehavior among school children: The role of the school in strategies for prevention. Policy and Politics, 6, 321-333.

Heath, A. and Clifford, P. (1980). The seventy thousand hours that Rutter left out. Oxford Review of Education, 6, 3-19.

Hedges, Larry V. (1987). How hard is hard science, how soft is soft science? The empirical cumulativeness of research, American Psychologist 42: 443-455.

Helmke, A.; Schneider, W.; and Weinert, F. E. (1986). Quality of instruction and classroom learning outcomes: The German contribution to the IEA Classroom environment study, Teaching and Teacher Education, 2: 1-18.

Helmreich, R. (1972). Stress, self-esteem and attitudes. In B. T. King and E. McGinnies (Eds.), Attitudes, conflict and social change. London: Academic Press.

Herz, B., Subbarao, K., Habib, M., & Raney, L. (1991). Letting girls learn - Promising approaches in primary and secondary education. World Bank Discussion Paper 133. Washington, DC.

Hess, R. D., Kashiwagi, K., Azuma, H., Price, G. G., & Dickson, W. P. (1980). Maternal expectations for mastery of developmental tasks in Japan and the United States. International Journal of Psychology, 15, 259-271.

Heyneman, 5. (1976). Education during a period of austerity, Uganda, 1971-81. Comparative Education Review, 27(3), p. 209.

Heyneman, S. (1976). Influences on academic achievement: A comparison of results from Uganda and more industrialized societies. Sociology of Education, 49, 200-211.

Heyneman, S. (1980). The evaluation of human capital in Malawi. Washington, DC: World Bank, PPR Working Paper No. 420.

Heyneman, S. P. & White, D. S. (Eds.). (1986). The quality of education and economic development. Washington DC: The World Bank.

Heyneman, S. P. (1980). Differences between developed and developing countries: Comment on Simmons and Alexander's "Determinants of school achievement", Economic Development and Cultural Change, 28, (2), 403-406.

Heyneman, S. P. (1985). Research on education in developing countries. International Journal of Educational Development. 8(2): 41-56.

Heyneman, S. P. and Loxley, W. A. (1982, January). Influences on academic achievement across high and low income countries: A re-analysis of IEA data. Sociology of Education. 55 , 13-21.

Heyneman, S. P. and Loxley, W. A. (1983). The distribution of primary school quality within high- and low-income countries. Comparative Education Review. 27 (1) 108-118.

Heyneman, S. P., Farrell, J. P, and Sepulveda, M. (1978). Textbooks and achievement: What we know. The World Bank, Washington, DC.

Heyneman, S., & Loxley, W. (1983). The effect of primary school quality on academic achievement across twenty-nine high and low-income countries. American Journal of Sociology, 88, 1 162- 1 194.

Heyneman, S., and Jamison, D. T. (1980). Student learning in Uganda: Textbook availability and other factors. Comparative Education Review, 24 (2): 206-220.

Heyneman, S., Farrell, J., and Sepulveda-Stuardo, M. (1981). Textbooks and achievement in the developing countries: What we know. Journal of Curriculum Studies, 13(13): 227-246.

Heyneman, S., Jamison, D. T., and Montenegro, X. (1984). Textbooks in the Philippines: Evaluation of the pedagogical impact of a nationwide investment. Educational Evaluation and Policy Analysis. 6 (2): 139-150.

Holahan, C. J. and Saegert, S. (1973). Behavioral and attitudinal effects of large scale variation in the physical environment of psychiatric wards. Journal of Abnormal Psychology, 82, 454462.

Holloway, S. D., & Hess, R. D. (1985). Mothers' and teachers' attributions about children's math performance. In 1. E. Sigal (Ed.), Parental belief systems. Psychological consequences for children (pp. 177-199). Hillsdale, NJ: Erlbaum.

Holloway, S. D., Gorman, K. S., & Fuller, B. (1987). Contrasting social structures and child learning beliefs: Mothers and preschool teachers in Mexico. Unpublished document, University of Maryland, College Park.

Holmes, Mark, Kenneth A. Leithwood, and Donald F. Musella, (Eds.). (1980). Educational policy for effective schools. New York: Teachers College Press.

Honig, Bill (1988). The key to reform: Sustaining and expanding upon initial success. Educational Administration Quarterly. 24 (3) 257-271.

Hopkins, K.0.(1982). The unit of analysis: Group means versus individual observations. American Educational Research Journal, 19(1), 5-18.

Horn, R., and Arriagada, A. M. (1986). The educational attainment of the world's population: Three decades of progress. Washington, DC: World Bank, Education and Training Discussion Paper EDT 37.

Horowitz, F. D. and Paden, L. Y. (1973). The effectiveness of environmental intervention programs. In B. M. Caldwell and H. N. Ricciuti (Eds.),

Review of child development research, Vol. 3. Chicago: University of Chicago Press.

Horwitz, R. A. (1979). Psychological effects of the "open classroom. Review of Educational Research, 49, 71-86.

Howard, E., Howell, B. and Brainard, E.(1987). Handbook for conducting school climate improvement projects. Bloomington, Indiana The Phi Delta Kappan Educational Foundation

Howell, B. (1981). Profile of the principalship. Educational Leadership, 38, (4), 333-336.

Huberman, A. M. and Miles, M. B. (1972). How school improvement works: A field study of 12 sites. Andover. The Network.

Huh, Kyung Chul. (1986). The role of teacher logic and clarity in student achievement. Doctoral dissertation, Stanford University.

Husen, T. (1977). Pupils, teachers, and schools in Botswana: A national evaluation survey of primary and secondary education. Gaborone: Government Printing Office.

Husen, T. (1951). The influence of schooling upon IQ. Theory, 17, 61-68.

Husen, T. (1979). The school in question: A comparative study of the school and its future in western societies. London: Oxford University Press,

Husen, T., Saha, L. and Noonan R. (1978). Teacher training and student achievement in less developed countries. World Bank Staff Working Paper no. 310. Washington, D. C.

Hutchinson, D., Prosser, H. and Wedge, P. (1979). The prediction of educational failure. Educational Studies, 5, 73-82.

Huttenlocher, J. A., Haight, W., Bryk, A. S., and Selter, M. (1991). Early vocabulary growth: Relation to language input and gender. Developmental Psychology, 37 (2), 236-249.

Illich (1971). Deschooling Society. New York: Harper and Row.

Illinois State Board of Education (1984). Illinois quality schools index manual and instruments. Springfield, IL.

International Association for the Evaluation of Educational Achievement (IEA) (1988). Science achievement in seventeen countries: A preliminary report. Oxford: Pergamon.

Isherwood, G. B. and Hammah, C. K.(1981). Home and School Factors and the Quality of School Life in Canadian High Schools. In Epstein, J. L. and Jackson, P. W. (Eds.), The quality of school life. Lexington, MA.: D. C. Heath and Comp.

Jackendoff, R. (1991, September-October). The paradox of language acquisition. teaching thinking and problem solving. 13: 1-6.

Jackson, P. (1968). Life in classrooms. New York: Holt, Rinehart and Winston,

Jackson, P., Silberman, M., and Wolfson, B. (1969). Signs of personal involvement in teachers' descriptions of their students. Journal of Educational Psychology, 60, 22-27.

Jamison, D. (1978). Radio education and student repetition in Nicaragua. Washington, DC: The World Bank. (Reprint Series No. 91)

Jamison, D. (1982). Reduced class size and other alternatives for improving schools: An economist's view. In G. Glass, L. Cahen, M. Smith, & N. Filby, School class size: Research and policy (pp. 116-129). Beverly Hills, CA: Sage.

Jamison, D. T., & Lockheed, M. E. (1985). Participation in schooling determinants and learning outcomes in Nepal. Washington, DC: The World Bank, Education and Training Department.

Jamison, D. T., Searle, B., Golda, K. and Heyneman, S. (1981, August). Improving elementary mathematics education in Nicaragua: An experimental study of the impact of textbooks and radio on achievement. Journal of Educational Psychology, 73, 556-567.

Janicki, C., and Peterson, P. (1981). Aptitude-treatment interaction effects of variations in direct instruction. American Educational Research Journal, 18,63-82.

Jencks, C. (1979). Who gets ahead? New York: Basic Books.

Jencks, C., Smith, M., Acland, H., Bane, M. J., Cohen, D., Gintis, H., Heyns, B. and Michelson, S. (1972). Inequality: A reassessment of the effect of family and schooling in America. New York: Basic Books.

Jennings-Wray, Z. D. (1984). Implementing the integrated approach to learning: Implications for integration of the curricula of primary schools in the Carribbean. International Journal of Educational Development, 4: 265-278.

Jensen, A. R. (1969). How much can we boost IQ and scholastic achievement? Harvard Educational Review, 39, 1-123.

Jesson, D. and Gray, J. (1991). Slants on slopes: Using multi-level models to investigate different school effectiveness and its impact on pupil's examination results. International Journal of School Effectiveness and Improvement. Netherlands: Lisse, Swets and Zeitlinger.

Jimenez, E., Lockheed, M. Luna, E., and Paqueo, V. (forthcoming). School effects and costs for private and public schools in the Dominican Republic. International Journal of Educational Research.

Johnson, D. (1981). Student-student interaction: The neglected variable in education. Educational Researcher, 10, 5-10.

Johnson, D., and Johnson, R. (1975). Learning together alone. Englewood Cliffs, N. J.: Prentice-Hall, Inc..

Jones, A. (1980). The school's view of persistent non-attendance. In L. A. Hersov and I. Berg (Eds.), Out of school: Modern perspectives in truancy and school refusal. Chichester: Wiley.

Jones, Ben and Gray, J. (1985). Combining quantitative and qualitative approaches to studies of school and teacher effectiveness. In David Reynolds (Ed.) Studying school effectiveness. Philadelphia: The Falmer Press.

Jorgenson, G. (1978, March). Student ability—material difficulty matching: Relationship to classroom behavior. A paper presented at the meeting of the American Educational Research Association, Toronto.

Jung, S. M. & Schubert, Jane G. (1983, Winter). Evaluability assessment: A two-year retrospective. Educational Evaluation and Policy Analysis. 5: 435-444.

Kaagan, S. and Smith, M. (1985, October). Indicators of educational quality. Educational Leadership. 21-24.

Kahn, R. L. and Katz, D. (1960).Leadership practices in relation to productivity and morale. In D. Cartwright and A. Zander (Eds.), Group dynamics: Research and theory, Vol. 2. New York: Harper & Row.

Karrweit, N. (1985). Should we lengthen the school term? Educational Researcher, 14(6), 915.

Karweit, N., and Slavin, R.(1980,a, October). Time-on-task: Issues of timing, sampling and definition (Tech. Rep.). Baltimore: The John Hopkins University, Center for Social Organization of Schools.

Kassalow, E. M. (1968). More on multicolinearity and the effectiveness of schools. The Journal of Human Resources. 3. pp. 392-400.

Katzman, M. T.(1971). The political economy of urban School. Cambridge, Mass: Harvard University Press.

Keddie, N. (1971).Classroom knowledge. In M. Young (Ed.), Knowledge and control: New directions for the sociology of education. London: Collier-MacMillan.

Kelly, D. H. (1975). Tracking and its impact upon self-esteem: A neglected dimension. Education, 96, 2-9.

Kemp, L. C. D. (1955). Environmental and other characteristics determining attainments in primary schools. British Journal of Educational Psychology, 25, 67-77.

Kenney, Jane L. and Robert, Jane M. E. (1986). Characteristics and predictors of institutionalization. Paper presented at the Annual Meeting of the AERA, San Francisco, CA, April 16-20.

Kepler, K. (1977, April). Descriptive feedback: Increasing teacher awareness, adopting research techniques. A paper presented at the annual meeting of the American Educational Research Association, New York.

Kepler, K. (1980). BTES: Implications for preservice education of teachers. In C. Denham and A. Lieberman (Eds.), Time to learn. Washington, DC: U. S. Department of Education.

Kerlinger, F. N. and Pedhazur, E. J.(1973). Multiple regression in behavioral research. New York: Holt, Reinhart and Winston.

Kerlinger, F. N.(1986). Foundations of behavioral research. New York: CBS College Publishing.

Keziah, R. (1980). Implementing instructional behaviors that make a difference. Centroid (North Carolina Council of Teachers of Mathematics), 6, 2-4.

Kiesling, H. J. (1969). The relationship of school inputs to public school performance in New York State. ED 051 581.

Kim, B. S.(1984). Schooling and social achievement, Seoul: KEDI Press.

Kim, B. S.(1985). Prior study for the evaluation of the HSEP. Seoul: KEDI Press.

Kim. Y. T.(1976). An evaluation study in the HSEP I. Seoul: KEDI Press.

King, E. M., & Hill, M. A. (Eds.). (1991, September). Women's education in developing countries - Barriers, benefits and policy (document No. PHREE/91/40). Washington, DC: World Bank, Population and Human Resources Department.

Klees, S. (1975). Television and other determinants of scholastic achievement in Mexican secondary education. Unpublished document, Cornell University, Department of Economics, Ithaca, NY.

Klitgaard, R. E. and Hall, G. R. (1975). Are there unusually effective schools? Journal of Human Resources, 10, 90-106.

Knapp, M. S. and Turnbull, B. J. Better schooling for the children of poverty: Alternatives to conversational wisdom. Study of academic instruction for disadvantaged students. 2 Volumes. Menlo Park, CA: SRI International.

Koehler, V. (1978). Classroom process research: Present and future. Journal of Classroom Interaction, 13, 3- 11.

Korean Educational Development Institute (1978). Evaluation study of the high school equalization policy. Seoul: KEDI Press.

Kostakis, A.(1987). Differences among school outputs and educational production functions. Sociology of Education, 60, 232-241.

Kounin, J. S. (1970). Discipline and group management in classrooms. New York: Holt, Rinehart and Winston.

Kozol, J. (1967). Death at an early age. Boston: Houghton Mifflin.

Kratcoski, P. C. and Kratcoski, J. E. (1977). The balance of social status groupings within schools as an influencing variable on the frequency and character of delinquent behavior. In P. C. Friday and V. L. Steward (Eds.), Juvenile justice: international perspectives. New York: Praeger.

Kreinberg & Nathan, Harriet. (1991). Teachers' voice, teachers' wisdom. Berkeley, CA: University of California, Lawrence Hall of Science.

Krutetskii, V. (1976). The psychology of mathematical abilities in school children. Chicago: University of Chicago Press.

Kuhn, M. H. (1964). Major trends in symbolic interacting theory in the past twenty-five years. Sociological Quarterly, 5, 61-84.

Kulik. J., and Kulik, C. L. (1988). Timing of feedback and verbal learning. Review of Educational Research, 58 (1): 79-97.

Kunarak, P., and Saranyajaya, A. (1986). Project RECOMB: Remodeling the school cluster's organization and management boundary: A synopsis report (research report submitted to UNICEF). Bangkok: Office of the National Primary Education Commission.

Kuykendall, C. (1989). Improving black student achievement by enhancing students' self-image. Washington, DC: The Mid-Atlantic Equity Center, The American University.

Kyle, M. J. (Ed.) (1985). Reaching for excellence: an effective schools source book. Washington: U. S. Government Printing Office.

Lacey, C. (1970). Hightown grammar: The school as a social system. Manchester: Manchester University Press.

Lacey, C. (1974). Destreaming in a "pressured" academic environment. In J. Eggleston (Ed.), Contemporary research in the sociology of education. London: Methuen.

Lally, J. R. and Haiman, P. E. (1980). A study of participatory research, development, dissemination and implementation. Washington, D. C.: National Institute of Education.

Laudan, Larry. (1978). Progress and its problems. Berkeley, Calif.: University of California Press.

Lee, C. (1985). Financing technical education in LDC's: Economic implications from a survey of training modes in the Republic of Korea. Washington, DC: The World Bank, Education Department.

Leestma, R. & Walberg, H. J. (Eds.). (1992). Japanese education productivity. Michigan Paper in Japanese Studies No. 22. Ann Arbor, MI: University of Michigan.

Lehming, R. and Kane, M. (Eds.) (19). Improving Schools. Beverly Hills, CA: Sage Publications.

Levin, H. and Meister, G. (1986). Is CAI cost-effective? Phi Delta Kappan, 67 (10): 745-49.

Levin, H. M. (1986). Educational reform for disadvantaged students: An emernging crisis. West Haven, Conn: National Education Association Professional Library.

Levin, H. M. (1987). Accelerating schools for disadvantaged students. Educational Leadership, 44 (6): 19-21.

Levin, H. M. (1988). Accelerating elementary education for disadvantaged students. In Council of Chief State School Officers (Eds.). School success for students at risk. Orlando, FL: Harcourt Brace Jovanovich.

Levin, H. M. (1989). Financing the education of at-risk students. Educational Evaluation and Policy Analysis, 11 (1): 47-60.

Levin, H. M., & Lockheed, M. E. (Eds.). (1991, June). Effective schools in developing countries (Document No. PHREE/91/38). Washington, DC: World Bank, Population and Human Resources Department.

Levin, H. M. (1970). A New Model of school effectiveness. In Do teachers make a difference? A report on recent research on pupil achievement. Washing D. C.: U. S. Department of Health, Education, and Welfare, Office of Education, Bureau of Educational Personnel Development.

Levine, Daniel U. and Lezotte, L. W. (1990). Unusually effective schools: A review and analysis of research and practice, National Center for Effective Schools Research and Development, Madison, WI.

Levine, H., and Mann, K. (1981, April). The "negotiation" of classroom lessons and its relevance for teachers' decision-making. Paper read at the annual meeting of the American Educational Research Association, Los Angeles.

Levy, M. (1971). Determinants of primary school dropouts in developing countries. Comparative Education Review, 15(1), 44-58.

Lezotte, L. W. and Passalacqua, (1978). J. Individual school buildings do account for differences in measured pupil performance. Institute for

Research on Teaching Occasional Paper No. 6. East Lansing, Mich.: Michigan State University.

Lezotte, L. W.(1986). School effectiveness: Reflections and future directions. Unpublished paper prepared for the Annual Meeting of the American Educational Research Association. San Francisco.

Lieberman, S. (1956). The effects of changes in roles on the attitudes of role occupants. Human Relations, 9, 385-402.

Lightfoot, A. (1978). Urban education in social perspective. Chicago: Rand McNally.

Lillis, Kevin M. (1992). Improving basic education: Preconditions for successful inspection and supervision--Implications for training. Increasing and improving the quality of basic education No. 7, 26p.

Lindblom, C., and Cohen, D. (1979). Usable knowledge: Social science and social problem-solving. New Haven, Conn.: Yale University Press.

Little, A., Mabey, C. and Russell, J. (1971). Do small classes help a pupil? New Society, 18, 769-771 .

Livingstone, I. (1985). Perceptions of the intended and implemented mathematics curriculum. International Association for the Evaluation of Educational Achievement (IEA).

Lockheed, M. E. and Hanushek, E. (1987). Improving the efficiency of education in developing countries. Discussion paper, Education and Training Series, Report No. EDT77, Education and Training Department, World Bank.

Lockheed, M. E. and Komenan, A. (forthcoming). Teaching quality and student achievement in Africa: The case of Nigeria and Swaziland. Teaching and Teacher education.

Lockheed, M. E., Verspoor, A. M., with Deborah Bloch, Pierre Englebert, Bruce Fuller, Elizabeth King, John Middleton, Vicente Paqueo, Alastair Rodd, Ralph Romain, and Michel Welmond. (1991). Improving primary education in developing countries. New York: Oxford University Press.

Lockheed, M., and Harris, A. M. (1982). Classroom interaction and opportunities for cross-sex peer learning in science. Journal of Early Adolescence, 2 (2): 135-143.

Lockheed, M., and Komenan, A. (1989). Teaching quality and school effects on student achievement in Africa: The case of Nigeria and Swaziland. Teaching and Teacher Education, 5 (2): 93-113.

Lockheed, M., Fonacier, J., and BIanchi, L. (1989). Effective primary level science teaching in the Philippines. Washington, DC: World Bank, PPR Working Paper WPS 208.

Lockheed, M., Vail, S., & Fuller, B. (1986). How textbooks affect achievement in developing countries: Evidence from Thailand. Educational Evaluation and Policy Analysis, 8, 379392.

Lockheed, Marlaine E. and Adriaan M. Verspoor, with others (1991). Improving primary education in developing countries. New York: Oxford University Press.

Lockheed, Marlaine E. and Barbara Bruns (1990). School effects on achievement in secondary mathematics and Portuguese in Brazil. World Bank Policy, Research and External Affairs Working Paper WPS-525. Washington, DC: World Bank, Education and Employment Division.

Lockheed, Marlaine E. and Nicholas Longford (1989). A multi-level model of school effectiveness in a developing country. World Bank Discussion Paper 69. Washington, DC: World Bank.

Loucks-Horsley, S. and Crandall, D. (1986). Analyzing school improvement. Leuven, Belgium: ACCO.

Loucks-Horsley, S. and Hergert, F. (1985). An action guide to school improvement. Alexandria VA: ASCD.

Louis, Seashore, K., Rosenblum, S. and Molitar, J. (1981). Strategies for knowledge use and school improvement. Cambridge, Abt Associates.

Loxley, W. (1984, April). Quality of schooling in the Kalahari. Paper presented at the annual meeting of the Comparative and International Education Society, Houston, TX.

Luna, E., and Gonzales, S. (1986). The undevelopment of mathematics achievement: Comparison of public and private schools in the Dominican Republic. Santiago: Centro de Investigaciones UCMM. Processed.

Lunn, J. C. B. (1970). Streaming in the primary school. Slough, Bucks.: NFER.

Mabey, C. (1974). Social and ethnic mix in schools and the relationship with attainment of children aged 8 and 11. London: Center for Environmental Studies Research Paper No. 9.

Mackenzie, D. E.(1983,a). Research for school improvement An appraisal of some recent trends. Educational Researcher, 12(4), 5-17.

Mackenzie, D. E.(1983,b). School effectiveness research: A synthesis and assessment. In Duttweiler, P.C.(Ed). Educational productivity and school effectiveness. Austin, Texas: The Southwest Educational Development Laboratory.

Macmillan, C. J. B., and Garrison, James W. (1988). A logical theory of teaching: Erotetics and intentionality. Boston: Kluwer Academic Publishers.

Macmillan, C. J. B., and Garrison, James W.(1984). Using the 'New Philosophy of Science' in criticizing current research traditions in education. Educational Researcher 13, no. 10 15-21.

Madaus, G. F., Airasian, P. W., and Kellaghan, T.(1980). School effectiveness: A reassessment of the evidence. NY: McGraw-Hill.

Madaus, G. F., Kellaghan, T., Rakow, E. A. and King, D. J. (1979). The sensitivity of measures of school effectiveness. Harvard Educational Review, 49, 207-230.

Madaus, George, Thomas Kellaghan, Ernest A. Rakow, and Denis J. King (1987). The sensitivity of measures of school effectiveness. Harvard Educational Review, 49 (2): 207-230.

Mandeville, G. K & Anderson, L. W.(1987). The stability of school effectiveness indices across grade levels and subject areas. Journal of Educational Measurement. 24(3), 203-216.

Marco, G. C.(1974). A comparison of selected school effectiveness measures based on longitudinal data. Journal of Educational Measurement. 11, 225-234.

Marco, G. L., Murphy, R. T., and Quirk, T. J.(1976). A Classification of methods of using student data to assess school effectiveness, Journal of Educational Measurement, 13(4), 243-252.

Marjoribanks, K. (1978). Family and school environmental correlates of school related affective characteristics: An Australian study. Journal of Social Psychology, 106, 181-189.

Marland, M. (1975).The craft of the classroom: A survival guide. London: Heinemann Educational.

Martin, M. (1973). Equal opportunity in the classroom (ESEA, Title III: Session A Report). Los Angeles: County Superintendent of Schools, Division of Compensatory and Intergroup Programs.

Maughan, B., Mortimore, P., Ouston, J. and Rutter, M. (1980). Fifteen thousand hours: A reply to Heath and Clifford. Oxford Review of Education, 6, 289-303.

Maughan, Barbara and Ouston, J. (1985). Issues in assessment of school outcomes. in David Reynolds (Ed.) Studying school effectiveness. Philadelphia: The Falmer Press.

McCarthy, M. M. (1980). An aggregation of the case study literature. Why do some urban schools succeed? Phi Delta Kappan.

McCorkle, C. (1982, November). Equity activities: Year 2 - Elementary Level (AIR-87403-11/82-TR1, for the U. S. Department of Education, Contract No. 300-80-0689). Palo Alto, California: American Institute for Research, FOCUS.

McDermott, R. (1976). Kids made sense: An ethnographic account of the interactional management of success and failure in one first-grade classroom. Unpublished doctoral dissertation, Stanford University.

McDill, E. L. and Rigsby, L. C. (1973). Structure and process in secondary schools. Baltimore: Johns Hopkins University Press.

McDonald, F., and Elias, P. (1976). The effects of teaching performance on pupil learning (Final Report, Vol. 1, Beginning Teacher Evaluation Study, Phase II, 1974-1976). Princeton, N. J.: Educational Testing Service.

McGinn, N., Reimers, F., Loera, A., Soto, M., & Lopez, Sagrario. (1992, June). Why do children repeat grades? A study of rural primary schools in Honduras. The Basic Research and Implementation in Developing Education Systems Project (BRIDGES).

McGinn, N., Warwick, D., and Reimers, F. (1989). Policy choices to improve school effectiveness in Pakistan. Paper presented at the VII World Congress of Comparative Education, Montreal, Canada.

McLaughlin, Milbrey W. (1983). State involvement in local educational quality. In Allan Odden and L. D. Webb (Eds.), School finance and

school improvement: Linkages in the 1980's. Cambridge, MA: Ballinger.

McNamara, B. (1980). The outsider's arrogance: The failure of participant observers to understand classroom events. British Educational Research Journal, 6(2).

Medley, D. (1979). The effectiveness of teachers. In P. Peterson and H. Walberg (Eds.). Research on teaching: Concepts, findings, and implications. Berkeley, Calif.: McCutchan Publishing Corporation.

Medrich, E., Roizen, J., Rubin, V., and Buckley, S. (1982). The serious business of growing up: A study of children's lives outside school. Berkeley: University of California Press.

Mehan, H. (1979). Learning lessons: Social organization in the classroom. Cambridge, Mass.: Harvard University Press.

Metcalf, D. (1985). The economics of vocational training. Unpublished document. Washington, DC: The World Bank, Education and Training Department.

Metz, M. (1978). Classrooms and corridors: The crisis of authority in desegregated secondary schools. Berkeley: University of California Press.

Miller, Bruce A. (1989, September). The mutigrade classroom: A resource handbook for small, rural schools. Oregon: Northwest Regionsl Educational Laboratory.

Miller, D. C.(1983). Handbook of research design and social measurements. New York: Longman Inc..

Miller, J. D.(1983). Scientific literacy: A conceptual and empirical review. Daedalus, 112(2), 2948.

Miller, L. B. and Dyer, J. L. (1975). Four preschool programs: Their dimensions and effects. Monographs of the Society for Research in Child Development, 40, Serial No. 162.

Mischel, W. (1979). On the interface of cognition and personality: Beyond the person-situation debate. American Psychologist, 34, 740-754.

Mitchell, R. (1989). Beyond the bubble. Paper presented at the Curriculum/Assessment Alignment Conferences, Sacramento and Long Beach, Calif.

Mitman, A. et al. (1981). The junior high transition study: Students' perceptions of transition and school (mimeo). San Francisco: Far West Laboratory for Education Research and Development.

Mohlman, Georgea G.; Coladarci, Theodore; and Gage, N. L. (1982). Comprehension and attitude as predictors of implementation in teacher training, Journal of Teacher Education 33 : 31-36.

Montero-Siebert, M. (1989). Classroom management: Instructional strategies and allocation of learning resources. BRIDGES Research Report, Series, No. 4, Cambridge, MA: HIID.

Moorhead, R. and Nediger, W. G. (1990). Process components of effectiveness: A historic study of 4 secondary school principals. Paper presented at the Annual Meeting of the Canadian Society for the Study of Education. Victoria, British Columbia.

Moos, R. H. (1979). Evaluating educational environments. San Francisco: Jossey-Bass.

Morales, J., & Pinellsiles, A. (1977). The determinant factors and the costs of schooling in Bolivia (Working Paper No. 4-77). La Paz: Universidad Catolica Boliviana.

Mortimer, Peter, Pamela Sammars, Louise Stoll, David Lewis, and Russell E. Cob. (1988). School matters. Berkeley: University of California press.

Mundangepfupfu, M . (1988). School quality and efficiency in Malawi. Report of the pilot of the primary school quality survey. Lilongwe, Malawi: Ministry of Education and Culture.

Murnahe, Richard J. (1983). Quantitative studies of effective schools: What have we learned? In Allan Odden and L. D. Webb (Eds.), School finance and school improvement: Linkages in the 1980's. Cambridge, MA: Ballinger.

Murnane, R. J.(1975). The impact of school resources on the learning of inner-city children. Cambridge, Mass: Ballinger.

Murphy, J. (1991). Restructuring schools: Capturing the phenomena. New York: Teachers College Press.

Murphy, J.(1988). Methodological, measurement, and conceptual problems in the study of instructional leadership. Educational Evaluation and Policy Analysis, 10(2), 117-137.

Murphy, J., Weil, M., Hallinger, P., and Mitman, A. (1985). School effectiveness: Reassessment of the evidence. N. Y.: McGraw-Hill.

Murphy, Michael B. et al (1991). Pupils as partners: Site-based management in elementary classrooms. Paper presented at the Annual Meeting of the Association of the Supervision and Curriculum Development. San Francisco, CA.

Mwanwenda, T. S., and Mwamwenda, B. B. (1989). Teacher characteristics and pupils' achievement in Botswana primary education. International Journal of Educational Development. 9: 31-42.

Naismith, Donald (1990). Effectiveness and evaluation in educational institutions: Handbook of educational ideas and pratices. pp. 497-507.

Nasoetion, N., Djalil, A., Musa, 1., & Soelistyo, S. (1976). The development of education evaluation models in Indonesia. Paris: UNESCO, International Institute for Educational Planning.

National Institute of Education. (1978).Violent schools, safe schools. The safe school study report to the Congress. Washington, D. C.: U. S. Department of Health, Education, and Welfare.

Navarro, Richard (1988). Effects of management reforms on the social relations of instruction in eight Sri Lankan primary schools. BRIDGES Casual Paper. Cambridge, MA.: Project BRIDGES, Harvard Institute for International Development.

Needels, Margaret C. (1989). A new design for process-product research on the quality of discourse in teaching, American Educational Research Journal 25 : 503-526.

Neumann, P. (1980) Publishing for schools: Textbooks and the less developed countries. World Bank Staff Working Paper No. 398. Washington, D. C.

New Jersey State Department of Education(1987). Organizational climate survey. Ithaca, NY: Organizational Analysis and Practice Inc..

New York State Department of Education(1974). School factors influencing reading achievement: A case study of two inner-city schools. Albany, N. Y.: Office of Education Performance Review (ERIC Document Reproduction No. 089 211).

Niles, F. S. (1981). Social class and academic achievement: A third world reinterpretation. Comparative Education. 25 (3), pp. 419-430.

Nitsaisook, M., and Anderson, Lorin. (1989). An experimental investigation of the effectiveness of inservice teacher education in Thailand, Teaching and Teacher Education 5 : 287-302.

Northwest Regional Educational Laboratory. (1989, July). Success for all students - How onward to excellence uses R&D to improve schools. Portland, Oregon: Author.

Nuttal, D. L; Goldstein, H. and Rasbash, J. (1989). Differential school effectiveness. In B. P. M. Creemer's and J. Scheerens (Eds.). Development in school research. Special issue of the International Journal of Educational Research., 13, 181-199.

O'Neill, O. (1976). Opportunities, equalities and education. Theory and Decision. 7, 275-295.

Oakes, J. (1985). Keeping track: How schools structure inequality. New Heven: Yale University Press.

Odden, Allan (1985). District level policies and practices: Supporting effective school management and classroom instruction. In R. Kyle (Ed.) Reaching for excellence: An effective schools sourcebook(p. 100). Washington, DC: National Institute of Education, The Institute.

Odden, Allan, et al (1986). Causal linkages of local school variables associated with successful implication of state education improvement programs. Paper presented at the Annual Meeting of the American Educational Research Association. San Francisco, California, April 16-20.

Office of the National Primary Education Commission, Thailand. (1987a). The use of manuals for the followup and supervision of school administrators [In Thai]. Bangkok: National Primary Education Commission.

Office of the National Primary Education Commission, Thailand. (1987b). National Evaluation results for sixth grade students [In Thai]. Bangkok: Research and Development Section of ONPEC.

Ogundare, S. F. (1988). Curriculum development: A description of the development of national curriculum for primary social studies in Nigeria. Educational Studies, 14 (1): 43-50.

Organization for Economic Co-operation and Development (1989). School and quality: An international report. The author. Paris, France.

Overton J, Aime A (1985). Textbook program in Lesotho. Paper presented at a World Bank seminar on economic choices in the production and distribution of textbooks, Washington, DC

Pablant, P. and Baxter, J. C. (1975). Environmental correlates of school vandalism. Journal of the American Institute of Planners, 241, 270-379.

Passow, A. H., Goldberg, M. and Tannenbaum, A. J. (Eds.), (1967). Education of the disadvantaged: A book of readings. New York: Holt, Rinehart and Winston.

Paulu, Nancy (1989). Improving schools and empowering parents: Choice in American education. US Government Printing Office. Washington.

Paxman, B., Denning, C., and Read, A. (1989). Analysis of research on textbook availability and quality in developing countries, London: Book Development Council. Processed.

Peaker, G. F. (1971). The Plowden children four years later. National Foundation for Educational Research, London

pedagogical Choices in the production and distribution of textbooks.

Pedersen, E., Faucher, T. A. and Eaton, W. W. (1978). A new perspective on the effects of first grade teachers on children's subsequent adult status. Harvard Educational Review, 48, 1 -31.

Perl, L. J. (1973). Family background, secondary school expenditure, and student ability. Journal of Human Resources, 8(2),156-180.

Peterson, P., and Clark, C. (1978). Teachers' reports of their cognitive processes during teaching. American Educational Research Journal, 15, 555-565.

Peterson, P., and Walberg, H. (Eds.), (1979). Research on teaching: Concepts, findings, and implications. Berkeley. Calif.: McCutchan Publishing Corporation.

Peterson, P., Janicki, T., and Swing, S. (1980, October.). Individual characteristics and children's learning in large-group and small-group approaches: Study. II (Tech. Rep. No. 561). Madison, Wis.: University of Wisconsin, Wisconsin Research and Development Center for Individualized Schooling.

Peterson, P., Marx, R., and Clark, C. (1978). Teacher planning, teacher behavior, and student achievement. American Educational Research Journal , 1S, 417-432.

Pfau, R. (1980). The comparative study of classroom behaviors. Comparative Education Review, 24 (30): 400-414.

Phi Delta Kappa(1980). Why do some urban schools succeed?: The Phi Delta Kappa Study of Exceptional Urban Elementary Schools, Bloomington: Phi Delta Kappa

Phillips, D. (1980). What do the research and the practitioners have to offer each other? Educational Researcher, 9, 17-24.

Pierce, L. V. (1991). Effective schools for national origin language minority students. Washington, DC: The Mid-Atlantic Equity Center, The American University.

Pintrich, Paul R.; Cross, David R.; Kozma, Robert B.; and McKeachie, Wilbert, J. (1986). Instructional psychology, Annual Review of Psychology 37 : 611-651.

Plowden Report (The). (1967). Children and their primary schools. Central Advisory Council for Education (England). London: Her Majesty's Stationery Office.

Porter, A., Schmidt, W., Floden, R., and Freeman, D. (1978). Impact on what? The importance of content covered (Research Series No. 2). East Lansing: Michigan State University, Institute for Research on Teaching.

Postlethwaite, K. and Denton, C. (1978). Streams for the future: The long-term effects of early streaming and non-streaming. The Final Report of the Banbury Enquiry. Banbury: Pubansco Publications.

Postlethwaite, T. H. (1975). The surveys of the International Association for the Evaluation of Educational Achievement (IEA): Implications of the IEA surveys of achievement. In A. C. Purvis and D. V. Levine (Eds.), Educational policy and international assessment. Berkeley, Calif.: McCutchen.

Power, C. (1977). A critical review of science classroom interaction studies. Studies in Science Education, 4, 1-30.

Power, M. J., Alderson, M. R., Phillipson, C. M., Schoenberg, E. and Morris, J. N. (1967). Delinquent schools? New Society, 10, 542-543.

Power, M. J., Benn, R. T. and Morris, J. N. (1972). Neighborhood, school and juveniles before the courts. British Journal of Criminology, 12, 111-132.

Prather, C. (Ed.). (1991, December). Educating girls: Strategies to increase access, persistence, and achievement. Advancing Basic education and Literature (ABEL) Project. Washington, DC: U. S. Agency for International Development, Office of Education & Office of Women in Development.

Prawat, R., and Floden, R. (1980). A review of research in education. Elementary School Journal, (in press) psychology of school learning. New York: Academic Press.

Psacharopoulos, G., & Zabalza, A. (1984). The destination and early career performance of secondary school graduates in Colombia. Unpublished document. Washington, DC: The World Bank.

Psacharopoulos, George (1989). Why educational reforms fail: A comparative analysis. International Review of Education.

Pugh, W. C. (1988, a). An analysis of multiple indicators to evaluate school improvement projects. Paper presented at the Annual Conference Of the Eastern Evaluation Research Society, Villanova, PA.

Pugh, W. C. (1988, b). Ethnography and teacher efficacy: the case for collaborative teacher involvement in school effectiveness. Paper presented at the Annual Meeting of the Ethnography in Education Forum, Philadelphia, PA.

Purkey, S., & Smith, M. (1983). Effective schools: A review. Elementary School Journal, 83(4), 427~52.

Purkey, S.. & Smith, M. S. (1985). School reform: The district policy implications of the effective schools literature. Elementary School Journal, 85, pp. 353-389

Purves, A. (1973). Literature education in ten countries. Stockholm: Almqvist & Wiksell.

Quality Education for Minorities Project. (1990, January). Education that works: An action plan for the education of minorities. Cambridge, MA: Massachusetts Institute of Technology.

Ralph, J. H. and Fennesy, J.(1983). Science or reform: Some questions about the effective school model. Phi Delta Kappan, 64(10), 689-694.

Raudenbush, S. and Bhumirat, C. (1989). The effects of educational policy on student achievement and the practice of teaching in Thailand.

Preliminary findings from a national survey. Paper presented at the annual meeting of Project BRIDGES, Bangkok.

Raudenbush, S. W. and Bryk, A. S. (1989). Toward a more appropriate conceptualization of research on school effects: A three-level hierarchical linear model. In R. Darrel Bock (Ed.). Multilevel analysis of educational data. New York: Academic press.

Raudenbush, Stephen W. and Anthony S. Bryk (1986). A hierarchical model for studying school effects. Sociology of Education, 59: 1-17.

Raudenbush, Stephen W. and J. Douglas Willms (Eds.). (1991). Schools classrooms and pupils: International studies of schooling from a multilevel perspective. New York: Academic Press.

Raymond, R.(1968). Determinants of the quality of primary and secondary public education in West Virginia. The Journal of Human Resources. 3(4), 450-470.

Reimers, Fernando (1993). A framework to analyze the implementation of educational innovations in Latin America. Paper presented at the Annual Meeting of Comparative and International Educational Society, Jamaica.

Renihan, P. J., Renihan, F. I., and Waldron, P.(1986). The Common ingredients of successful school effectiveness projects. Education Canada, 26(3),16-21.

Revans, R. W. (1972). Hospitals: Communication, choice and change. London: Tavistock, 1972.

Revans, R. W. (1982). An assessment of adolescent attitudes. In The origins and growth of action learning. Collected papers. London: Chartwell Bratt, in press.

Revans, R. W.(1965). Involvement in school. New Society, 26 August, 9-12.

Reynolds, D., and Stoll, L. (1994). The school effectiveness and school improvement knowledge bases. Paper presented at the 7th International Congress for School effectiveness and Improvement. Melbourne.

Reynolds, D., Jones, D. and St. Leger, S. (1976). Schools do make a difference. New Society, 37, 223-225.

Reynolds, D., Jones, D., St. Leger, S. and Murgatroyd, S.(1980). Schools factors and truancy. In L. Hersov and I. Berg (Eds.), Out of school: Modern perspectives in truancy and school refusal. Chichester: Wiley.

Reynolds, David (1985). Introduction: Ten years on-a decade of research and activity in school effectiveness research reviewed. In David Reynolds (Ed.), Studying school effectiveness. Philadelphia: The Falmer Press.

Reynolds, David and Reid, K. (1985). The second stage: Towards a reconceptualization of theory and methodology in school effectiveness research. In David Reynolds (Ed.) Studying school effectiveness. Philadelphia: The Falmer Press.

Reynolds, David, (1982). The search for the effective schools. School Organization. 2 (3): 215-237.

Reynolds, David, Bert, Creemers and Ton, Peters (Eds.). (1988). School effectiveness and improvement. Amsterdam: Swets and Zet.

Richer, S.(1975). School effects: The case for grounded theory. Sociology of Education, 48, 383-399.

Riddel, Abby R. (1989). An alternative approach to the study of school effectiveness in the third world countries. Comparative Education Review. 33: 481-497.

Riddel, Abby R. and Levi, M. Nyagura (1991). Multilevel analysis of 1989 ZJC results in English and mathematics. World Bank, Population and Human Resources Department (Processed).

Rivarola, D., & Corvalan, J. (1976). Determinante del rendimiento educativo en el Paraguay. Asuncion: ECIEL.

Rivera, C. & Zehler, A.M. Collaboration in teaching and learning - A process model for school-private sector partnerships in science and mathematics. Arlington, VA: Development Associates, Inc. [brochure].

Robitaille, David F. and Robert, A. GArden (1989). The IEA study of mathematics II: context and outcomes of school mathematics. Oxford: Pergamon Press.

Rondinelli, D., Middleton, J. and Verspoor, A. (1990). Planning education reform in developing countries. Contingency Approach. Durham, NC.: Duke University Press.

Rosenberg, N. (1982). Inside the black box: Technology and economics. Cambridge, England: Cambridge University Press.

Rosenholt, S. J. (1985). Effective schools: interpreting the evidence. American Journal of Education. 93 (3), pp. 359-388.

Rosenshine, B. (1980). How time is spent in elementary classrooms. In C. Denham and A. Lieberman (Eds.), Time to learn. Washington, D. C.: U. S. Department of Education.

Rosenshine, B. Content, time, and direct instruction. In P. Peterson and H. Walberg (Eds.),(1979). Research on teaching: Concepts, findings, and implications. Berkeley, Calif.: McCutchan Publishing Corporation.

Rosenshine, Barak, and Furst, Norma. (1973). The use of direct observation to study teaching. In R. M. W. Travers (Ed.). Second handbook of research on teaching. Chicago: Rand McNally.

Rosenshine, Barak. (1968). Behavioral predictors of effectiveness in explaining social studies material. Doctoral dissertation, Stanford University.

Rosenthal, R. (1974). On the social psychology of the self-fulfilling prophecy: Further evidence for Pygmalion effects and their mediating mechanisms. New York: MSS Modular Publications.

Rosenthal, R., and Jacobson, L. (1968). Pygmalion in the classroom: Teacher expectations and pupils' intellectual development. New York: Holt, Rinehart and Winston.

Ross, Kenneth N. and Postlethwaite, T. N. (1992). Indicators of the quality of education: A summary of a national study of primary schools in Zimbabwe. IIEP Research Report No. 96, 67p.

Rossmiller, R. A. (1986). Resource utilization in schools and classrooms: Final report. Wisconsin Center for Educational Research, Madison, WI.

Rossmiller, Richard A. (1983). Resource allocation and achievement: A classroom analysis. In Allan Odden and L. D. Webb (Eds.), School finance and school improvement: Linkages in the 1980's. Cambridge, MA: Ballinger.

Rowan, B. (1985). The assessment of school effectiveness. In R. Kyle (Ed.) Reaching for excellence: An effective schools sourcebook(p. 100). Washington, DC: National Institute of Education, The Institute.

Rowan, B. and Denk, C. E.(1982). Modeling the academic performance of schools using longitudinal data: An analysis of school effectiveness measures and school and principal effects on school-level achievement. San Francisco: Far West Laboratory.

Rowan, B., Bossert, S. T., and Dwyer, D. C.(1983). Research on effective schools: A cautionary note. Educational Researcher, 12(4), 24-31.

Rowe, Mary B. (1974). Wait-time and rewards as instructional variables, their influence on language, logic, and fate control, Part 1. Wait-Time," Journal of Research in Science Teaching .11: 81-94.

Rowley, S. D. Jr. (1992). The consequences of teaching combined grades in Pakistan. Paper presented at CIES Conference in Annapolis, Maryland, March, 1992.

Rugh, A. B. (1989) Effective classroom practices in primary schools of Pakistan. BRIDGES. Papers on Primary Education in Pakistan, Report #8. Cambridge, MA: Harvard University.

Rugh, A. B., Malik A. N. and Farooq, R. A. (1991). Teaching practices to increase student achievement: Evidence from Pakistan. BRIDGES Research Report Series, No. 8. March. Cambridge, MA: Harvard University.

Rutter, M. (1983). School effects on pupil progress: Research findings and policy implications. Child Development, 54, 1-29.

Rutter, M., Maugan, B., Mortimore, P., Oustin, J., and Smith, A.(1979). Fifteen thousand hours: Secondary schools and their effects on children. Cambridge, MA.: Harvard University Press.

Ryan, J. (1973). Educational resources and scholastic outcomes: A study of rural primary schooling in Iran. Unpublished doctoral dissertation, Stanford University, Stanford, CA.

Sabatier, P. (1986). Top-down and bottom-up approach to implementation research: A critical analysis and suggested synthesis. Journal of Public Policy . 6, 1.

Sadker, M., Sdker, D., & Klein, S. The issue of gender in elementary and secondary education. Review of Research in Education, 17. pp. 269-315.

Sanders, James T. (1978). Teaching effectiveness: Accepting the null hypothesis, Journal of Educational Thought 12 : 184- 189.

Santa Clara County Office of Education (1983). School effectiveness program survey: Teacher. San Jose, CA.

Sanyal, B. (1991) Staff management in African universities. Paper presented for IIEP (International Institute for Educational Planning) meeting on Higher Education in Dakar, Senegal, June, 1991. Paris, France: UNESCO.

Sarason, S. (1971). The culture of school and the problem of change (p. 183). Boston, MA: Allyn and Bacon.

Saunders, W. and Valliamy, G. The implementation of curricular reform: Tanania and Papua New Guinea. Comparative Education Review, 27 (3). Chicago, IL.: University of Chicago Press.

Scheerens, J. (1990). School effectiveness research and the development of process indicators of school functioning. In International Journal of School Effectiveness and School Improvement. Netherlands: Lisse, Swets and Zeitlinger.

Scheerens, J. (1992). Effective schooling research theory and practice. London: Cassel.

Schiefebein, E., and Simmons, J. (1981). Determinants of school achievement: A review of research for developing countries. Ottawa: International Development Research Center. (IDRC).

Schiefelbein E, Farrell, J. P. (1973). Expanding the scope of educational planning: The experience of Chile. Interchange 2(1): 18-30

Schiefelbein, E, Farrell, J. P. (1982). Eight years of their lives: Through schooling to the labor market in Chile. International Development Research Center, Ottawa.

Schiefelbein, E. and Farrell, J. (1984, February). Education and occupational Attainment in Chile: The effects of educational quality, attainment, and achievement. American Journal of Education. 125-162.

Schiefelbein, E., & Farrell, J. (1973). Factors influencing academic performance among Chilean primary students. Santiago: Centro de Investigaciones y Desarrollo de la Educacion.

Schiefelbein, E., Clavel, C. (1977). Stability over time of educational input-output relationships. Unpublished document, University of Chile, Department of Economics, Santiago.

Schiefelbein, E., Farrell, J. and Sepulveda-Stuardo, M. (1983). The influence of school resources in Chile: Their effect on educational achievement and occupational attainment. World Bank Staff Working Paper No. 530. Washington, D. C.

Schiefelbein, Ernesto (1975). Repeating: An overlooked problem in Latin American Education. Comparative Education Review, 19 (3): 468-4876.

Schlechty, Phillip C. (1985). District level policies and practices: Supporting effective school management and classroom instruction. In R. Kyle (Ed.) Reaching for excellence: An effective schools sourcebook(p. 100). Washington, DC: National Institute of Education, The Institute.

Schmitt, D. R. (1989). Effective schools research: twenty years of debate. Paper presented at the Annual Meeting of the Eastern Educational Research Association, Swannah, GA.

Schwab, J. (1969, November). The practical: A language for curriculum. School Review, 1-23.

Schweinhart, L., and Weikart, D. (1980). Young children grow up: The effects of the Perry preschool program on use through age 15. Monographs of the high/scope educational research foundation, No. 7, Ypsilanti, Mich.: High/Scope Press.

Schwille, J., Eisemon, T. O., and Prouty, R. (1989). Between policy and students: The reach of implementation in Burundian primary schools. BRIDGES Project Paper presented at the Annual Meeting of the Comparative and International Education Society, Boston, Massachusetts.

Schwille, J.; Beeftu, A.; Navarro, R.; Pronty, R.; Randenbush, 5.; Schmidt, W.; Tsang, M.; & Wheeler, C. (1986). Recognizing, fostering and modeling the effectiveness of schools as organizations in Third World countries. Michigan State University, (Prepared for Project BRIDGES).

Scott-Jones, D. & Clark, M. L. (1986, March). The school experiences of black girls: The interaction of gender, race, and socioeconomic status. Phi Delta Kappan. pp. 520-526.

Sembiring, R., & Livingstone, 1. (1981). National assessment of the quality of Indonesian education. Jakarta: Ministry of Education and Culture.

Shaeffer, S. (1986). Participatory approaches to teacher training. Paper presented at the IMTEC conference on improving the quality of

teachers and teaching in the lesser developed world, Denpasar, Indonesia.

Shaeffer, S. (1990). Educational change in Indonesia. Canada: IDRC.

Sharan, S., and Sharan, Y. (1976). Small-group teaching. Englewood Cliffs, N. J.: Educational Technology Publications,

Shavelson, R. (1981, April).Review of research on teachers' decision making. A paper presented at the annual meeting of the American Educational Research Association, Los Angeles, .

Shoemaker, J.(1982). What are we learning? Evaluating the Connecticut school effectiveness project. Paper presented at the annual meeting of the American Educational Research Association. New York.

Shulman, L. (1978, June). Investigations of mathematics teaching: A perspective and critique (mimeo report). East Lansing: Michigan State University, Institute for Research on Teaching,.

Shulman, L. (1981). Disciplines of inquiry in education: An overview. Educational Researcher, 10, 5-12; 23.

Shulman, Lee S. (1986). Paradigms and research programs in the study of teaching. In Merlin C. Wittrock (Ed.), Handbook of research on teaching, 3rd ed., New York: Macmillan.

Silberman, C. E. (1970). Crisis in the classroom. New York, Vintage Books.

Silvey, J. (1972). Long range prediction of educability and its determinants in East Africa. In L. Cronbach & P. Drenth (Eds.), Mental tests and cultural deprivation (pp. 212-243). Paris: Mouton.

Simmons, J. (1970). Towards an evolution of adult education in a developing country (Vols. 1-2). Paris: UNESCO.

Simmons, J., & Alexander, L. (1978). The determinants of school achievement in developing countries: A review of the research. Economic Development and Cultural Change, 26, 341357.

Skolnick, J., Langbort, C., & DAy, L. (1982). How to encourage girls in math and science. Englewood Cliffs, New Jersey: Prentice-hall, Inc.

Slavin, R. (1980). Cooperative learning. Review of Educational Research, 50, 315-342.

Slavin, R. (in press). A case study of psychological research affecting classroom practice: Student team learning. Elementary School Journal.

Slavin, R. E. (1987). Ability grouping and student achievement in elementary schools: A best-evidence synthesis. Review of Educational Research, 57, pp. 347-350.

Slavin, R. E., Madden, N. A. (1989). What works for students at risk: A research synthesis. Educational Leadership. 46(5): 4-13.

Slavin, S., Leavey, M. B., and Maden, N. A. (1984). Combining cooperative learning and individualized instruction: Effects on student mathematics achievement, attitudes, and behaviors. Elementary School Journal, 84 (4): 409-22.

Smart, M. (1978). The Denzu Times: Selfmade literacy. Development Communication Report, 21, 5 1-73.

Smith, L., and Geoffrey, W. (1968). The complexities of an urban classroom: An analysis toward a general theory of teaching. New York: Holt, Rinehart and Winston.

Snow, Richard E. (1973). Theory construction for research on teaching. In R. M. W. Travers. (Ed.), Second handbook of research on teaching, Chicago: Rand McNally.

Snyder, C. W. (1990). Affective context of schools as a potential indicator of teacher receptivity to instructional change and teacher worklife quality. In Chapman, D. W. and Carrier, C. A. (Eds.). Improving educational quality. Westport, Conn.: Greenwood Press.

Soltz, D. (1976, April). The various teacher: Subject matter, style, and strategy in the primary classroom. A paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Somerset, H. (1968). Predicting success in the school certificate exam: A Uganda case study. Nairobi: East Africa Publishing House.

Sookpokakit, B. (1988). Improving primary school quality in Thailand: A case study of a school cluster. College of Wecuation , Michigan State University, East Lansing, Michigan.

Sorenson, A. B. and Halliman, M. T.(1977). A Reconceptualization of school effects. Sociology of Education. 50, 273-289.

Southwest Educational Development Laboratory, for the Compensatory Education Programs, U. S. Department of Education.(1992). Follow through: A bridge to the future. Austin, TX: Author.

Spencer Hall, D. (in press). The personal lives of teachers. Elementary School Journal.

Spencer, Hall, D.(1981). Looking behind the teacher's back. Elementary School Journal,, 81, 281289.

Spindler, George, and Spindler, Louise., Roger Harder and Schonhausen. (1982). From the familiar to the strange and back again. In George Spindler (Ed.), Doing the ethnography of schooling, New York: Holt, Rinehart and Winston.

Stallings, J. (1980). Allocated academic learning time revisited, or beyond time on task. Educational Researcher, 9(11), 11-16.

Stallings, J. (1985). Effective Elementary Classroom Practices. In R. M. J. Kyle (Ed.). Reaching for excellence: An effective schools sourcebook. Washington, DC: National Institute of Education, The Institute.

Stallings, J., Needels, M., and Stayrook, N. (1979). How to change the process of teaching basic reading skills in secondary schools: Phase 11 and Phase III, Final Report. Menlo Park, Calif.: SRI International.

Stanford Program on teacher effectiveness: An experiment in teacher effectiveness and parent assisted instruction in the third grade. (1978, March). Set of five papers presented at the annual meeting of the American Educational Research Association, Toronto.

Stayrook, Nicholas. (1982). A comparison of two causal models in elementary school reading. Doctoral dissertation, Stanford University.

Stedman, L.C.(1988). The effective schools formula. Phi Delta Kappan. 69(6), 439-442.

Stelcner, M., Arriagada, A., & Moock, P. (1987). Wage determinants and school attainment among men in Peru. Washington, DC: The World Bank.

Stenmark, Jean Kerr. (1989). Assessment alternatives in mathematics - An overview of assessment techniques that promote learning. Berkeley, CA: EQUALS, Lawrence Hall of Science, University of California.

Stinson, T. F. and Krahmer, E. F. (1969). Local School expenditures and educational quality: A correlation analysis. Paper presented at the Annual Meeting of the American Agricultural Economics Association, Lexington, KY.

Stringfield, S. et al (1986). School improvement efforts: Qualitative data from four naturally occurring experiments in phase III of the Louisiana school effective study. Paper presented at the Annual Meeting of the American Educational Research Association. San Francisco, CA.

Strivens, Janet (1985). School climate: A review of a problematic concept. In David Reynolds (Ed.) Studying School Effectiveness. Philadelphia: The Falmer Press.

Stubbs, M., and Delamont, S. (Eds.), (1976). Explorations in classroom observation. London: Wiley.

Summer, A. A. and Wolfe, B. L.(1977). Do schools make a difference? American Economic Review, 67, 639-652.

Suryadi, A., Green, M., and Windham, D. (1981). Teacher quality as a determinant of differential mathematics performance among poor rural children in Indonesia Junior secondary schools. Mimeo.

Tallmadge, G. K. (1973). An analysis of the relationship between reading and mathematics achievement gains and per pupil expenditures in California Title I projects, fiscal year 1972, final report. American Institute for Research in the behavioral Sciences, Palo Alto, CA.

Teddlie, C. and Stringfield, S. (1993). Schools make a difference: Lessons learned from a 10-year study of school effects. New York: Teachers College, Columbia University.

Teddlie, C.; Kirby, P. C. and Stringfield, S. Effective versus ineffective schools: Observable differences in the classroom. American Journal of Education. pp. 231-236.

The Central Institute of Educational Development(1989). Analytic results of the academic achievement examination. Seoul, Korea.

The Mid-Atlantic Equity Center & Andover. (1989). The report Card #1 - The cost of sex bias in schools and society. Updated Edition. Washington, DC: Author. MA: The NETWORK, Inc..

The national education goals report - Executive summary. (1991).

Thelen, H. (1960). Education and the human quest. New York: Harper and Bros..

Thiagarajan, 5., & Pasigna, A. L. (198). Literature review on the soft technologies of learning. BRIDGES Research Report Series.

Thias, H., & Carnoy, M. (1973). Cost benefit analysis in education: A case study of Kenya. Baltimore, MD: Johns Hopkins Press.

Thomas, C., & Shaw, C. (1992, May). Issues in the development of multigrade schools. Washington, DC: World Bank Technical Paper Number 172.

Thomas, Lewis. (1976). The future place of science in the art of healing, Journal of Medical Education 51: 2~29.

Thorndike, R. (1973). Reading comprehension in fifteen countries. New York: Halsted.

Tikunoff, W., Ward, B., and Griffin, G. (1979). Interactive research and development on teaching study (TR & DT-79-11 Final Report). San Francisco: Far West Laboratory for Education Research and Development.

Tom, Alan R. (1984). Teaching as a moral craft. New York: Longman.

Tom, Alan R.(1980). The reform of teacher education through research: A futile quest, Teachers College Record 82: 15-29.

Tsang, M. and Kidchanapanish, S. (forthcoming). Private resources and quality of primary education in Thailand. International Journal of Educational Research.

U. S. Agency for International Development. (1990, February). Female education and fertility - Summary of research findings of BRIDGES and ABEL project. Washington, DC: Office of Education & Office of Women in Development, USAID.

U. S. Agency for International Development. (1990, February). Female education and infant mortality - Summary of research findings of BRIDGES and ABEL project. Washington, DC: Office of Education & Office of Women in Development, USAID.

U. S. Agency for International Development. (1990, February). Female education and labor force participation - Summary of research findings

of BRIDGES and ABEL project. Washington, DC: Office of Education & Office of Women in Development, USAID.

U. S. Agency for International Development. (1990, February). Female education and life expectancy - Summary of research findings of BRIDGES and ABEL project. Washington, DC: Office of Education & Office of Women in Development, USAID.

U. S. Department of Education, Educational Resources Information Center. (1991, October). Striving for excellence: The national education goals. Washington, DC: Author.

U. S. Department of Education. (1991). America 2000 - An education strategy. Washington, DC: Author.

Um, Sangheon. (1990). Factors that relate to student achievement in Korean academic high schools. Dissertation, Ph.D., University of Pittsburgh.

UNESCO (1991). Education for all conferences: Final report. Jomtien, Thailand: UNESCO Publication.

University of Washington(1982). The school self-assessment service: Technical Manual. Seattle, WA.

Van Der Sijde, Pieter C. (1989). The effect of a brief teacher training on student achievement. Teaching and Teacher Education 5 : 303-314.

Veneskie, R.L. and Winfield, L. F.(1979). Schools that succeed beyond expectations in reading (Studies on Education Tech. Rep. No. 1). Newark: University of Delaware. (ERIC Document Reproduction Service NO. ED 177 484).

Verspoor, Adriaan (1989). Pathways to change: Improving the quality of education in developing countries. World Bank Discussion Paper 53, Washington, DC.

Walberg, H. J. and Weistein, T. (1982). The production of achievement and attitude in high school social studies. Journal of Educational Research, 75(5), 285293.

Wang, J. (1989). Improving student achievement: A study of determinants of differential performance in the primary schools of China. Ed.D Dissertation, State University of New York at Albany.

Wang, M., Nojan, M., Strom, C. and Walberg (1984). The utility of degree c implementation measures in program implementation an evaluation research. Curriculum Inquiry, 14 (3).

Warwick, D. (1982). Bitter pills, population policies and their implementatic in eight developing countries. Cambridge, Mass.: Cambridge Universit Press.

Warwick, D. et al (1992). The implementation of educational innovations Lessons from Pakistan. International Journal of Educationa Development. 12 (4); 297-307.

Watchel, P. (1975). The effect of school quality on achievement, attainment levels, and lifetime earnings. Explorations in Economic Research. 2(4), 502-536.

Webb, N. (1977). Learning in individual and small-group settings (Tech. Rep. No. 7). Stanford, Calif.: Stanford University, School of Education, Aptitude Research Project.

Webb, N. (in press). Review from the perspective of instructional processes. Elementary School Journal.

Weber, E. (1978). The effect of learning environment on learner involvement and achievement. Journal of Teacher Education, 29, 81- 85.

Weber, G.(1971). Inner-city children can be taught to read: Four successful schools. Washing, DC: Council for Basic Education.

Webster, W. J. & Olson, G. H.(1988). A quantitative procedure for the identification of effective schools. Journal of Experimental Education, 56(4), 213-219.

Weil, M., Marshalek, B., Mitman, A., Murphy, J., Hallinger, P., and Pruyn, J.(1984). Effective and typical schools: How different are they? Paper presented at the American Educational Research Association. New Orleans.

Weinstein, R. (1976). Reading group membership in first grade: Teacher behaviors and pupil experience over time. Journal of Educational Psychology, 68, 103-116.

Weinstein, R.(1983). Student perceptions of schooling. Elementary School Journal. 83.

Weinstein, R., Middlestadt, S., Brattesani, K., and Marshall, H. (1980, April). Student perceptions of differential teacher treatment. A paper presented at the annual meeting of the American Educational Research Association, Boston.

Wellish, J. B., MacQueen, A. H., Carriere, R. A., and Dick, C.A. (1978). School management and organization in successful schools. Sociology of Education, 51, 211-226.

Wennberg. John E. (1989). Outcomes research and the evaluative clinical sciences at Dartmouth. Hanover, N. H.: Dartmouth Medical School.

West, C., and Anderson, T. (1976). The questions of preponderant causation in teacher expectancy research. Review of Educational Research, 46, 185-213.

Wheeler, C., et al (forthcoming, a). School clusters in Thailand: A management strategy for improving primary school quality. International Journal of Educational Research.

Wheeler, C., Raudenbush, S., and Pasigna, A. (1989). Policy initiatives to improve primary school quality in Thailand: An essay on implementation, constrains, and opportunities for educational improvement (BRIDGES) Research Report Series). Cambridge, Mass.: Harvard Institute for International Development.

Wheeler, C., Raudenbush, S., Kunaak, P., and Pasigna, A. (forthcoming, b). Accountability, capacity-building and enduring dilemmas: Policy initiatives in Thailand from 1980-1988 to improve primary education. International Journal of Educational Research.

Wilcox, B. M. and King, R. A. (1986). Production function revisited in the context of educational reform. Journal of Educational Finance, 12 (Fall), 191-222.

Wilkinson, L., and Calculator, S.(1982). Requests and responses in peer-directed reading groups. American Educational Research Journal, 19, 107-120.

Williams, W. (1980). Implementation in perspective. The Implementation Perspective. Berkeley, CA.: University California Press.

Willson, B. L., Fireston, W. A., and Herriott, R. E.(1985). School Assessment Survey: A Technical Manual. Philadelphia, PA: RBS Inc..

Windham, G. (1970). Occupational aspirations of secondary school students in Sierra Leone. Rural Sociology, 35(1), 40-53.

Windham, M. Douglas (1990). Improving the efficiency of educational systems: Indicators of educational effectiveness and efficiency. USAID, USA.

Winkler, D. R.(1975). Education achievement and school peer group composition. Journal of Human Resources, 10(2),189-205.

Witte, John F. and Daniel E. Walsh (1990). A systematic test of the effective school model. Education Evaluation and Policy Analysis, 12 (2): 188-212.

Wolff, L. (1970). Why children fail in first grade in Rio Grande do Sul: Implications for policy and research. Washington, DC: U. S. Agency for International Development.

World Bank. (1990). Primary education. A World Bank Policy Paper. Washington, DC: Author.

Youdi, R. (1971). An exploratory study of achievement and attitudes of high school students in the Congo: An aspect of socialization for national development. Unpublished doctoral dissertation, Stanford University, Stanford, CA.

Zahorik, J. (1981). Using insights in education. Journal of Teacher Education, 32, 10-13.

Zeller, R. A. and Carmines, E.G.(1980). Measurement in the social sciences, New York: The Press Cyndicate of the University of Cambridge.

Zirkel, Perry A. and Scott C. Greenwood (1987). Effective schools and effective principals: Effective research? Teachers College Record, 89 (2): 255-267.

Zumwalt, Karen K. (1982). Research on teaching: policy implications for teacher education. In Ann Lieberman and Milbrey W. McLaughlin (Eds.). Policy making in education, 81st Yearbook of the National Society for the Study of Education, Part 1, Chicago: University of Chicago Press.

Attachment 5

Fiscal Years 1 and 2:
Activities and Accomplishments

FISCAL YEAR 2 *(October 1992-September 1993)*
Activities and Accomplishments

Month	Knowledge-Building	Country Activities	Contact with R&D Community	Administrative	Requirements Contract
October 1992		Ghana: IEQ staff launched the project; took part in UCC's Seminar on Primary School Education Reform in Ghana; submitted MOU draft to the Mission; held a conference on project design; prepared Terms of Reference for the Research Team Leaders; and researched options for equipping the new CRIQPEG office. Mali: Visited Mali to discuss the MOU with the Mission and to hold discussions with the Institut Supérieur de Formation et de Recherche Appliquée Nationale (ISFRA) and the Institut Pédagogique Nationale (IPN) on potential project collaboration.		Submitted *Trip Report #6: Ghana and Mali.*	Delivery Order 1: IEQ began activities under the Requirements Contract, via the Africa Bureau Buy-In. Diane Prouty joined IEQ as the Buy-In's Education Policy Analyst.
November 1992	Distributed Don's paper (*Defining Educational Quality*) at the Year One Outcomes Meeting and solicited comments.	Mali: Steve invited ISFRA and IPN to conduct three preliminary studies. Both institutions agreed to participate in these projects and ISFRA submitted a budget for its tasks.	Jane, Don, Leo and Mark gave a presentation on IEQ activities at the American Educational Studies Association Convention.	IEQ hosted a Year One Outcomes meeting. IIR, Juarez, Pittsburgh, R&D/Ed, Africa Bureau, LAC Bureau, WID Office, FWL, NCAL, and the Dept of Education participated to discuss past and future project activities and to raise issues of concern. Submitted *Trip Report #7: Guatemala.*	Delivery Order 1: Ash Hartwell joined the IEQ staff as the Buy-In's Quantitative Education Planner.
December 1992	Established a definitional framework on educational quality.	Mali: We received five brief papers identifying issues in language instruction for discussions in Mali.	NCAL submitted its review of the literature on the issue of teaching handwriting for discussions in Mali.	Submitted IEQ's Technical Report #3: *Annual Report.*	

FISCAL YEAR 1 *(October 1991-September 1992)*
Activities and Accomplishments

Month	Knowledge-Building	Country Activities	Contact with R&D Community	Administrative	Requirements Contract
June 1992				Dr. Pat Campbell led an IEQ seminar, Issues of Research, Measurement and Equity. Submitted IEQ's Technical Report #2, *Nine Month Report.* Submitted *Trip Report #3: Honduras.* Submitted *Trip Report #4: Guatemala.*	
July 1992		Ghana: Jane and Steve visited Ghana to continue talks on IEQ project implementation. Chose the University of Cape Coast as IEQ's institutional partner, selected the Research Coordinator and Research Team Leaders, discussed MOU with Mission, drafted Terms of Reference for the National Advisory Committee, and met with the Ministry and the Ghana Education Service.			
August 1992	Don Adams submitted a preliminary draft of *Defining Educational Quality* for IEQ staff review.	Mali: Jane and Steve made preliminary visit to Mali, held discussions with Mission and Ministry staff, and identified potential collaborators and study topics for IEQ.		Submitted *Trip Report #5: Ghana and Mali.*	
September 1992				Held first IEQ Retreat to discuss project status and forthcoming activities.	

FISCAL YEAR 2 *(October 1992-September 1993)*
Activities and Accomplishments

Month	Knowledge-Building	Country Activities	Contact with R&D Community	Administrative	Requirements Contract
March 1993	Pittsburgh submitted a plan for IEQ knowledge building activities for life of project. Submitted proposed plan for the International Coordinating Committee on Educational Quality to COTR.	Ghana: Dr. Frimpong replaced Dr. Yakubu as RTL. Guatemala: Completed training of field workers and test administrators, collected quantitative and qualitative data in experimental schools, and began data entry. Mali: Completed drafts of cooperative agreements for ISFRA and IPN. Uganda: Jane's visit further explored using a buy-in to develop institutional linkages and to provide information via a research program about the progress of educational reform.	Jane, Don, and Mark Ginsburg delivered a presentation on IEQ at the CIES meeting in Jamaica. Jane, Paul and Diane attended the A.I.D. workshop on *Rethinking the Learning Community*. Far West Lab submitted report on relevant research and instruments on children's capacity to learn upon school entry.		Delivery Order 1: Diane visited USAID/Mali to provide technical support to the WID officer and to work on upcoming evaluation activities.

FISCAL YEAR 2 *(October 1992-September 1993)*
Activities and Accomplishments

Month	Knowledge-Building	Country Activities	Contact with R&D Community	Administrative	Requirements Contract
January 1993	Circulated the revised definition of educational quality. Submitted IEQ Publication #1: Biennial Report, Don's *Defining Educational Quality.* This document was translated into Spanish and French.	Ghana: UCC received computers and printer for the CRIQPEG office. Mali: Steve visited Mali to continue discussions with ISFRA and IPN on their proposed studies, staffing plans and budget requirements. Guatemala: The HCRT Coordinator acquired research facilities in Guatemala City.	Steve visited UNESCO headquarters in Paris to discuss alternative forums for holding round table discussions on ongoing research on educational quality with individuals involved in educational quality. Gretchen Hummon obtained memberships in ASCD networks and AERA special interest groups. Jane, Ray and Diane attended NCAL's *Literacy and Development Workshop.*	IIR received NCAL's signed contract. Submitted *Trip Report #8: Mali.*	
February 1993	Don submitted the next draft of *Implementing Change in Educational Quality.* IEQ core staff met with Robert Leestma (OERI) and Jerry Strudwick (IIR) to clarify and plan IEQ's knowledge-building activity.	Ghana: Jane's visit to Ghana included a 4-day workshop with the UCC Research Team; completion of data collection forms and procedures; collection of initial data in the sample of Central Region schools; presentation about IEQ to Donor's meeting; and clarification of the research focus on the use of instructional materials. South Africa: Jane and Paul Spector conducted IEQ's first country visit to South Africa.		Submitted *Trip Report #9: Ghana.* Submitted *Trip Report #10: Guatemala.*	Delivery Order 1: Diane and Ash attended the HRDO meeting in Abidjan.

FISCAL YEAR 2 *(October 1992-September 1993)*
Activities and Accomplishments

Month	Knowledge-Building	Country Activities	Contact with R&D Community	Administrative	Requirements Contract
June 1993	Distributed Don's biennial publication: *Defining Educational Quality.*	Mali: IPN conducted field research.	Attended USCEFA-sponsored symposium on *Integrating Social Services and Education*	Gretchen arranged a tour of educational centers in the D.C. area for Fioni Murray, Queenstown Early Learning Center (South Africa). Submitted Technical Report #4, *Semi-Annual Report.* Submitted *Trip Report #13: Ghana.*	Delivery Order 1: Diane provided technical support on gender and quality issues to Guinea.
July 1993	Don submitted revised version of the *Plan for IEQ Knowledge Building.* Submitted Mark Ginsburg's paper, *Choices in Conducting Classroom-Anchored Research to Improve Educational Quality in Developing Countries.*	Ghana: CRIQPEG submitted draft of research reports. Guatemala: Kjell Enge assisted HCRT in quantitative test data analysis, reviewed qualitative data, checked coding, and set up electronic mailing capability. Mali: IPN completed field work.		IEQ staff and consultants met for a Research Design Meeting for the core countries.	Delivery Order 1: Ash travelled to Lesotho to assist with the basic education program implementation and to present a paper on school quality at the BOLESWA conference.
August 1993	Distributed Don, Ray, and Pat Campbell's paper, *The Value of Cross-Country Comparisons*	Guatemala: HCRT completed pretest data analysis and developed post-test analysis plan.		Submitted *Trip Report #14: Guatemala.* Held meeting on Ghana design.	Delivery Order 2: Submitted proposal for South Africa buy-in to Contracts.

FISCAL YEAR 2 (*October 1992-September 1993*)
Activities and Accomplishments

Month	Knowledge-Building	Country Activities	Contact with R&D Community	Administrative	Requirements Contract
April 1993		Ghana: Steve visited Ghana in order to discuss the RTL's research findings and recommendations for workshop topics. Guatemala: The MOU received signatures from all parties and classroom observations began. Mali: Steve and Josh Muskin conducted a training seminar for IPN and ISFRA. IPN and ISFRA signed cooperative agreements. South Africa: Received positive feedback to our paper outlining possible IEQ contributions under a buy-in. Responded to Mission's questions and submitted a budget. Uganda: Submitted a paper on potential IEQ activities under a Mission buy-in.	Jane and Bob Leestma gave a presentation on IEQ to Directors of Regional Educational Laboratories.	Submitted *Trip Report #11: South Africa and Uganda.*	Delivery Order 1: Ash travelled to Malawi, Swaziland and Paris. Diane visited Botswana and South Africa.
May 1993		Ghana: Jane, Don Adams and Abi Harris conducted a seminar with Research Team Leaders which focussed on research outcomes of the preliminary study.	IEQ hosted a 2 day seminar on knowledge building and utilization which included representatives from all of R&D/Ed's major projects.	Submitted *Trip Report #12: Mali and Ghana.*	Delivery Order 1: Ash and Diane modeled the database to the ARTS/HHR/ED team and demonstrated ways in which the information could be used.

FISCAL YEAR 1 *(October 1991-September 1992)*
Activities and Accomplishments

Month	Knowledge-Building	Country Activities	Contact with R&D Community	Administrative	Requirements Contract
October 1991			IEQ team members attended the U.S. Coalition for Education for All Conference.	IEQ team members met and held the first Project Steering Committee meeting to begin project planning.	
November 1991			Gave a presentation at the Office of Educational Research and Improvement's National Forum on Research, Development and Dissemination.		
December 1991					
January 1992				Jane Schubert and Ray Chesterfield met with the Institute for International Studies and the Learning Research and Development Center at Pittsburgh to introduce the project. Conducted two workshops for A.I.D./W participants to develop a functional definition of quality and hosted a seminar on Assessment Issues and Options, presented by James Royer of the University of Massachusetts.	
February 1992		Jane and Ray visited three Latin American candidate countries: El Salvador, Guatemala, and Honduras.			

FISCAL YEAR 1 *(October 1991-September 1992)*
Activities and Accomplishments

Month	Knowledge-Building	Country Activities	Contact with R&D Community	Administrative	Requirements Contract
March 1992		Jane conducted initial site visits to Ghana and Uganda with COTR.	Gave a presentation at the 36th Comparative and International Education Society Conference, which focussed on the Crisis in the Quality of Education.		
April 1992	Submitted Leo Klopfer's *Guide to Information Sources - A Description of Work in Progress*, IEQ's Technical Report #1.		Jane attended the American Educational Research Association Conference. Collected numerous papers that were presented at AERA.	Held a one-day project management meeting to discuss contract obligations and project activities. Submitted *Trip Report #1: El Salvador, Guatemala, and Honduras.* Submitted *Trip Report #2: Ghana and Uganda.*	
May 1992	Senior staff met in Pittsburgh to discuss knowledge-building activities, including the Biennial Publication and Occasional Papers.	Ray and David Plank visited Guatemala and Honduras. Guatemala: produced an implementation schedule to collect baseline data, completed groundwork for the Memorandum of Understanding (MOU), refined possible research topics and identified potential HCRT and Advisory Board members. Honduras: submitted Scope of Work reflecting background research suggested by the USAID Education Officer.		Arranged for a study tour visit for Dr. Medjomo Coulibaly, Regional Education Advisor from USAID/REDSO in Abidjan. Dr. Coulibaly also lead a seminar for IEQ and USAID/W on education in Western and Central Africa.	

FISCAL YEAR 2 *(October 1992-September 1993)*
Activities and Accomplishments

Month	Knowledge-Building	Country Activities	Contact with R&D Community	Administrative	Requirements Contract
September 1993	Distributed *Occasional Paper #1: Research Reports on Availability and Utilization of Materials in the Central Region of Ghana: Phase 1 Study.*	Ghana: Three Research Team Leaders visited U.S. schools and educational institutions and attended workshops on evaluating language proficiency, curriculum based assessment, Phase II design, and reading outcomes Guatemala: Ray and Kjell calibrated observational data across observers, helped develop video record of classrooms, and discussed feedback mechanisms with Ministry personnel. Mali: One ISFRA and two IPN representatives visited U.S. schools and educational institutions and attended workshops on analyzing and presenting qualitative data, reading outcomes, and research design. Jane and Don travelled to Mali.	IEQ hosted the International Exchange on Educational Quality, 23-24 September. Jane, Steve, Don held discussions with Dieter Berstecher, UNESCO, regarding plans for next year's International Exchange on Educational Quality.	IEQ Retreat at Harpers Ferry with IEQ staff, consultants, and representatives from Ghana and Mali. Distributed the premier issue of *The Quality Link*, IEQ's newsletter.	Delivery Order 1: Distributed the first issue of EDNET, a network newsletter for A.I.D. education staff in Africa.

IMPROVING EDUCATIONAL QUALITY PROJECT

The Quality Link

Summer 1994 | *The Newsletter of the Improving Educational Quality Project* | Number 3

New Directions in Foreign Language Teaching and Learning *by Rick Donato*

Classroom foreign language learning has recently become the topic of intense research. The results of this research have challenged the traditional belief that language learning can be achieved through the memorization of vocabulary lists, grammatical rules, syntactic patterns, and unauthentic dialogues. Research has also shown that using the foreign language for real purposes in normal conversational and literate ways results in language development. Conversely, foreign language instruction emphasizing low-level drill, repetition, and memorization is destined to student failure and teacher frustration.

As is well known, the language learning situation in Mali represents a case of *foreign* language learning as opposed to *second* language learning. In a second language situation, the learning of the new language takes place in a context in which the language is used extensively by native speakers. In the case of foreign language instruction, language learning takes place in a context where a language other than the new language is spoken as the first language. In Mali, although French is the national language, a child learns first to speak a vernacular language spoken in the home and community. Thus, a relatively small percentage of students bring to the classroom well developed oral ability in French. This situation makes the research on foreign language all the more relevant to Malian children who are required at the onset of schooling not only to learn a new way of coding

(continued on page 11)

Table of Contents

Ghana 2

Guatemala 4

IEQ Partner: IISE at the University of Pittsburgh 5

IEQ Forges Professional Linkages 6-7

Mali 8

South Africa 9

What a Moment!: A New South Africa 9

USCEFA Conference: The Revolution in World Education .. 10

INSERT:

- *Complexity Theory & Learning*
- *Upcoming Events*

UGANDA JOINS IEQ!!!

IEQ welcomes Uganda to the IEQ partnership. IEQ will work with the Uganda National Examinations Board (UNEB) to assist the Government of Uganda's long-term effort to rehabilitate primary education. The Primary Education Reform Program (PERP) is supported by USAID through the Support to Ugandan Primary Education Reform (SUPER) Program, the World Bank through the Primary Education and Teacher Development Project and by various other donors and NGOs. These reforms aim to improve students' mastery of literacy, numeracy, and other basic skills; improve schools administration, management, and accountability; and reduce inequities among different groups of children.

IEQ and UNEB will launch their program in October 1994. UNEB, which was formed in 1980 as a professional testing institution, will be responsible for overseeing a competitive research program that enables a broad range of researchers to design and conduct studies linked to the reform.

IEQ's research objectives include:

- illuminating the progress and the impact of efforts to reform and rehabilitate primary education in Uganda.
- responding to the information needs expressed by key stakeholders in primary education.
- providing formative information that can feed into the design and correction of interventions and validate policy reforms in primary education.
- providing information on the impact of educational reforms and other efforts to improve educational quality as these efforts mature.
- contributing to baseline data on the primary education system in Uganda.

Preliminary plans are underway for hiring Ugandan staff, establishing a UNEB/IEQ office, developing procedures for conducting research, and holding a start-up conference for the Ugandan educational community.

41

IEQ in Ghana

Project Summary: GHANA

In Ghana, IEQ's effort is linked to the Government of Ghana/USAID Primary Education Program (PREP). IEQ's collaborating institution in Ghana is the University of Cape Coast's Centre for Research on Improving Quality of Primary Education in Ghana (CRIQPEG). The first phase of IEQ research examined the availability, source, and use of materials in six schools in the Central Region. Now, CRIQPEG is turning research into action! Initial Phase II research activities developed profiles of the English language proficiency of children in grades 2-5. CRIQPEG assessed the reading, writing, and oral language abilities of over 1000 children in 14 schools in the Central and Western regions. CRIQPEG is sharing these research findings with circuit supervisors, head teachers, and teachers to improve language learning in seven participating schools.

Last fall, the CRIQPEG team developed curriculum-based assessment instruments for oral language, reading, and writing using the syllabi and textbooks from Ghanaian primary schools. In each area, the skills assessed range from very basic (e.g., letter recognition and responding to simple oral questions) to grade level appropriate (e.g., reading a passage of average difficulty from the English textbook with a least 70% accuracy). The instruments were pilot tested, revised, and administered in January and February. Individual results were aggregated by classroom, school, and overall.

The most common learning difficulties revealed by the performance assessment are in the areas of listening comprehension, oral and written expression, and reading, both decoding and comprehension. This performance pattern seems to reflect an emphasis on copying and choral repetition as opposed to comprehension and open-ended oral or written expression. Further, results indicate that most pupils have not mastered the language skills necessary for basic oral and written English communication. This confirms the hypotheses generated by the Phase I research that children do not have the skills to use textbooks efficiently and that they need more opportunities to practice and apply beginning English skills.

Findings

Oral Language: The oral language assessment includes functional, listening comprehension, and oral expression questions. Performance on questions measuring basic functional English (e.g., "How old are you?") suggests that pupils acquire functional English throughout primary school. In second grade, only 13% of the pupils perform at the full mastery level, whereas by fifth grade, more than half of the pupils demonstrate full mastery and fewer than 10% performed at the non-mastery level. On listening comprehension questions (e.g., "Point to the black goat."), pupil performance is uneven. Across the grade levels, the majority of children perform at a partial mastery level. Pupils experience the most difficulty on questions requiring them to express themselves orally. For example, over 85% at all grade levels assessed perform at the non-mastery level and almost none (less than 2% overall) of the children perform at a full mastery level.

Reading: Pre-reading includes skills such as letter recognition and basic questions about print, as well as reading skills involving word and passage decoding and passage comprehension. On the pre-reading skills, there was a steady growth from second to fifth grade. About 1/4 of the grade 2 pupils performed these skills at a full mastery level.

One reading assessment task required children to read lists containing the most common words used in the Ghanaian textbooks. When children had difficulty decoding these words independently, the CRIQPEG examiners simplified the task to word recognition. This "aided" reading task provides a diagnostic bridge between pre-reading and reading. At each grade level, a greater percentage of children could recognize the words than could read them. Also, there was a steady increase in the proportion of children who demonstrated full mastery from 3% at grade 2, to 40% at grade 5.

When children read and responded to comprehension questions on passages from the English textbooks, several important findings emerged. First, a substantial proportion of the children at all grade levels are non-literate (i.e., unable to read 30% of the word in a primary school passage). Even at grade 5, 40-50% of the children are unable to decode typical passages from the 2nd, 3rd, 4th, and 5th grade books. Only about 1/6 of the grade 4 children and 1/3 of the grade 5 children can decode with at least 70% accuracy. CRIQPEG also found that even when the children can decode accurately, reading comprehension is very low (regardless of grade level). When performance of upper primary pupils is examined, data suggest that passages in the 2nd and 3rd grade textbooks and not easier than passages in the 4th and 5th grade textbooks. A review of the reading rate (words per minute) is being conducted to evaluate this preliminary finding.

Writing: While most Ghanaian children can copy letters (93% by grade 3 and 99% by grade 4) and write their names (60% by grade 3, 79% by grade 4, 95% by grade 5), they have more difficulty when asked to write words. The children were encouraged to write any words that they knew and were prompted with possible words. Not surprisingly, the younger children found this task more difficult. Seventy-five percent of second grade pupils and 57% of third grade pupils wrote fewer than six words (including their names). By fifth grade only 31% of the pupils wrote fewer than six words and almost half of the pupils wrote more than 15 words.

(continued on next page)

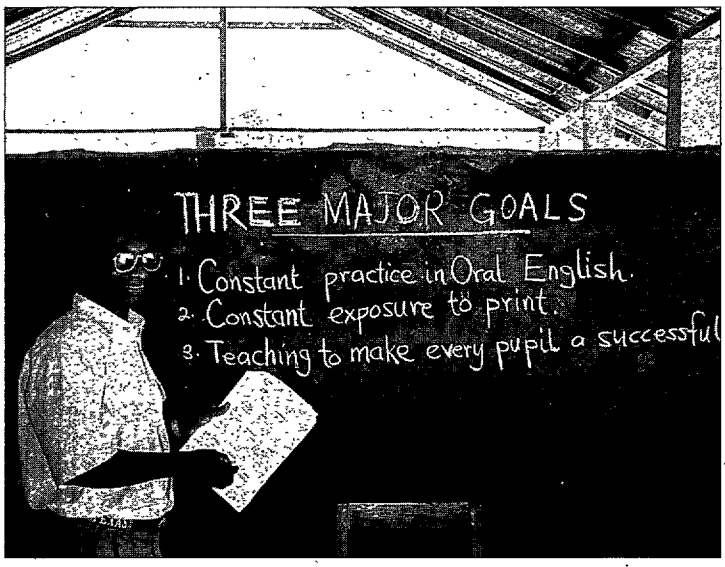
412

Interviews and Classroom Observations

In conjunction with assessing pupil performance data, CRIQPEG collected extensive interview and observational data. The team interviewed circuit supervisors, head teachers, teachers, parents, community leaders, and pupils to gain insight into the factors affecting language learning. Classroom observations assessed existing instructional practices and the children's current exposure to printed and oral English in the classroom and school. The findings will be reported in the next issue of **The Quality Link**.

Transforming Research into Improved Practice

From the beginning, CRIQPEG team members have been committed to expanding the research agenda to active participation in improving Ghanaian primary education. Thus, the Phase II design uses research findings from the 14 schools as the basis for identifying potential strategies for improving English learning, then collaborating with local educators to introduce these strategies into seven of the 14 schools. In May, CRIQPEG identified three major instructional goals: (a) constant practice in oral English, (b) constant exposure to print, and (c) instruction geared towards making every pupil a successful learner. CRIQPEG team members, head teachers and circuit supervisors from the seven intensive intervention schools, worked with Aida Pasigna of the Institute for International Research and Abi Harris of Fordham University to refine these goals and to develop strategies for implementing them.



The three major instructional goals of the Phase II intervention.

The first two goals require as much "immersion" as possible in oral and written English--increasing proportionately in both frequency of usage and scope of content and skills as the grade level goes up.

- The first goal encourages teachers to **constantly use English so as to provide practice in both listening comprehension and oral expression,** particularly in meaningful situations and in routine classroom activities.
- The second goal encourages teachers to **surround the pupils with reading opportunities** -- e.g., taping printed labels on common objects found in the classroom, using the textbooks as frequently as possible, allowing the pupils to take the textbooks home, obtaining food labels, old newspapers and magazines, and having the pupils circle all the words they can read from these materials and cut out words, phrases or sentences they recognize to make flashcards; etc.
- The third goal **insures that learning <u>does</u> take place after initial instruction by providing timely and appropriate remedial help** to the pupils who have learning difficulties. This goal borrows basic concepts in teaching-learning from the mastery learning model, emphasizing that the school and the teachers' main responsibility is to help all pupils to learn by giving pupils the opportunity to attain their fullest potential.

Collaboration, Partnerships, and Research

Working together at each of the seven intensive intervention schools, CRIQPEG team members, head teachers, and circuit supervisors discussed the research findings and the three major instructional goals with classroom teachers. CRIQPEG offered support and encouragement for teachers to reflect on how the findings pinpoint opportunities for improving how they teach and what students learn.

Next Steps

In the 1994-95 school year, CRIQPEG will continue to collaborate with local educators in the intervention schools. The instructional goals will be reinforced by introducing more strategies such as pupil peer tutoring and other ideas for helping teachers to manage teaching, remediation, and enrichment within the same classroom.

Research into the factors affecting language learning and textbook usage will continue. USAID has helped the project immensely by expediting the process of securing enough textbooks for all 14 Phase II schools. This makes it possible for CRIQPEG to compare textbook usage in the seven intervention schools and the remaining Phase II schools. CRIQPEG hopes to provide USAID and Ghanaian educational leaders with suggestions for enhancing the usefulness of Ghanaian textbooks and improving language learning.

Beatrice Okyere & Abi Harris

IEQ in Guatemala

Project Summary: GUATEMALA

In Guatemala, IEQ is working with the Ministry of Education to study the implementation and impact of Nueva Escuela Unitaria (NEU), Guatemala's adaptation of Colombia's Escuela Nueva program. NEU's principle characteristic is multi-grade classrooms, in which children are divided into groups by grade level, participate in peer teaching, use instructional guides, learn in activity centers, and receive individualized instruction from teachers. The NEU program is being implemented in 100 schools. IEQ is studying a 10% sample of schools in two regions, one with a predominantly indigenous population and one with non-indigenous, or ladino, children.

During the 1993 school year, which corresponded to the first full year of the NEU program, IEQ conducted testing and classroom observations of first and second grade children at 10 experimental schools and 10 comparison schools. IEQ's design was a pre-post study for second graders and a post-test-only study for first graders. Children were tested on reading, mathematics, creativity, and self-concept. Spanish language proficiency was also assessed in the region with a predominately indigenous population. In addition, IEQ observed a subsample of experimental and comparison children at each of the study schools for two month-long periods during the school year. Twice during the school year, IEQ questioned parents and teachers regarding their satisfaction with the curriculum. IEQ assessed the differences in the test performance of experimental and comparison children and by gender and language. Observational data were coded by the nature of the interaction engaged in by the target child and these interaction codes were summarized and correlated with the children's academic performance on the tests. IEQ researchers also gathered information on how well the NEU program has been implemented, based on four areas: schedule and organization; physical space; instructional materials; and instructional strategies.

Overall, higher academic achievement was found in the experimental schools carrying out the NEU program as it had been designed.

In Region II, where the NEU program was fairly well implemented in four of the five experimental schools, the significant differences in test scores favored the NEU children on eleven of twelve comparisons. These results were consistent for both schools in Alta Verapaz, a Mayan-speaking area, and Baja Verapaz, a Spanish-speaking area.

In Region IV, however, the NEU program was well implemented in only two of the five experimental schools. In that region, only one of the four significant differences found between experimental and comparison children favored NEU.

Where the NEU program is well implemented, it can contribute to increasing cross-sex interactions and to girls' achievement.

One of the hypotheses of decentralized programs such as NEU is that they allow children of different sexes greater access to each other, thereby helping to break down traditional stereotypes. To investigate this contention, IEQ calculated the relative frequencies of interactions with same and opposite sex peers. In Region II, girls in both first and second grade at each NEU school interacted with boys with greater frequency than girls in the corresponding comparison schools. This trend was not found in Region IV, however, where girls in both types of schools had similar interaction patterns.

In Region II, eight of the nine significant test results favored NEU girls. In Region IV, three of four significant differences favored girls in the comparison schools.

Use of both Mayan and Spanish by children whose dominant language is Mayan is significantly related to achievement in NEU schools.

At the time of the pre-test, Mayan children participating in the NEU program were significantly less proficient in Spanish than the comparison children. However, by the post-test, NEU children performed as well as the comparison children on all Spanish reading measures.

Despite similar overall patterns of language use, the relationship of language use to academic performance differed greatly in NEU and comparison schools. The use of Spanish was significantly correlated with vocabulary, comprehension, overall reading and mathematics at the first grade level in NEU schools. Spanish comprehension was also correlated with the use of the Mayan language, suggesting that constructing knowledge in the native language aids children in understanding the content presented in a second language. No significant relationships were found between language use and achievement among first graders in comparison schools.

In schools where the program was well implemented, both malnourished and well-nourished children participating in NEU had higher academic achievement than comparison children.

The mediating factor in the relationship between nutrition level and achievement in the NEU schools is context and the type of interaction that this new methodology provides. Where teachers implemented an active teaching style, the pupils with a low level of nutrition were compelled to participate in the classroom activities despite their low activity level and tendency toward isolation. This did not occur where the NEU program was poorly implemented or in traditional schools.

Parents generally had highly favorable perceptions of the NEU program.

By the end of the school year, parents who had children in the NEU program were more satisfied with changes in the school than those parents

(continued on next page)

IEQ conducted testing and classroom observation of 1st and 2nd graders at 10 experimental and 10 comparison schools in Guatemala.

who had children in traditional schools. Furthermore, the percentage of drop-outs from NEU schools was significantly lower than that of comparison schools. These two findings are yet more relevant if it is considered that the parents of the NEU schools have an average education significantly lower than that of the parents in the comparison schools.

Implications

IEQ's findings suggest several implications:

Carrying out strategies that allow children to interact with teachers and peers to construct meaning is essential to increased academic achievement.

Children in well-implemented NEU classrooms tended to work with teachers, peers, and materials in a decentralized manner. In less successful NEU schools, the teacher usually initiated and evaluated the discourse related to knowledge acquisition, thus requiring students to perform in ways that met the teacher's expectations. Students internalized knowledge through memorization but were not allowed to discover knowledge on their own, as occurred in well implemented NEU schools.

The decentralized constructivist approach of NEU has potential for aiding second language acquisition in rural schools serving indigenous populations.

Young children were observed to use both Spanish and Q'eqchi' to further their comprehension of subject matter in the NEU schools. The freedom to work with and alter the content and context of classroom discourse appears to aid in acquisition of both vocabulary and comprehension in a second language.

In a large-scale pilot project, a single year of implementation is not sufficient to see changes in academic achievement or classroom strategies at all schools.

Although all schools had the physical setting and materials of a NEU program, not all had mastered the program's instructional strategies. While students in the less successful NEU schools were organized in small groups, their tasks were often those of drill and memorization common to the traditional multigrade schools. Greater success had been achieved in one region of the pilot project than in the other, but both regions contained schools that had not effectively implemented the NEU's instructional strategies by the end of the first year.

Yetilu de Baessa & Ray Chesterfield

IEQ Partner:
IISE at the University of Pittsburgh

The University of Pittsburgh's Institute for International Studies in Education (IISE) is one of the three U.S.-based institutions that make up the IEQ Project team. Founded in 1787, the University has a student body of approximately 30,000 (1/3 graduate students) and more than 2,600 full-time faculty.

Pitt, as the University is informally known, has a well-established track record and an outstanding reputation for internationally-oriented research, teaching, and service. Approximately half of the School of Education's 120 faculty members have extensive international experience and interests. In its four departments -- Administrative and Policy Studies; Health, Physical and Recreational Education; Instruction and Learning; and Psychology in Education — these international functions are coordinated and performed by IISE.

IISE's goals are to: 1) encourage and facilitate international scholarship in education; 2) recruit and attract internationally-oriented students from the USA and abroad; 3) develop school and university curricula with international content; and 4) support technical cooperation projects and specialized training programs for international educators and policy makers. IISE-coordinated initiatives also involve faculty from other departments in the University, teachers and administrators of local school districts and colleges, and senior scientists associated with Pitt's Learning Research and Development Center.

In addition to IEQ, IISE has collaborated on several major projects such as:

- the Foreign Language and International Studies in Schools Project;
- the Indonesian Integrated Management Educational Program;
- an in-service program in Francophone Africa for teachers of French;
- a Latin American studies outreach to teachers of Spanish and social studies;
- networking with Mongolians involved in reforming labor force participation;
- staff development for Indonesia's Examination Center;
- a short course on technical, practical, and theoretical issues for Indonesian educational policy analysts.

IEQ FORGES PRO

IEQ creates opportunities for dialogue and partnerships among researchers and educators

IEQ ON EMAIL

Many people involved in the Improving Educational Quality Project can now be reached by electronic mail, including the host country research teams in Mali and Guatemala. This linkage has greatly facilitated the information exchange throughout the project. Following is a short list of IEQ staff and their email addresses. For a more complete list, please contact Ina Laemmerzahl at IIR.

Jane Schubert, Project Director: ..... 72620.602@compuserve.com
Ray Chesterfield, Associate Director: ..... juarezdc@access.digex.net
Don Adams, Knowledge Building Specialist: ..... adams@vms.cis.pitt.edu
IEQ/Guatemala: ..... ieqgt@huracan.cr
IEQ/Mali: ..... diarra@paqe.isfra.ml

MALI ➜ GHANA

In April, IEQ sponsored the first ever dialogue among Mali's educational stakeholders. (See page 4.) Two professors from the University of Cape Coast, IEQ's institutional partner in Ghana, attended this landmark event and shared the Ghanaian perspective on strategies to improve language learning.

GHANA, GUATEMALA, MALI ➜ USA

Representatives from IEQ's three Host Country Research Teams -- Beatrice Okyere and Francis Amedahe (Ghana), Yetilu Baessa and Erick Macz (Guatemala), and Sékou Diarra and Brehima Tounkara (Mali) -- conducted a study tour to the U.S. in March. The purpose of the trip was to present IEQ's research at the annual Comparative and International Education Society (CIES) conference in San Diego and to participate in a series of professional development activities organized by the Universit Pittsburgh's Institute for International Studies in Education (IISE).

IEQ's two-session panel presentation, "Improving Educational Quality: Classroom and School Level Research and Practic Ghana, Guatemala, and Mali," featured as one of the CIES program highlights, attracting some 80 educational researchers an development professionals. Jane Schubert (IEQ Project Director) began the dialogue with a vision of the overall IEQ Project. country representatives followed this introduction with specific country presentations, including vivid videotaped classroom sce from each country. Don Adams (University of Pittsburgh) chaired the sessions, while discussants Stephen Heyneman (World Bank) and Wes Snyder (Ohio University) provided positive comments and suggestions.

The formal sessions and extensive informal interchanges with conference participants generated a high level of excitement about the IEQ Project. The participants were particularly intrigued with the cycle of sharing classroom-based research findings with teachers, administrators and policy makers and converting them into improved instructional practice. The country represe tives also attended and participated in many other conference sessions, which extended and strengthened contacts with interr tionally-oriented colleagues.

Following CIES, the country teams travelled to Pittsburgh, where they presented their research at an IISE Symposium and part in workshops on: qualitative data collection and analysis; involving school and university-based educators in classroom re search; language teaching, learning and assessment; preparing documentation for cross-site comparisons; and collaborative cooperative learning approaches. The country teams also visited schools in the Pittsburgh public school system.

Overall, the March study tour was very productive, both in developing the capacity of HCRT members and in fostering prof sional exchanges among HCRT members and between them and a range of colleagues from the U.S. and other countries.

416

COMPLEXITY THEORY AND LEARNING

by Ash Hartwell

A new science -- the science of complexity -- is emerging at the close of the twentieth century. This new science is likely to have as profound an impact on the next generation's ways of thinking and learning as the science of Newton has on us today. Much of our perception of reality, which we incorporate into scientific principles and theories, is deductive and analytical. Schools first teach facts, and then how to analyze. The sciences provide a process for how to do this. When schools teach children about a flower, teachers discuss the petals, the stamen, the pistol, and so forth. "Good" teachers may even bring an actual flower to class and take it apart to examine and name its parts. But we do not teach the students how to put the parts together to make a flower. Science does not tell us how to do that -- that is science fiction.

Spontaneous Self-Organization

Synthesis is a complex issue. And the new science of complexity is more interested in synthesis than in analysis. It focuses on how life began, how cells evolved into plants and animals, how humans organize into tribes and nations, how a mind can develop new concepts, and how a society develops new organizations, such as school systems. One might think that these questions are simply too complicated for any scientific investigation, and that they do not have much in common. But what they do have in common is something quite fascinating: *spontaneous self-organization.*

Spontaneous self-organization is the natural complement to one of the basic principles of contemporary science, the *second law of thermodynamics.* This law says that the universe is running down, that systems inevitably decay. Left to themselves, atoms will mix until they are completely random. That is why iron rusts and why hot water cools. The trouble with this theory is that it does not explain why order and structure do exist. Trees fall and rot, but they also grow from seeds. Organisms die, but they are also born and grow. The Nobel prize-winning physicist Ilya Prigogine has asked the question, "Where does order and structure come from?" He found that self-organizing structures are everywhere in nature: from water crystallizing into ice, to a storm forming into a hurricane, to a cell which takes in energy in the form of food, transforming itself and sending out energy as heat and waste. One can even see an economy as a self-organizing system of markets, companies and firms.

Complex Adaptive Systems

The investigation into the phenomenon of spontaneous self-organization has been undertaken by scientists from different specialties: from physicists like Prigogine, to biologists studying the organization of life, to those trying to understand the way a national economy develops. A set of principles has evolved from this work which describes what are called "complex adaptive systems." Such a system has the following characteristics:

1) *It is a network of many agents acting together.* For example, an economy is made up of many markets, or a concept is made of many facts and other ideas. These agents are constantly acting and reacting to what other agents within the system are doing.

2) *There is no single point of control to a complex adaptive system.* In the brain there is no master cell or neuron, nor in a forest is there any single rule or central control to the ecological evolution. Although teachers sometimes like to believe that the facts and stories and ideas they present to students should define what the student knows and thinks, a child's mind is buzzing with conflicting and cooperating perceptions, "facts," thoughts, ideas and emotions.

3) *There are many levels of organization, with the agents at any one level serving as the building blocks at a higher level.* This principle is obvious within any large government or business organization -- with its bureaus, departments, offices and units. It also is clear in a living organism which has cells, tissues, organs and systems. In the field of education, Bloom's taxonomy describes a hierarchy for levels of cognitive functioning, from perception of facts, to comprehension, application, analysis, synthesis and evaluation, each of which builds on the former.

4) *A complex adaptive system is constantly revising and rearranging the building blocks as they develop and grow.* Organs and tissues in an evolving plant will change over generations, departments and offices will change in a dynamic organization, and our knowledge and concepts change as we develop.

5) *A complex adaptive system anticipates the future.* From bacteria on up through the life chain, every living creature has an implicit prediction encoded in its genes. Humans develop elaborate, specific concepts and theories about the future -- indeed it is one of the claims of science that it does this better than other approaches. Nonetheless, many people still use horoscopes or their traditional forecasting as competing paradigms. The teacher who helps pupils relate new knowledge to their own developing capacity to think about the future is drawing on this fundamental principle.

6) *These systems are never stable, or in equilibrium; they are constantly unfolding, developing and in transition.* One of the reasons they are called *complex* and *adaptive* is that plants, animals, societies and brains are characterized by perpetual change. Likewise, the active student is continually curious,

searching for a better understanding of the world as she knows it. One never knows everything, and authentic knowledge is not inert.

Teaching and Learning

There are many implications of these concepts for teaching and learning. One, which I find compelling, is that *the process of individual learning is the most dynamic process, the most "emergent" reality, in the universe.* I start this thought with the image of the matter of the universe organizing itself into galaxies, stars and planets; then the matter of the planet Earth organizing itself into the first life form; and that life form evolving into a cellular organism. At each stage, matter and energy interact to create a system more complex, more reflective of the principles described above, than the prior state. From a virus and bacteria to plants and animals, and from plants and animals to humanity, there is an accelerated process of transforming matter and building blocks into more complex, dynamic and adaptive systems. Throughout biological evolution change uses the principles of genetic transformation -- a very slow form of learning. Where biological organisms transform energy into order, human societies and individuals transform information into knowledge, and thereby create learning systems.

With humanity, the development of language, culture, writing, and -- today -- computers, has accelerated and enriched the learning process enormously. Less than a century ago, education's function was to pass on the knowledge, skills and wisdom of the past on to the next generation. In the paraphrased words of the philosopher Whitehead, "we are of the first generation in human history where the wisdom of our fathers will be of less practical value to our livelihoods than the knowledge produced during our lifetimes." *To prepare today's child to cope in the "learning society" of the 21st century, it is essential to focus on learning how to learn, how to solve problems, how to synthesize the new with the old.*

Learning theory and teaching itself is likely to be greatly enriched by the emerging science of complexity. A formal description of the principles governing the process of learning is at the core of new thinking about social evolution, organizational change and individual development. For example, the contemporary wisdom for the international economic and political sectors argues for greater autonomy from central government control, and for greater participation of all sectors of society in policy formation, so as to develop a freer system of exchange and thereby restore dynamism to stagnant economies. So too, teachers need to see that the starting point of learning is the rich complexity of the conceptual structures that a child brings to the classroom, and seek to build on this, rather than attempt to control a pupil's knowledge development by "force-feeding" facts and knowledge outlined by a syllabus.

I invite all those working on the Improving Educational Quality Project to respond to the principles given above and explore how they might be used as a framework to analyze a specific classroom and to develop an approach that would enhance learning.

For further information on this subject, Ash recommends the following books: Chaos: The Making of a New Science by James Gleick and Complexity: The Emerging Science at the Edge of Order and Chaos by M. Mitchell Waldrop.

UPCOMING EVENTS

SEPTEMBER 1994

Guatemala:

- Feedback workshops for supervisors and teachers on Phase I research results

Mali:

- Teacher training workshops in Kayes, Mopti, and Sikasso

South Africa:

- SABER grantees' study tour to U.S.

U.S.

- CRESST Conference in Los Angeles

OCTOBER 1994

Ghana:

- Third Annual Conference on Improving Quality of Primary Education in Ghana
- CRIQPEG team training on interventions

Guatemala:

- Completion of data gathering for Year 2

South Africa:

- Second Evaluation Training Workshop

Uganda:

- Launching of IEQ/UNEB office

DECEMBER 1994

U.S.

- USCEFA conference in Baltimore, MD (delegations from all IEQ countries)

IONAL LINKAGES

seeking to improve educational quality at local, regional, national, and international levels.

GHANA ➜ SWAZILAND

In January, Dr. Beatrice Okyere, CRIQPEG's Research Coordinator, was invited to participate in the Workshop on Qualitative Research, an effort to build on African initiatives supporting qualitative research methodologies focusing on the classroom. The workshop was held in Mbabane, Swaziland and was jointly sponsored by World University Services of Canada (WUSC), USAID, and the Swazi Ministry of Education. The workshop, led by Dr. Diane VanBelle-Prouty, was attended by Swazi primary school teachers, WUSC volunteer secondary school teachers, and researchers with the Ministry of Education, the National Curriculum Centre, teacher training colleges, and the University of Swaziland.

Dr. Okyere did an outstanding job of presenting the Phase I results of IEQ's efforts in Ghana and the plans for Phase II. Her presentation was enthusiastically received because it provided realistic insights into the collaboration between classroom teachers and researchers in learning to enhance reflective practice in the African context. Videos of urban and rural classrooms in Ghana were shown in tandem with her discussion and greatly enriched the session.

SOUTH AFRICA ➜ USA

September marks the first visit to the U.S. by IEQ's South African colleagues. The visit will enable IEQ staff and SABER grantees to strengthen professional linkages in program monitoring and evaluation and to collaborate with U.S. counterparts to complete the Educare impact assessment design. Each of the eight representatives holds responsibility for program monitoring and evaluation in their respective organizations. They will also attend the annual Center for Research on Evaluation, Standards and Student Testing (CRESST) conference at the University of California at Los Angeles, visit the Head Start center at the University of Southern California and the Southwest Regional Laboratory, and converse with U.S. researchers on evaluation and preschool quality of care issues. The next issue of **The Quality Link** will report further on this visit.

SWAZILAND ➜ GHANA

The Swazi-Ghana exchange continued when four educators from Swaziland's Ministry of Education -- two of whom participated in the Mbabane workshop -- visited CRIQPEG in May.

The purpose of the visit was to familiarize the Swazi researchers with CRIQPEG's research activities and to swap ideas on primary education reform. The visitors arrived while CRIQPEG was organizing a three-day seminar on Phase II intervention strategies for seven of the fourteen sample primary schools. The Swazis participated fully in the seminar and visited a local school where they discussed continuous assessment practices with teachers.

On the whole, it was a very fruitful trip for the Swazi researchers: they had the opportunity to meet the University of Cape Coast's Vice-Chancellor, the Dean of the Faculty of Education, CRIQPEG researchers, as well as some head teachers, circuit supervisors and primary school teachers. CRIQPEG also benefitted greatly from the Swazis' memorable visit, for it was a chance to discuss issues of mutual interest and learn about the educational system in Swaziland.

Beatrice Okyere

419

IEQ in Mali

Project Summary: MALI

In Mali, IEQ is supporting USAID's Basic Education Expansion Program (BEEP). IEQ is collaborating with two educational reserach organizations: Institut Pédagogique National (IPN) and the Institut Supérieur de Formation et de Recherche Appliquée (ISFRA). During Phase I, IPN and ISFRA conducted field research on the learning process in the first two years of primary education, contributing to a better understanding of the link between classroom practices and pupil peformance. The two institutions produced a joint preliminary report of Phase I activities and held a concluding seminar in Bamako in April.

In April, the IEQ Mali Project held a seminar in Bamako to conclude the Phase I research activity and to present its research results on language learning in primary school.

The purpose of the seminar was to: (i) bring together local, sub-regional, regional and central educational actors, decision-makers, and partners to discuss issues related to language learning through reading, writing and speaking; and (ii) engage Mali's educational partners in a continuing and constructive dialogue on academic and extra-academic factors that influence language learning. Discussions were based on personal experiences and focussed on the child's condition, the learning environment, and teaching strategies.

The seminar was a big success. First, there was large-scale participation on the part of parents, teachers, and school principals, and summaries of the days' events were presented each night on national television. Second, the presence of two professors from Ghana's University of Cape Coast and Dr. Joshua Muskin and Professor Richard Donato, two long-term consultants for the IEQ Mali Project, displayed a rising institutional collaboration which will benefit the project. IEQ's biggest accomplishment in this respect has been the harmonious and successful landmark collaboration between IPN and ISFRA--institutions from different Ministries--around the same research project.

The collaboration between IPN & ISFRA is a grand premiere in Mali.

This collaboration is a grand premiere in Mali! Third, the seminar decentralized the identification of interventions and implementation strategies; they were designed by the same people who will be implementing them.

Based on their discussions, participants identified and elaborated pilot interventions that may improve pupils' language learning in primary school:

- teacher training in the manipulation of didactic materials (particularly teacher's guides), the use of folktales for language learning, and the pedagogics of large groups;
- pupil transportation using local resources such as carts and bicycles to alleviate the distance and fatigue impact on children;
- introduction of school canteens to improve pupils' nutritional health conditions and increase school attendance; and
- establishment of community study centers in the canteen spaces to provide rural pupils with further opportunities for learning activities.

Perhaps the greatest impact of the three-day effort was the complete appreciation by all the participants, including the IEQ research team, of the role of consultation and collaboration in all stages of the education reform process. In an interview during which he was asked about his feelings on the seminar, one parent declared:

"This project is no longer your project, it's our project--all of us--because we have reflected together. We have together identified what is good for the learning of our children..."

Next Steps

After the seminar, the IEQ team discussed plans for the Phase II research component. The team agreed to use both quantitative and qualitative methods; this "wide-angle approach" will capture a host of behaviors, changes, interaction patterns, achievements, attitudes, and classroom experiences. The research aims to measure and document the effects of the teacher training interventions on the academic achievement related to language learning in the context of the child's total experience (as opposed to measuring performance on a test exclusively).

Phase II research will be divided into two components: *language achievement* and *classroom culture*. The *language achievement* research will compare baseline data on the language abilities of pilot school students with performance on these measures at the mid-point and the end of Phase II. Research on *classroom culture* will aim to document and analyze the context of instruction, how this context changes and improves over time, and how it compares to the classrooms studied during Phase I and to other non-intervention classes.

Sékou Diarra, Rick Donato & Josh Muskin

420

Program Evaluation Workshop *by Thuli Dlamini*

In June, I attended a week-long workshop on program evaluation along with eighteen participants from twelve USAID/NGO grantees. Dr. Patricia Campbell, a U.S.-based evaluation expert, conducted the workshop under the spicy banner, *Program Evaluation: Let's Do It!* The other participants and I met the workshop with mixed expectations and feelings, as experts from developed countries do not always offer the best opportunities for learning. How was Pat going to handle it?

Pat started on a very high note, beginning with an overview of the workshop goals. This was delivered with such enthusiasm that she not only broke the ice but also de-mystified evaluation.

Participants learned a variety of essential evaluation skills. We learned to define and refine the goals of an evaluation. Even though the participants had always considered stakeholders' interests in their programs, the workshop showed us how to incorporate these interests consciously and systematically. We learned to select and develop measures of evaluation, coded and analyzed the data set collected in the grantees' evaluation exercises, and got hands-on experience using a computer spreadsheet program (Microsoft Excel) to present data in an effective, parsimonious, and eye-catching manner. The climax of the week involved designing evaluation plans for programs within each participant's organization, so that the participants could return to their organizations with implementable designs.

All of us found the workshop extremely useful and attributed its success to the good teaching qualities and infinite energies displayed by Pat, who kept us highly motivated throughout the week. We felt so engaged in the workshop that we lingered past closing each day, only leaving when Pat "kicked us out."

In response to the participants' evaluations of the workshop, the IEQ South Africa Project plans to: a) host a follow-up conference in October 1994 on using computer software to analyze data; b) provide on-site support for implementing evaluation plans; c) create opportunities for participants to visit U.S. program evaluation centers; and d) review regularly each grantee's progress towards implementing a well-defined program monitoring and evaluation system.

Thuli Dlamini is a member of the IEQ South Africa staff who is assisting several NGO grantees to design and implement program evauations. For the Evaluation workshop, Thuli led two small group sessons on the graphic presentation of data using Microsoft Excel software.

WHAT A MOMENT!: A New South Africa

by Jonathan Jansen, IEQ South Africa Team Leader

The night before we were partying till 3:00 am singing, toyi-toying, and sharing thoughts on what the new day mean to all of us. We reminisced about those who had died in the struggle, who missed this historic opportunity: First, Hani, Tambo, and most recently, Keane. Tears flowed openly. At 6:00 am, Grace and I moved to the polling booth in Retreat (where I grew up) determined to be the first to vote when the polls opened at 7:00 am. Alas, there were already 300 people in line. Great excitement! Strangers talking loudly and openly to each other, much laughing, celebrating, joking. Surprisingly, no talk of politics; except for a few ANC caps and rosettes (and 1 conspicuous DP), everyone was colourless. The violence and racial division in the pre-election period had silenced the crowd with respect to political talk or party symbolism.

I knew in my heart as I looked around that most of these now-500 people were solid Nationalist Party (pro-government) voters even though they were all Coloured, all victims of apartheid who lost homes in District Six and Tokai, some who lost loved ones in the torture chambers of the NP. The fear of Africans (a successful NP election strategy) outstripped the fear of Whites; "better the Devil you know" argued some. But for a brief moment, it did not matter who they voted for...what was important is that the struggle of many millions brought us the opportunity to vote freely for the government of our choice. Many poignant moments: old persons in wheelbarrows being brought to the polls; the aged, the ill, some literally crawling, to make their mark for freedom. Tears as some approached the booths; red eyes as others emerged.

(continued on page 10)

THE REVOLUTION IN WORLD EDUCATION:

Towards Systemic Change

A USCEFA Conference

South African reform in action at an Educare facility.

The **United States Coalition of Education for All** (USCEFA) will host an international conference, entitled The Revolution in World Education: Towards Systemic Change, from December 11-15, 1994 at the Hyatt Regency Hotel in Baltimore, Maryland. This conference will provide a unique opportunity for educators from around the world to explore the rapidly expanding parameters of education reform. IEQ will present policy implications of its research and experience in two areas: the use of knowledge about the classroom experience within culturally diverse environments; and the approach to systemic educational change from a South African perspective.

The USCEFA conference is designed for educators, reformers, decision-makers, and implementors who wish to help set the education agenda for the future. Participants will be invited to cross current professional, sectoral, and geographic boundaries to examine the connections, interdependence and tensions among school-based education: early childhood development and adult education; health and nutrition; business and industry needs; mass media and emerging information and communications systems; social, economic and environmental imperatives; and the reality of global interdependence.

One of the conference's main goals is to promote critical partnerships, coordination, integration, and synergy, both domestically and internationally, in the creation of effective educational systems. The conference will explore three major themes:

1) ***Emerging Understanding in Education*** (or Why Systemic Change is Necessary) will examine new learning theories, information and communications technologies, motivational, cultural and contextual issues, and emerging economic imperatives;
2) ***Expanding the Reform Agenda*** (or What Must Be Done) will examine a lifelong learning approach for the future, integrated community education, new partnerships, and family involvement in education; and
3) ***Approaches to Systemic Change*** (or How We Can Do It) will explore research and policy connections, system change at different levels, feasibility, entry points, sustainability, and major foundation approaches to system reform.

Leading thinkers in all these areas will interact with domestic and international participants. Colleagues from each of IEQ's partner countries will participate in the discussions.

For more information about the conference, please contact: Eileen St. George, Program Director, USCEFA, 1616 N. Fort Myer Drive, Suite 1100, Arlington, VA 22209. Phone: 703/528-7474; Fax: 703/528-7480.

What a Moment!: A New South Africa (continued from page 5)

My time came. I was nervous. My hand shook as I tried to find the block next to the face of my hero, Nelson Mandela. I made the mark. Involuntarily, my arms reached upwards...thank you, Hector Zolile Pieterse (the first student to fall during the Soweto Uprising of 1976)! But much joy and humour, such as the man in Thornton (Cape Town) who expressed dismay that Oom Jannie (Jan Smuts, a pre-war Prime Minister) did not feature on the ballot paper; or the woman who came to vote "for Jesus;" of the semi-blind Coloured pensioner who ran his fingers down the list, under the supportive eyes of two voting officials, and stopped at the face of the first white man (Constand Viljoen) to make his mark (De Klerk was lower down). Then there was the placard of the ANC-aligned Call of Islam displayed throughout Cape Town: Your Vote is Secret...But not to God, So don't vote NP; rumour has it that the NP took the group to the IEC Court...the case? Divine Intimidation.

In the end, the ANC walked away with an overwhelming majority (possibly 2/3rds) except in the Western Cape and, possibly, in KwaZulu-Natal. The celebrations have started in earnest. Our new President will be inaugurated on Tuesday, 10 May 1994. A better caption could not be found: From Prison to the Presidency.

What a moment!

NEW DIRECTIONS IN FOREIGN LANGUAGE TEACHING AND LEARNING

(continued from page 1)

the world but also to produce and comprehend this code while simultaneously learning new concepts in academic disciplines. The research on foreign language instruction and learning can, therefore, directly inform this language learning context.

The following is a summary of the literature concerning effective foreign language instruction. This summary represents the results of extensive research studies on a variety of learners from diverse cultural backgrounds. Further, this research applies directly to cases where learners acquire a new language for the first time, as is the case of the majority of Malian children who enter first grade.

In order to be effective, foreign language instruction should provide learners with regular opportunities to:

1) **Listen to and comprehend personally relevant and useful talk in the foreign language.** This assertion means that extended language input is critical for developing competence in a learner. In addition, this language input needs to be of high quality, interesting to the learner, and slightly beyond the learners present level of competence.

2) **Read authentic texts that capture the interest and imagination of the learners. Authentic texts are, contrary to intuitive notions, easier to comprehend than edited or abridged selections.** Natural redundancies and repetitions provide support for learners to construct meaning from texts. Additionally, authentic texts encourage the student and teacher. Effective reading instruction in the foreign language class also requires that students have some prior familiarity with the contents of the text to be read. Teachers who help students activate prior knowledge or build pre-requisite knowledge of what is to be read can greatly enhance reading comprehension.

3) **Interact verbally with the teacher and each other in the foreign language in an effort to create meaning and extent and refine developing linguistic resources.** Verbal interaction here means using questions that assist learners in producing language rather than merely assessing them on the accuracy of their production. Research shows that the quality of student production is often directly connected to the types of questions a teacher asks.

4) **Express thoughts, ideas, and feelings in extended writing activities.** Rather than waiting until learners have "mastered" all the grammatical elements of a new language, teachers can provide opportunities for creativity in writing short texts from the beginning of instruction. Reactions to student writing should center on the content of the text rather than on its form. Research indicates that when given frequent opportunities to write and to receive feedback from the teacher on content, students make significantly greater progress in their writing ability than when writing is delayed or teacher feedback focuses on explicit grammar correction.

5) **Have the freedom to make mistakes which are recognized by the teacher as normal and essential for language development.** Anyone who has ever learned a foreign language knows that errors are inevitable. Research shows that grammatical development follows a fixed sequence and that formal instruction on grammatical forms does not always influence the productive use of these structures. In other words, there are similarities between first and second language learning concerning the order of acquisition of certain grammatical patterns. A surprising finding is that these developmental sequences are similar across learners from different first language backgrounds: a structure learned early by one child is learned early by another. Moreover, what appears to be an error may in reality be movement toward the target structure. That is, although still not native-like, the student's production may be different from previous errors, indicating that the grammar of the language is changing and being restructured toward target-language norms.

6) **Learn from teachers who assist learners to extend their language abilities in new directions and who "value" student language rather than merely "evaluate" it.** Teaching requires a form of "scaffolding", whereby teachers assist learners to extend their knowledge in a supportive, discursive interaction. In first language learning,caretakers often simplify their speech, slow down the rate of delivery, and rephrase statements to assist the learners' comprehension. In addition, caretakers support production by asking questions, modeling words and phrases, and recasting what the child says in the correct form. Language teachers use these techniques to render their input comprehensible and to assist the learners in expressing themselves. Research shows that "scaffolded interaction" produces learners who develop both communicative competence and confidence.

7) **Learn content through the medium of the new language rather than focusing exclusively on the language itself as the objective of each lesson.** When the new language is placed in a meaningful context, learning is facilitated. The context for instruction can be a story known to children, an unfamiliar story, or an academic lesson. When the focus is on content rather than on the language itself, forms and meanings are more easily bound together and more easily recalled.

(continued on next page)

New Directions...
(continued from page 11)

8) **Use the language to perform a variety of functions that are found in real life, such as expressing likes and dislikes, narrating events, describing family and friends, asking for information, etc.** Students do not transfer grammatical knowledge to functional language ability. No amount of drill and repetition of grammar rules, verb paradigms, or vocabulary will ever produce a competent speaker. To gain competence in using language, students need frequent opportunities to perform language functions for real purposes.

9) **Negotiate meaning with the teacher and each other through a variety of comprehension checking strategies, clarification requests, and confirmation checks.** Numerous studies show that, through the negotiation of meaning, language is made comprehensible to the learner. As stated in #1, comprehension is a critical component for language acquisition to occur. Through comprehension of the new language, learners can hypothesize about how the language works, compare their output with what they hear from the teacher, and expand their linguistic resources. Effective language instruction starts with comprehension activities before requiring learners to produce the new language. Empirical studies indicate that students need time to listen to and comprehend a new structure before being required to use it productively.

10) **To link the new language to concrete, here-and-now experiences that take place in the classroom.** The "here-and-know" principle anchors language instruction in the concrete reality of the students. This contextual support, through visuals, objects, or gestures, enables learners to quickly assign meaning to the words they hear and to recall these words with greater facility than if learned in a memorized dialogue or a list of disconnected vocabulary words.

What do classes based on the principles derived from research and listed above look like? In classes where students have the opportunity to develop linguistic proficiency, regularly-planned meaningful interaction with the teacher and each other is routinely observed. Students hear the teacher talk about meaningful topics, tell stories, and teach academic lessons at appropriate levels of language complexity. Teachers also attend to comprehension and use a variety of strategies to ensure that students comprehend the new language and verify their level of comprehension. Students also have the opportunity to talk to each other, are challenged to express their meanings in speech and writing and are encouraged to communicate in any way they can. Students are guided by their teacher to listen to extended discourse, hypothesize about the language they are learning, and act out new vocabulary or everyday situations. Students may participate in storytelling activities, create written stories with their teachers on the blackboard, or explore other academic disciplines in content-based language lessons. Students are also observed to work cooperatively on projects in group work or pair work activities. The hallmark of these classes is the belief that to learn a foreign language requires "talking *in* the language and not just talking *about* it."

It is hoped that this brief summary captures several of the new directions in foreign language instruction. Since the early 80s, our understanding of how languages are taught and learned has been greatly expanded. The points raised in this discussion are not intended to provide all the answers. They can, however, serve as guiding principles to language instruction. In this way, teachers and educational researchers can engage in a cycle of reflective practice that is informed by current research and theory on language learning and further shaped by the specific contextual and cultural factors of their own classrooms and schools.

For a full list of bibliographic references, please contact the editors of **The Quality Link**.

IEQ Funding Agency & Partners

The IEQ Project is funded by the Office of Education, Research, and Development Bureau, U.S. Agency for International Development. IEQ is conducted by the Institute for International Research (IIR), in collaboration with Juárez and Associates, Inc. and the Institute for International Studies in Education at the University of Pittsburgh.

IEQ Management Team

Paul Spector, *Principal Investigator,* IIR
Jane Schubert, *Project Director,* IIR
Ray Chesterfield, *Associate Director,* Juárez & Associates
Don Adams, *Knowledge Building Specialist,* Univ. of Pittsburgh

Newsletter Editors

Gretchen Hummon, *Research Consultant,* IIR
Ina Laemmerzahl, *IEQ Project Manager,* IIR

Newsletter Production Manager

Mariel Escudero, IIR

INSTITUTE FOR INTERNATIONAL RESEARCH

The editors of The Quality Link welcome your comments and suggestions.

The views contained in this publication should not be attributed to USAID or the contracting institutions. The contents may be reproduced if **The Quality Link** is acknowledged as the source. **The Quality Link** is produced using desktop publishing under U.S.A.I.D. contract DPE-5836-C-00-104-00 & DPE-5836-Q-00-1043-00.

424

Attachment 7*a*

Trip Report #24
(San Diego and Pittsburgh, 20 March-1 April 1994)

Improving Educational Quality Project

Trip Report - San Diego and Pittsburgh

20 March - 1 April 1994

Prepared for:

Office of Education
Bureau for Research and Development
United States Agency for International Development
Washington, D.C.

Project undertaken by:
Institute for International Research
in collaboration with
Juárez and Associates, Inc.
and
The University of Pittsburgh

Contract #DPE-5836-C-00-1042-00
Trip Report #24

Prepared by:
Yetilú de Baessa & Ray Chesterfield
Juárez and Associates, Inc.

426

SUMMARY

Purpose

Guatemala

1. Present preliminary findings of phase I research at CIES annual meeting in San Diego.

2. Participate in seminars on topics related to IEQ research at the University of Pittsburgh.

3. Interchange ideas with the HCRTs of Mali and Ghana.

4. Make contact with other researchers interested in educational quality at the classroom level.

Overview

Dr. Yetilú de Baessa, Dr. Ray Chesterfield and Mr. Erick Macz formed the IEQ Guatemala team participating in the CIES meeting and the series of seminars at the University of Pittsburgh. The Guatemalan members of the team presented the preliminary findings from the phase I study at CIES. The team also attended sessions related to the IEQ research and made contacts with researchers from the U.S. and other countries interested in issues of educational quality similar to those being investigated in Guatemala.

The extensive interaction among the different IEQ teams over a two-week period allowed for identification of common procedures and research interests. Tentative plans were made for Dr. Baessa to assist the Malian team in data analysis at a future date. In addition cross-national areas of interest and documentation procedures were discussed

OUTCOMES

Goal 1. Understand how and why each country's classroom-based intervention influences pupil performance.

CIES Meeting. Meetings were held with the other HCRTs from Ghana and Mali to coordinate the IEQ presentation at the CIES conference. A handout summarizing the preliminary findings of the IEQ research in Guatemala was prepared, copied, and distributed to attenders of the session (See Attachment A). The importance of examining socio-emotional behavior such as self-esteem and creativity were discussed by the team with the discussants for the session during the discussion period.

Sessions dealing with issues of concern in the research and data analysis were attended by different team members. The sessions attended included: The transformation of educational institutions in Latin America and the Caribbean; Girls education workshop; Gender differences in student achievement; Language learning, achievement, and use issues; Debates on knowledge, measurement, and evaluation; Approaches to catalyzing complementarities in education and health; Education policy analysis and dialogue: The 1994 education sector assessment in El Salvador; Observation, and measurements of student achievement; and Education sector reform: The experience of USAID in Africa. At each session, papers were gathered for their contribution to interpreting the research findings and for the methodologies employed.

Pittsburgh Meetings. The Pittsburgh meetings were designed around issues of special interest of the HCRTs. The teams supplied the Pittsburgh organizers with the information on relevant seminar topics prior to arrival in Pittsburgh. The teams discussed issues such as the collection and analysis of qualitative data; linking research and practice; language learning, teaching, and assessment; and collaborative and cooperative learning approaches in seminars chaired by Pitt faculty members. In each case, the ongoing research in the countries was incorporated into discussions of recent U.S. research and methodological approaches. In each seminar the teams were furnished with bibliographies to help them in their research efforts. The teams also visited schools to observe the implementation of some of the approaches discussed in the seminars.

Goal 2. Demonstrate a process whereby classroom research on improving educational quality is integrated into the educational system.

CIES and the Pittsburgh meetings had sessions that provided lessons learned in the U.S. and other countries for putting research into practice. The HCRT will consider

428

the relevance of the information gathered at these meetings within the context of Guatemala to determine possible applications.

Goal 3. Create opportunities for dialogue and partnerships among researchers and educators who are seeking to improve educational quality at local, regional, national, and international levels.

The CIES meeting and the seminars in Pittsburgh offered the HCRTs an opportunity to discuss the projects in each country and look for common elements across projects. The Malian team thought it would be especially useful to have Dr. Yetilú de Baessa from the Guatemalan team visit Mali and assist the HCRT in data reduction and analysis. The teams also identified areas of possible cross-national interest. Possible areas the might be examined are the nutritional status of children in relation to their experience in the classroom, preliteracy levels and classroom experience, teachers' strategies for communicating content, and the use of materials in the classroom.

CIES also provided the opportunity for discussion with researchers who have extensive experience in areas of interest to the IEQ team, such as Beryl Levinger in the area of children's health and nutrition, Bob Myers on preschool experience, and Stephen Heyneman on textbook research.

In Pittsburgh, the team also met with researchers working in areas being studied in Guatemala. Especially important were discussions held with Rick Donato on language acquisition and with Ellice Forman on collaborative and cooperative learning approaches. Dr. Forman also provided the team with the name of a Guatemalan researcher working in the collaborative learning area in the United States.

Goal 4. Maintain an ongoing history of the project to document the rationales for choices made, opportunities and constraints encountered, and lessons learned.

Pittsburgh Meeting. A special session at Pittsburgh was devoted to documentation. This session helped the teams and the Pittsburgh personnel responsible for knowledge building to identify existing sources of information among project documents that can be used to record the history of the IEQ project. It also helped to determine additional documentation needs. The responsibility for documentation beyond that required by the project remained and unresolved issue, however, given the current heavy work load of the HCRTs.

Follow-up Activities

1. Integrate additional literature gathered at CIES and Pittsburgh into the interpretation of phase I data.

2. Complete analysis and preparation of phase I report.

3. Work with the Malian HCRT to determine the scheduling of Dr. Baessa's visit to Mali.

4. Determine the responsibility for any additional documentation among the members of the Guatemalan HCRT.

5. Continue the dialogue with researchers such as Beryl Levinger and Ellice Forman, that was initiated at CIES and Pittsburgh, in order to incorporate their expertise into the research efforts.

Proyecto Mejoramiento de la Calidad Educativa

REPORTE DE VIAJE A SAN DIEGO Y PITTSBURGH

20 de marzo - 1 de abril 1994

Preparado para:

Oficina de Educación
Departamento de investigación y desarrollo
Agencia de los EEUU para el desarrollo internacional
Washington, DC

Proyecto realizado por:
Instituto de Investigación Internacional
en colaboración con
Juárez y Asociados, Inc.
y
La Universidad de Pittsburgh

Contrato #DPE-5836-C-00-1042-00
Viaje #24

Elaborado por:
Yetilú de Baessa
Juárez y Asociados, Inc.

RESUMEN

Objetivos

Guatemala

1. Presentar los resultados de la fase I de la investigación en la conferencia anual de CIES en San Diego.
2. Participar en los talleres que organizó la Universidad de Pittsburgh sobre temas relacionados con el proyecto IEQ.
3. Estrechar vínculos e intercambiar ideas con los otros miembros de los equipos de Ghana y Mali.
4. Hacer contactos con otros investigadores en el campo de la educación interesados en la investigación cualitativa a nivel del aula.

Repaso

Los miembros del equipo de Guatemala participaron en la conferencia de CIES y en la serie de talleres organizados en la Universidad de Pittsburgh. En la conferencia se presentaron los hallazgos preliminares de la fase I de la investigación. Además los miembros del equipo asistieron a otras sesiones de interés para el proyecto y a la vez establecieron contacto con otros investigadores con intereses similares, en especial la Dra. Levinger y Robert Meyers.

Se mantuvo una extensa comunicaciones con los miembros de los equipos de Ghana y Mali, lo que permitió una mayor y mejor comprensión del trabajo que ellos desarrollan. Esto permitió identificar posibles procedimiento y áreas de interés comunes.

RESULTADOS

Meta 1. Comprender cómo y porqué la intervención en el aula de cada país influye en el rendimiento de los alumnos.

Reunión del CIES: Se sostuvieron reuniones con los miembros de los equipos de Ghana y Mali para coordinar la presentación que se hizo en conjunto. El equipo de Guatemala preparó, reprodujo y distribuyó un resumen de los resultados preliminares encontrados a los asistentes a la sesión. Hubieron algunos comentarios interesantes a la presentación en relación a los resultados sobre el nivel niutricional de los alumnos y su aprendizaje y sobre el hecho que se estén evaluando el efecto de la intervención en áreas no academicas.

Durante la conferencia los miembros del equipo asistieron a diferentes sesiones de interés relacionadas con la investigación que se lleva a cabo en Guatemala.

Talleres en Pittsburgh: Los talleres en Pittsburgh estuvieron planificados para enfocar temas relacionados con las investigaciones que se llevan a cabo en los tres países. En todos los talleres se proporcionó información relevante y actualizada y bibliografía sobre los diferentes tópicos. Además, los miembros de los equipos visitaron escuelas en las cuales se estaban implementando las metodologías enfocadas en los talleres.

Meta 2. Demostrar el proceso mediante el cual la investigación en el aula para mejorar la calidad educativa se puede integrar al sistema educativo.

Tanto en la conferencia del CIES como en la Universidad de Pittsburgh se pudo apreciar la puesta en práctica de la investigación, también hubo oportunidad de dialogar con los maestros y autoridades educativas sobre las ventajas y desventajas de la ideas llevadas a la práctica. El equipo de Guatemala deberá evaluar la información recabada para determinar su posible aplicabilidad al caso de Guatemala.

Meta 3. Crear oportunidades para el diálogo y asociación entre los investigadores y educadores que estén buscando mejorar la calidad de la educación a nivel local, regional, nacional e internacional.

Las reuniones en la conferencia y en los seminarios en Pittsburgh dieron oportunidad a los miembros de los equipos para discutir los proyectos en cada país y

buscar elementos comunes. El equipo de Mali se interesó en saber más acerca de aprendizaje por iguales y en grupo y en análisis y reducción de datos y pidieron asitencia a ese respecto. De especial interés fueron las visitas a las escuelas en las cuales se pudo observar como se estaban implementando las ideas de los doctores Creek y MacDonald. De gran interés fueron las platicas con los doctores Garman Donato y Forman con los cuales se pudo aclarar y ampliar temas de interés para el proyecto en Guatemala. Hubo tambiidad de conocer e intercambiar ideas con el Dr. Morgan, conferencista invitado de la Universidad de Florida, quien tiene una amplia experiencia internacional.

Meta 4. Mantener una historia acutalizada del proyecto para documentar la base sobre la cual se toman decisiones, oportunidades y problemas encontrados y lecciones aprendidas.

Sesiones en Pittsburgh: Una sesión se dedicó por completo a tratar asuntos relacionados con la documentación. Durante esta sesión se identificaron posibles fuentes de información ya esixtentes y como se podían usar. Debido a la carga de trabajo que los equipos de trabajo ya tienen se sugiró utilizar las fuentes ya existentes y no crear nuevas.

Actividades Futuras:

1. Integrar y recolectar literatura necesaria para la interpretación de los datos recolectados en la fase I.

2. Completar el analisis y preparación del reporte de la fase I.

3. Coordinar posibles actividades con el equipo de Mali.

4. Determinar la responsabilidad adicional de documentación.

5. Mantener el contacto establecido con los diferentes investigadores.

ATTACHMENT A: CIES HANDOUT

COMPARATIVE AND INTERNATIONAL EDUCATION SOCIETY CONFERENCE

IEQ IN GUATEMALA

IEQ in Guatemala is evaluating one of the innovative educational projects that are being implemented by the Ministry of Education with funding from the BEST/USAID project that began in Guatemala in 1989.

This project is the NUEVA ESCUELA UNITARIA (NEW UNITARY SCHOOL) or NEU that is being implemented in two rural regions of the country. This is an adaptation of the Colombian project that proved to be highly successful in that country. One of the most pressing problems in education in Guatemala is the deficit of coverage and poor quality of the rural education, so this is an important project for the Ministry of Education of Guatemala.

The main objective of the IEQ project in Guatemala is to undertake a study that will focus on the implementation of the NEU project both at the classroom and at the community level.

The research study is examining the relationship between some key elements of the NEU program with the school achievement in language, mathematics and the socio-emotional development of the students attending the NEU schools in the two regions where it is been implemented. The research questions are directed basically toward three contexts: students, teachers and community.

The research consists of a quantitative and a qualitative component. It combines the use of quantitative instruments to assess the academic performance and the social development of the children with the qualitative evaluation using parents and teachers' interviews, classrooms' observations, and naturalistic observations of the community.

The sample of the research consists in 5 experimental or NEU schools and 5

control schools or traditional schools in each region. In those 20 schools all the children in first and second grade or approximately 500 children in the two regions, were tested with the quantitative instruments. A subsample of 6 children in each grade and in each school was selected at random to be observed during classes at the beginning and at the end of the school year.

Based on the research questions it was necessary to design a set of instruments to be applied. Both during the pre test and the post test several tests were applied to all the first and second graders: Self-concept, creativity, reading, mathematics. Oral Spanish proficiency, was only applied in the pre test in order to get a base line of Spanish proficiency of the children in the Mayan region. Weight and height of all the first and second graders was obtained at the beginning of the project to assess the nutritional status of the students.

NUEVA ESCUELA UNITARIA (NEU)

NEU is an educational program that is being implemented in approximately 100 multigrade schools in two rural areas of Guatemala. One that is predominantly Mayan speaking (Region II) and the other with Spanish speaking population (Region IV).

The main objectives of the project are:

To improve in a qualitative and quantitative way the elementary education in the rural areas.

To extend schooling to the six grades of elementary education.

(In Guatemala , primary school students in the rural area attend the first three years only and then drop out)

Some of the main features of the methodology involved in the NEU project are:

- Active learning (the student participate in their learning process).

438

- Student centered curriculum (in contrast to traditional methods).
- Use of peer teaching and small groups to facilitate learning.
- Flexible promotion, so the student can learn at their own pace and would allow working students to go back to school when they return to classes without having to repeat the whole grade.
- Implementing a student government (the purpose is to stimulate leadership and organizational skills and to involve students in school management).
- Emphasis on the socio-emotional development of the students (to promote creativity and to enhance self-concept).
- Involvement of the community in school activities (incorporating aspects of the environment and culture in the educational process).

This new methodology has been implemented through a series of workshops with the teachers who volunteer to participate in the project. Besides, the teachers have participated in the development of educational materials based on the NEU philosophy of teaching. Teachers receive constant technical assistance to help them implement the new system, and besides they have established "circulos de maestros" or teachers groups where they can discuss the problems they are facing in their daily work.

This year the project will expand to other schools that are in the vicinity of the pilot schools as a natural expansion.

In traditional multigrade schools (EU) , teachers use a combination of elements from different programs. They do not have a specific, coherent curricula. Usually the teaching is memoristic, using drills and repetition. The whole teaching process is centered in the teacher, who is the main actor of the process.

PRELIMINARY RESULTS

Overall, children in the experimental program performed better on measures of academic achievement than the children in traditional multigrade schools. With one exception, the measure of self-concept in the indigenous schools of Alta. Verapaz, all significant difference favored the experimental children. First grade NEU children in Alta. Verapaz significantly outscored comparison children on the measure of creativity. Second graders in the experimental program scored significantly higher than the comparison group on creativity, vocabulary comprehension and total Spanish reading scores. These gains were achieved despite the fact that the children in the NEU schools in Alta Verapaz had significantly lower levels of Spanish oral language proficiency at the start of the school year tan did comparison children.

In Baja Verapaz, similar trends were found. In first grade, experimental children performed significantly better than the comparison group on measures of self-concept, creativity, vocabulary and total reading performance. Second graders had significantly higher self-concept scores and made greater gains in comprehension and total reading scores, although these were not significant at the p .05, owing to small sample size.

Analysis of the tests scores by nutritional level of the children suggests that an active learning program such as that promoted by the Nueva Escuela Unitaria, can contribute to the learning of malnourished children when compared to children of similar nutritional status in traditional multigrade schools. Using height by age data, z-scores were calculated and children were divided into quartiles. Children in the lowest quartiles (two standard deviations or more below the group mean) and in the highest quartile were compared across the experimental and traditional programs. Among malnourished children, the NEU group had higher scores on all measures of academic achievement and had

440

significantly outperformed counterparts on measures of creativity in first grade and vocabulary and total reading in the second grade in Alta. Verapaz. In Baja Verapaz, NEU first graders scored better on all measures but not significantly so. At the second grade level, all mean scores also favored experimental children and significant differences were found in self-concept, vocabulary, and total reading scores. As might be expected, the results of comparisons made between the relatively well-nourished children in each region followed similar trends favoring the NEU children. In both types of schools, the performance of malnourished children was generally significantly below that of the well nourished children.

As an initial step in the integration of the academic achievement data with observational data on children's behavior in the classroom, the observations were coded in terms of context, content, person initiating the interaction and language used in the interaction. Additionally, a system of codes related to socio-emotional behavior, practice with reading, writing, and mathematical skills, and interactions with elements of the NEU program was developed. The codes from the observational data were entered into a database (Paradox for windows) and then the summary data for each child was transferred to a spreadsheet in order to make grade and school level comparisons. The spreadsheet data were then converted to an SPSS file and matched with the test data. This allowed the examination of the relation between the behaviors of the children when observed in class and their performance on the achievement measures.

Academic achievement in the NEU schools is highly correlated with certain contexts promoted by the program. Significant correlations were found between participation in small groups directed by the teacher and achievement in mathematics, vocabulary, comprehension, and total reading at

the first grade level in NEU schools. At the second grade level, the same relationship between participation in small group activities lead by the teacher and academic achievement was found. In addition, significant correlations were found on several measures of reading achievement and participation in peer-led small groups. Thus, it appears that as students achieve a certain degree of proficiency with the subject matter they can take advantage of cooperative learning situations. No significant correlations were found between large group teacher-led contexts and achievement, and significant negative correlations were found between individual seat work and all measures of academic achievement at the second grade level. In traditional schools, no significant relationships between any of the four contexts examined and academic achievement were found.

As might be expected, participation in certain types of classes, such as Spanish and Math, was correlated with achievement in those areas in both NEU and traditional schools. It was significant for both Math and Spanish at the first grade level in NEU schools and for Spanish in traditional schools. At the second grade level no significant correlations were found between achievement and these two primary classes.

The small group context appears to provide young children the opportunity to interact successfully with the teacher, as child-initiated interactions with the teacher were significantly correlated with vocabulary, comprehension, total reading and mathematics scores at this grade level in NEU schools. No significant correlations were found between interactions with he teacher and achievement among the traditional school first graders. In NEU second graders, both teacher-initiated interactions and those initiated with teachers by students were correlated with Spanish achievement measures. Teacher initiated interactions were also correlated with math achievement at

this grade level. In comparison schools, significant negative correlations were found between achievement in Spanish reading and interactions between students and teachers regardless of initiator.

Both in first and second grade in the NEU program there were significant correlations between the total number of interactions the children had and the scores in vocabulary, comprehension and total reading. In the comparisons schools those correlations were non significant. This suggests that in NEU the children' s interactions are generally more related to subject matter than in EU.

As pointed out in the video, IEQ is also investigating the involvement of NEU in the community. In the preliminary results of interviews with parents, it was found that 80.7% of NEU parents feel that there has been a positive change in the school during the school year, whereas only 20% of EU parents felt this way. The positive perceptions of the parents and gains in achievement are reflected in lower dropout rates. Only 7.6% of the students in the NEU schools left school during the year compared to 25% in the traditional schools.

FEEDBACK INTO THE SYSTEM

Since the beginning of the IEQ project in Guatemala, there has been constant contact with the developers of NEU to provide periodic feedback. The teachers have been provided with tests results and feedback on the advance of the program. personnel of IEQ have attended end of the year evaluation workshops of NEU in both regions, providing general results of the evaluation to parents and teachers. The project has already trained a group of psychologists from the Ministry of Education in the use of qualitative methodology and there are other two workshops planned for the rest of the year. In the future, the psychologists will be able to conduct classroom observations and code qualitative data. Besides, a paper will be presented in a national meeting of

educational researchers during the month of April, 1994.

PROBLEMS ENCOUNTERED

As in all research carried on in underdeveloped countries, there were some political and logistic problems to overcome. Last year at the end of May there was "coup" which paralyzed the whole country so it was impossible to collect the data at mid year. When the exact birth dates of the children were needed it was found that the information is not available in the schools and that the children did not know their birth dates. It is difficult to schedule data collection in specific dates because teachers' absenteeism. Another problem is the high expectations for the program by donors after only a year of implementation of the program.

FUTURE ACTIVITIES

During the year of 1994, the project will continue observing the same cohorts who are now in second and third grade.

At the end of the school year the same battery of tests will be applied to the children to assess their academic achievement after the second year of NEU implementation.

444

Attachment 7*b*

Trip Report #25
(Uganda, 4-15 April 1994)

465

Improving Educational Quality Project

Uganda Trip Report

4 April - 15 April 1994

Prepared for:
Office of Education
Bureau for Research and Development
United States Agency for International Development
Washington, DC

Project undertaken by:
Institute for International Research
in collaboration with
Juárez and Associates, Inc.
and
The University of Pittsburgh

Prepared by:
Jane G. Schubert
Institute for International Research

Contract #DPE-5836-C-00-1042-00
Trip Report #25

10 May 1994

446

Table of Contents

Page Number

Purpose of Visit 1

Background 2

Schedule 4

Preliminary Design: IEQ/UNEB Research Program 4

IEQ Project Time Line 12

Comments 13

Next Steps 14

ATTACHMENTS:

A. UNEB: A Description 15
B. Background: Uganda Primary Education Reform 18
C. Terms of Reference for the Principal Investigator 21
D. Terms of Reference for the Research Leader 24
E. List of UNEB Team Members 26
F. Discussions held regarding Uganda Primary Education Reform . . . 28
G. Bibliography of Materials 30
H. Primary Education and Teacher Development Project Focus Chart 32

PURPOSE OF VISIT:

USAID/Uganda contacted Jane Schubert, the IEQ Project Director, in January 1994 when she was conducting IEQ site visits in South Africa. The purpose of the contact was to report on progress made in Uganda towards identifying a local institutional partner (Uganda National Examinations Board) for an IEQ collaboration and to schedule a third IEQ visit to Uganda. This would conclude the initial phase and activate the Mission buy-in to IEQ.

The visit was scheduled for early April 1994. The agenda for the visit was to:

- Finalize discussions for a Mission buy-in to the IEQ Project (Phase II);
- Draw up and agree upon the set of questions that will form the research agenda for the program;
- Determine the institutional arrangements with-in UNEB for managing the research program ie: where will the program be housed, what will the reporting requirements be, how will research proposals be solicited, reviewed and approved etc.;
- Identify key personnel, including the principal investigator;
- Specify technical assistance needs to implement the program;
- Specify equipment and supplies necessary to implement the program; and
- Draw up and agree upon an evaluative research program to inform progress and ultimately to assess the impact of educational reforms being implemented by the Government of Uganda (GOU), Ministry of Education and Sports (MoES).

Discussions between USAID/Uganda and the IEQ project on the possibility of a Mission buy-in to the IEQ project began in April 1992 with a site visit by Frank Method, COTR/USAID/W and Jane Schubert, IEQ Project Director. We concluded that the potential for a buy-in existed, but would be more appropriately scheduled after USAID support to the Ugandan Primary Education Reform Project was in place.

The following April, at the request of USAID/Uganda, Jane Schubert responded to a request from Patrick Fine to visit Uganda en route from South Africa. The purpose of this brief stop was to discuss opportunities for IEQ institutional partners, hold meetings with prospective candidate partners, and refine the criteria for further exploration.

BACKGROUND

Primary Education Reform Program:

The Government of Uganda (GOU) has embarked upon a long-term effort to rehabilitate primary education. The Primary Education Reform Program (PERP) is supported by USAID through the Support to Ugandan Primary Education Reform (SUPER) Program, the World Bank through the Primary Education and Teacher Development (PETD) Project and by various other donors and NGOs.

These reforms aim to:

- improve students' mastery of literacy, numeracy, and other basic skills;
- improve school administration, management, and accountability;
- and reduce inequities in persistence among different groups of children (taken from Phase I Terms of Reference/IEQ).

The main features of the GOU's education reform are to:

- reestablish the teaching profession by improving teachers' terms and conditions of service;
- strengthen teacher training programs by improving their curriculum content, making standard materials available, and integrating pre-service, in-service and management training to increase the percentage of trained teachers and administrators;
- enhance community participation by empowering communities to hold schools accountable for quality and equity;

- allocate resources for instructional materials, especially core textbooks;
- reform and revamp the examinations process to suit new curricular demands and introduce a standardized national assessment;
- revitalize local educational publishing; and
- rehabilitate schools and teachers colleges.

The SUPER program embraces the first four items: The PETD Program supports the remaining three items.

Improving Educational Quality

The Improving Educational Quality (IEQ) Project begins and ends in the classroom. IEQ forms partnerships with local educators in developing countries which are implementing educational reforms that seek to improve the quality of teaching and learning. The research teams conduct guided inquiry of classroom environments to better understand the dynamics and effects of the reforms to improve pupil performance. The findings suggested by such multi-disciplinary research are presented in form and content appropriate to potential users. Policy makers and practitioners receive support from IEQ to identify ways to use findings to improve the quality of education in classrooms. The four major goals of IEQ are to:

- understand how and why each country's classroom-based interventions influence **pupil** performance;
- establish a sustainable process whereby **research** on improving educational quality is **transferred** into **practice** throughout the educational system;
- create opportunities for **dialogue** and **partnerships** among researchers and educators who are seeking to improve educational quality at local, regional, national, and international levels; and
- maintain an **ongoing history** of the project to document the rationales for choices made, opportunities and constraints encountered, and lessons learned.

45

The IEQ Project currently works with local research teams in Ghana, Guatemala, Mali, and South Africa. The research activity in each country reflects each of these four goals, but within the framework and priorities of its own reform effort.

SCHEDULE:

- The IEQ Project Director (Jane Schubert) left Washington D. C. Monday April 4 and arrived Kampala on Wednesday morning, April 6. She departed Entebbe on Thursday, April 14.

The meetings and discussions focused on the stated agenda. Christine Kiganda, USAID/GDO/Education Specialist, who will be the IEQ liaison, arranged meetings with USAID, several meetings with UNEB management and staff, an orientation meeting with the Super staff and Noreen B. Kiremire, Deputy Director of the Project Implementation Unit at the Ministry of Education and Sports, and Ian Smith, Project Coordinator of the Project Implementation Unit (A list of the UNEB and SUPER/TDMS team who attended these meetings appears as Attachments E & F). We could not make school visitations because schools were on mid-term holiday.

The outcome was a document that reflected a collaborative design for an IEQ/UNEB project. The initial draft was reviewed by IEQ, UNEB and USAID and then revised. The product of these discussions, A Preliminary Design: IEQ/UNEB Research Program, was submitted to USAID/Uganda prior to departure.

A debriefing was held on 13 April with Leticia Diaz (USAID/Uganda Deputy Director), Holly Wise (HRDO), Patrick Fine (GDO), and Christine Kiganda (GDO/Education Specialist).

OUTCOME:

Preliminary Design: IEQ/UNEB Research Program

Topic: Evaluative Research Program of the Uganda Primary Education Reform Program: The Improving Educational Quality Project (IEQ) in Uganda.

Venue: The Uganda National Examinations Board, 11 April 1994

Present: C.I. Cele/Senior Deputy Secretary/UNEB; Primo J. Okelowange/Deputy Secretary, Research & Data/UNEB; Patrick Fine/USAID/Uganda; Jane Schubert/IEQ Project Director.

Purpose of the Meeting:
To begin to operationalize a collaboration between IEQ and UNEB for the purpose of establishing a program to sponsor research of the educational reforms being implemented by the Ministry of Education and Sports (MOES).

Purpose of this Document:
To summarize the discussion, provide a basis for preliminary budgeting, and to clarify scope and direction of IEQ in Uganda.

Research Objectives:

1. This is proposed as a five-year IEQ/UNEB Research Program that provides information about the primary education system to key institutional participants. As efforts to improve educational quality mature, the Research Program will shift towards investigating the impact of the MOES' initiated reforms on the quality of primary education in Uganda. For example, the Research Program will:

    - respond to the information needs expressed by key stakeholders in primary education;
    - solicit research proposals from the educational community in Uganda; and
    - explore the magnitude and utility of gathering baseline data on teaching and learning in the classroom.

Such activities complement the overall IEQ goals in Uganda, which are to:

- illuminate the progress and the impact of the effort to rehabilitate primary education in Uganda;
- strengthen the methodological capacity of the Ugandan research community;

- facilitate professional linkages between the Ugandan research community and the educational research and development community within and outside of Uganda;

- create opportunities for dialogue and partnerships among Ugandan policy makers and practitioners; and

- develop a mechanism for disseminating and utilizing the research findings within the Ugandan educational system.

2. The mechanism for conducting the research will be through the solicitation, submission and award of proposals. Submission guidelines will be prepared and widely distributed. Information needs will be generated through meetings of key stakeholders. The Principal Investigator (in his absence, the Research Leader may represent him) will communicate regularly (e.g. in person, through meetings, and by phone) with prospective candidates for research support.

   Action: Plan for two or three research activities not to exceed a combined total of $35,000 between project start-up and September 1995.

   Note: The IEQ Research Program can best serve efforts to improve primary education if it plays a neutral role and has access to key policy makers and policy fora, i.e. NPERPMC. Advantages of such a role are that: a mechanism for utilizing the research findings would be in place; the research activity would be a public process with an agreed-upon structure, agenda, and reporting procedure; key stakeholders (i.e targeted users) would gain a better understanding of the program; feedback to potential users would be through established channels; the potential exists for a more efficient and effective allocation of resources; as the messenger, IEQ is a non-vested communicator.

Institutional Arrangements:

1. **Space**: The most desirable location for an IEQ/UNEB Research Office is at UNEB. At the moment, space is limited as all offices are occupied.

   Action: UNEB will investigate and make recommendations on the physical location of offices.

2. **Non-expendable equipment purchases:** The project will begin with the necessities in office furnishings and equipment. As the project expands, additional equipment may be purchased as needed.

   IEQ will eventually be connected to an electronic network. Some countries are already on Compuserve: networking all participating countries on Internet is a short-term goal.

   Action: To plan for the purchase of:

   - one photocopier, one computer, one fax machine, one laser printer, and software for word processing, data analysis, data based management, and spreadsheet. If possible, staff training for 2-3 persons should be included in the negotiated purchase price or budget.
   - one four-wheel drive vehicle plus fuel and maintenance etc.
   - office furniture (2 desks, 2 filing cabinets, office chairs, 3 bookcases, chairs for visitors, etc).

3. **Resource Center:** It is important to create a library or resource center where professional publications will be available to researchers. Although UNEB holds professional publications, they are not housed in a central location because of limited available space. This situation should not preclude the establishment of a Center.

   Action: To plan for the purchase of professional literature (e.g. books, annual reviews, journals, membership in professional societies). This may begin modestly (e.g. $1,000 per year) and increase as needs are clearly identified by users.

4. **Reporting Requirements:** IEQ prepares several reports in response to contractual obligations. The Research Leader in each participating country is responsible for preparing the following documents:

   - biweekly reports which are submitted to USAID in Washington and distributed to all project staff (This information is received by fax from each country);

- semiannual and annual reports which are prepared according to an outline sent from IEQ headquarters to all authors;
- minutes of staff and other key meetings are maintained to document the flow of project activities, especially where decisions are made regarding project direction;
- project deliverables linked to research activities will be due (e.g. interim and final reports of research activities). These will be specified within the guidelines prepared for submission of research proposals; and
- financial reports must be submitted on a monthly basis.

USAID/Uganda shall receive copies of all relevant project documents.

KEY PERSONNEL:

Principal Investigator:

The Project will be housed in the Research Unit/UNEB headed by Dr. Primo J. Okelowange. He will serve as the Principal Investigator (PI), responsible for all technical and administrative aspects of the project (terms of reference to be specified). For the first six months of the project, The P.I. will devote approximately 25% of his time to establishing the office and launching the project (e.g. hiring staff; arranging for start-up events).

> **Action:** Explore options for the proportion of time after project launching and the remuneration provided to the Principal Investigator (See attachment C).

Research Leader:

This is a full-time position. While the exact terms of reference will be specified, this individual will most desirably hold an advanced degree in education or psychology (or related field), possess experience in research design and implementation (preferably in mixed methodologies). The Research Leader will execute duties such as: representing the project at professional gatherings; monitoring the research activities in the field; organizing major events such as conferences and seminars;

reaching out to the educational community to solicit research proposals and coordinate presentation of research findings; and overseeing the daily management of the project.

Action: Draft terms of reference (See attachment D).

Office Administrator:

This is a full-time position that will carry responsibilities for fiscal accountability and reporting, support for arranging conferences and other events, and all administrative matters such as correspondence and filing.

Action: Draft terms of reference.

Other UNEB participation:

UNEB, through its senior management, will provide overall supervision to the IEQ/UNEB Research Program as an in-kind contribution to the project.

Action: Specify institutional arrangements (See attachment E).

Note: We envision that as the Research Program expands, it may be necessary to hire additional staff.

Professional Development and Training:

1. **Events:** One of the major objectives of the IEQ Research Program is to strengthen the capacity of qualitative and quantitative methodological skills of Ugandan researchers. The Program will therefore support up to three events a year to fulfill this mandate, beginning with contract award. Examples include:

   - a start-up conference that will include, but not be limited to identifying key stakeholders, announcing the IEQ/UNEB Research Program, initiating a dialogue on "quality" issues, specifying information needs;

   - workshops on topics such as research methodology (qualitative & quantitative designs); and

436

- seminars to discuss research underway and/or completed and to facilitate dialogue on issues related to quality of education in Ugandan primary schools;

2. **Consultants**: The priority will be to use African experts when available and appropriate. Other sources upon which IEQ will draw expertise will include: expertise within other IEQ partner countries; expertise from the international educational research and development community.

   Action: For planning purposes, we will assume three five-day gatherings per fiscal year - with approximately 40 participants per event. Budget estimates will include facility costs, travel (per diem and lodging), honoraria for presenters, and materials.

   Consultants from the international educational research and development community may participate in several ways: as professional backstopping resources that advise on research design; as on-site leaders (often with a host country co-leader) of workshops; and as facilitators in working with local teams in developing the form and substance of major conferences. While specialists may be called upon to offer expertise in a particular area, the approach used in other IEQ countries is for one or two consultants to develop a long-term relationship with the local researchers. Such an affiliation typically generates a greater commitment to the effort and the professional connections IEQ fosters become deeper.

   Action: For planning purposes, we will assume two or three on-site consultancies to Uganda during each fiscal year. Each visit will be three weeks.

3. **International Linkages**: The IEQ\UNEB Research Program will support educational researchers who will represent Uganda in international activities and events such as: participation in an IEQ event in another partner country (e.g. Third Annual CRIQPEG Conference on Improving Primary Education in Ghana); participation in international conferences such as the Comparative and International Education Society (CIES) or an IEQ/UNESCO International Conference on Educational Quality; specially designed study tours to obtain special skills (e.g. data analysis).

Action: For planning purposes, we will assume three two-person teams per year traveling outside of Uganda for a maximum of three weeks. Costs include travel; per diem and lodging; conference costs.

Notes:

- I didn't include products such as video cassettes or hiring a private firm to do such work.
- One segment of the overall budget is for US-based personnel and backstopping, Project Manager, Administrative Assistant (Dena Duerbeck), consultants, travel, materials purchase, and communications.
- IEQ works with two subcontractors: the University of Pittsburgh and Juarez & Associates, Inc. Juarez is a Gray amendment firm.
- Budget will require communications and supplies line items.

IMPROVING EDUCATIONAL QUALITY PROJECT TIME LINE/UGANDA

Fiscal Year 1: 1994-1995

IEQ Tasks	Month 1 1994		Month 2 1994		Month 3 1994		Month 4 1995		Month 5 1995		Month 6 1995		Month 7 1995		Month 8 1995		Month 9 1995		Month 10-12 1995	
1. Establish Office	x																			
• Identify Location		x																		
• Hire Staff		x																		
• Purchase Equipment		x																		
2. Initiate Research Program																				
• Prepare Guidelines																				
• Solicit and Receive Proposals				x																
• Issue Awards				x																
• Monitor Research				ONGOING																
3. Conduct Professional Development Training																				
• Seminar #1				x																
• Stanley Town												x							x	
• Attend International Conference												x								x
4. Disseminate Research																			x	
5. Facilitate Dialogue																				
• Maintain Communication			x	ONGOING																
• Annual Conference		x																		
6. Document Progress																				
• Reports				AS SPECIFIED																
• Deliverables				AS SPECIFIED																

COMMENTS

1. **IEQ will have a new type of institutional partnership.** A collaborative effort between those who set the exams and researchers whose focus is teaching and learning in the classroom is potentially valuable. The mixed methodologies employed by IEQ (e.g. observing classroom interactions, measuring pupil performance, examining resource utilization, interviewing parents and teachers) inform potential users of the research findings (stakeholders at all levels of the system) will bring the classroom into focus within the system. As one component of the GOU's education reform, the UNEB is revamping the examinations system. The findings from a joint enterprise will, hopefully, lead to improved classroom practice.

2. **The Uganda National Examinations Board has been selected as the partner institution because it is a highly regarded component of the education system.** The UNEB enjoys a reputation for high quality performance, timeliness in task performance, collegial environment, and empowering leadership. The board actively conducts research and evaluation, draws scholars together to perform tasks and set exams, and has an established network to the schools. During my visit, the staff interested in IEQ were invited to participate in the orientation session, the review of the draft document, and the final presentation to a larger educational community. Senior staff at UNEB (Dr. David Ongam, Dr. Primo Okelowange, and Dr. Cyprian Cele) were available for discussions on four separate occasions during my visit. Their availability and their input enabled me to produce the preliminary design. It truly represents a joint effort.

3. **The establishment of a competitive program that enables a broad range of researchers to design and conduct studies linked to a reform is a new model for IEQ.** It is a model suggested by and strongly favored by the Mission to broaden the participation of Ugandan educators in research and to strengthen research capacity within the country. In other IEQ countries, the researchers in the partner institutions design and implement the projects. We will pay careful attention to the strengths and weaknesses of each country's approach. The Ugandan model is patterned after an existing program which addresses equity issues. I don't know how successful this program has been, but have urged UNEB and USAID to talk to the implementors. IEQ must establish standards that result in quality research designs. During our discussions, several participants noted that proposals among some Ugandan researchers are often weak. It may be necessary to conduct professional development activities to raise the level of proposals submitted. It will be important, however, to weigh the trades between resources committed to proposal training and research outcomes. How can resources best be used to

460

achieve IEQ goals? The formative evaluation built into IEQ will help address this issue.

4. **The commitment of major actors who represent critical segments of the system to education reform in Uganda offers hope for systemic change.** They are attempting to move at the same time in the same direction. A Management Committee consisting of these key elements meets biweekly to oversee the reform. People are not only talking to one another, but they are attempting to coordinate efforts so as to maximize limited resources. This is a very positive sign. IEQ will also coordinate its efforts with this Committee in order to support research whose findings are potential useful to the reform effort.

5. **I see a unique opportunity, given this widespread reform effort, to initiate a large-scale, long-range educational research effort to identify, develop and utilize human resources and talent in Uganda.** The research would aim to provide information that brings about more effective use of talents by looking at the ways in which schools can improve service to youth - particularly in the classroom. This idea is based on Project TALENT, an unprecedented survey undertaken in the United States in 1960. Data on the aptitudes, achievements, interests, activities, background, personalities, and aspirations of a large, nationally representative sample of high school youth were collected and entered into one of the largest research databases of its kind. The value to educational research was enormous as follow-up surveys were conducted on subsamples of the population and hundreds of research studies were conducted.

   Such research is not with the purview of IEQ, but I think the idea has merit for Uganda. The stuff of which dreams are made!

NEXT STEPS

USAID/Uganda's will produce the scope of work and PIO/T that leads to a buy-in. While waiting to receive a request for a proposal and budget, IEQ will locate a U.S.-based project manager and identify potential consultants.

ATTACHMENT A:

UNEB: A Description

462

NEWS

WHAT IS UGANDA NATIONAL EXAMINATIONS BOARD (UNEB)?

by M. B. B. Bukenya

Some members of the public don't know what exactly UNEB (Uganda National Examinations Board) is and what it does.

In this article, we attempt to give some brief information about **UNEB, its principal functions and its composition.** UNEB, as called by many, took over from the defunct East African Examinations Council, which had been set up by the three East African governments to replace the University of Cambridge Local Examinations Syndicate; (CANTAB) as it was called during those days. In June 1980, East African Examinations Council was dissolved and in July, the same year, UNEB was formed as a professional testing institution in Uganda. It was later on, established as an independent parastatal body under the Ministry of Education and Sports. In 1983, an Act of Parliament, known as **"UGANDA NATIONAL EXAMINATIONS BOARD ACT - 2 OF 1983"** was passed and from that time UNEB acquired its legal status and recognition as an examining institution in Uganda. The Act is available for sale from UNEB Publications Office at Crested Towers, Block "D" and anybody is free to buy a copy.

"UNEB is a Body Corporate with perpectual succession and a common seal, and may sue or be sued in its corporate name, and may purchase, hold, manage, and dispose of any property, and enter into such contracts or other transactions, as may be necessary or expedient for the discharge of its functions under the Act."

Among the many functions of UNEB, as spelt out in the Act, the principal function is to **conduct** within Uganda, **Primary, Secondary, Technical, Business,** and such other examinations as may be considered desirable in the public interest, for example; in 1991, UNEB was asked to undertake Grade-III Teacher Education Examinations.

The Board, after conducting the examinations, must **publish the results of those examinations and issue Certificates, Diplomas to successful candidates.** The Board also publishes result slips of all the candidates who appear for the examinations as well as past papers.

As mentioned above, it is the principal duty of UNEB to conduct examinations in Uganda and in order to accomplish that duty, a number of preliminary activities take place before the final goal is achieved.

First and foremost UNEB must have adequate funds to get the whole machinery moving, in order to have examinations effectively conducted. The examinations Syllabii for each subject to be examined have to be discussed and approved by the relevant examinations Committees. They are then despatched to schools for the purpose of preparing candidates for examinations.

Examination question papers are set based on the examinations syllabii. Each paper set by UNEB is moderated by subject experts. They get together to moderate the paper to the required standard. After moderation, papers are now put in their final form and typed, proof read and thereafter Camera-ready copies are forwarded to the Printer for printing and packing before the actual question papers are finally despatched to schools.

The work of UNEB on examinations does not end until marking of scripts and processing of results are completed. After the results of examinations have been processed, they are released to the Ministry of Education and Sports and, thereafter issued to schools for transmission to candidates. The Ministry of Education uses these results to select students to Advanced Level Schools and institutions of higher learning. It should therefore, be categorically stated that **UNEB does not place candidates to schools, but only assists the Ministry to process, through its computer, the choices of schools made by candidates who wish to join either Senior-I or Senior-V.**

After going through the main functions of UNEB we can now look at **UNEB's composition.**

According to the present UNEB Act, there are twenty-six members, with a chairman who is appointed by His Excellency, the President of the Republic of Uganda. The full Board is the Supreme authority. Under the Board are several Committees which are charged with various duties and responsiblities-

- **Finance and General purposes Committee** is one responsible for the finances and general administration of the Board activities.

For every examination conducted, there is a Committee responsible for it namely:

- **Primary, Secondary, Business, Technical and Teacher Education.**

463

A lot of research is carried out in UNEB, for the purpose of improving on the examination system. The **Research Committee**, guides and supervises its work.

In addition, the Board has delegated its full powers to the following Committees:

- **Examinations Security Committee** to take charge of the running and supervision of all examinations, and
- **The Appointment and Disciplinary Committee** to take full charge of staff appointments and discipline.

For implementation of what has been stated above and for the execution of Business, UNEB has a fully established Secretariat based on the approved administrative structure. Its composition is as follows:-

The Secretary is the executive head of the Secretariat and also the Accounting Officer answerable to the Board. His appointment is made directly by the full Board itself and he is the Secretary to Board and all its Committees.

Under the Secretary, is a **Senior Deputy Secretary** who is his immediate deputy and he co-ordinates the work of departments through the respective heads of department. He provides a forum of exchange between the departments.

In order to achieve efficiency and for the convenience of work, there are six departments, which are of now, considered sufficient and economical to carry out work at the Sacretariat. They are each headed by a **Deputy Secretary.** Below them are **Principal Assistant Secretaries** who head sections and units within the departments. The list of various departments is given below:

(i) Finance and Administrative Department

(ii) Primary Leaving Examinations Department

(iii) Secondary School Examinations Department

(iv) Teacher Education Examinations Department

(v) Research and Data Department

(vi) Business and Technical Department

We sincerely hope that through this article, our readers and the general public will now have some knowledge about UNEB, its functions, composition and the entire set up.

ATTACHMENT B:

Background: Uganda Primary Education Reform

I. Background

The Uganda Ministry of Education and Sports (MoES) is rebuilding and revitalizing primary education by focusing on teacher training activities and other activities that support the provision of quality education and equity for the pupils of primary schools. Toward this end **Support for Ugandan Primary Education Reform (SUPER)** will work with Ministry officials, teachers, PTC principals and tutors, headmasters and community members to define, plan and carry out the activities described in this work plan.

All the activities will be implemented within the context of reforms outlined in the Government of Ugandan White Paper entitled, "Education for National Integration and Development" and other official documents of the Government of Uganda (GOU).

The SUPER Project will build on and complement other donor support to the reform of primary education. The World Bank, in preparation of the Primary Education and Teacher Development Project (PETDP), helped the MoES in the conceptualization of the plan to reform primary education and will finance construction of about 18 Primary Teacher Colleges (PTC's), two tutor training facilities through IDA-5, approximately 250 teacher resource centers at Coordinating Schools and approximately 3,100 primary classrooms at Outreach Schools. PETDP will finance further technical assistance to the MoES for the planning, curriculum development and examinations and testing departments.

Rebuilding and revitalizing of primary education is founded upon a wide range of policy reforms undertaken by the GOU, which upon implementation, will result in an environment conducive to quality education.

The form and substance of the reform of primary education were determined after careful consideration of the binding constraints to the provision of quality primary education in Uganda. These constraints include an untrained teaching force of which 47% are not trained and qualified. Other constraints include the lack of adequate instructional materials for classroom use, inadequate classrooms and furniture, deficient management of schools, and poor salary and terms of service for teachers. In addition the parents and community leaders have not been effectively involved to help improve the quality of schools.

The priority activity of the SUPER project is to assist the MoES in establishing the **Teacher Development and Management System (TDMS).** This new integrated approach to teacher training will provide professional and material support to schools, incorporate in-service teacher training into the program of PTC's, provide a network for

- 466

distributing instructional materials and assist in the administration of competitive incentive grants to primary schools by the MoES. This will change the focus of the PTC's from pre-service to an emphasis on in-service, in service upgrading and school-based support.

SUPER project will assist in the establishment of TDMS in ten districts and their catchment areas by 2000. In contract year one the project will pilot the concept in the Bushenyi and Gulu Districts. During contract years two and three it will be expanded into the Apac, Hoima, Luwero and Mpigi areas. Selecting the remaining four districts will proceed according to the schedule of PTC construction and the resolution of competing interests by the MoES regarding adjacent areas that may be attached to selected districts. Full implementation of TDMS in these last four areas will not occur until Phase II of the project except for establishment of District Implementation Committees. These committees need to become operational so that construction schedules for PTCs and Coordinating Schools will not be delayed. The committees will determine clusters and select Coordinating Schools as required by the tender phase of the construction process. The committees will also be involved in the Financial Incentive Grant process prior to the full development of the TDMS system in the respective district.

The purpose of the Uganda reform of primary education is to improve the quality of education for primary pupils and to improve equity for pupils currently excluded from the system, especially girls and orphans who do not complete P-7 in any appreciable numbers. Total impact of the actions taken by SUPER Project and the implementation of TDMS in this reform will be increasingly felt over several years.

*(Taken from **The 1993 Work Plan Support for Ugandan Primary Education Reform** by the Academy for Educational Development.)*

467

ATTACHMENT C:

Terms of Reference for the Principal Investigator

IEQ/UNEB Research Program: **Terms of Reference for the Principal Investigator**

The Principal Investigator shall be responsible for all technical and administrative aspects of the Research Program.
This official's primary duties will be to:

1. provide leadership to the research program (e.g.technical guidance when required to the individual research efforts);

2. represent the program (or provide a designate) at all key meetings and events (in and out of Uganda);

3. ensure that the research program is responsive to the information needs of the primary education reform;

4. supervise office staff and make recommendations for expansion in human and material resources as deemed necessary;

5. maintain quality control on all products and reports emerging from this office;

6. liaise closely with USAID/Uganda and IEQ/Washington (or assign designate) on project activities, particularly noting difficulties in meeting schedules;

The reporting requirements are as follows:

1. biweekly reports submitted to IEQ/Washington (by fax to IEQ headquarters);

2. semiannual and annual reports prepared according to an outline developed at IEQ headquarters;

3. minutes of staff and other key meetings to document flow of project activities, especially when major decisions are made; and

4. financial reports submitted to IIR on a monthly basis.

Qualifications:

1. Held administrative and technical leadership post.

2. Holds advanced degree (PhD) in education, psychology, or related field or equivalent experience.

3. Designed and conducted educational research projects.

4. Effective oral and written communication skills.

ATTACHMENT D:

Terms of Reference for the Research Leader

IEQ/UNEB Research Program: **Terms of Reference for the Research Leader**

The Research Leader will report directly to the Principal Investigator (P.I.) of the IEQ/UNEB Research Program. This is a full-time position.

This official's primary duties will be to:

1. develop and coordinate all personnel management functions of the office;

2. oversee the financial management functions of the office, as specified by the IIR Financial Officer;

3. prepare required reports, as directed by the P.I. on the status and progress of the research activities and other office functions;

4. carry out the daily management functions that keep an office running efficiently;

5. represent the project at committees, conferences and other events, as requested by the P.I.;

6. organize and monitor the research activities conducted under this Program (i.e. preparing guidelines, coordinating review of proposals, making periodic field visits);

7. organize project events such as conferences and seminars; and

8. reach out to the Ugandan educational community to solicit research proposals and coordinate presentation of research findings.

Qualifications:

1. M.A. in education, psychology or a related field.

2. Experience in designing and conducting educational research (so as to provide technical support to the research activities).

3. Strong writing skills (samples required).

4. Experience in using word processing and/or data analysis packages very desirable.

5. Strong interpersonal communication skills.

ATTACHMENT E:

List of UNEB Team Members

MEMBERS OF THE UNEB TEAM

Mr. Joseph Acigwa	Principal Assistant Secretary, Teacher Evaluation Exams
Mr. Christopher Assiimwe	Deputy Secretary in charge of Technical and Business Education Exams
Mr. Matthew Bukenya	Chief Finance and Administrative Officer
Dr. Cyprian Cele	Senior Deputy Secretary
Mr. Zacky Eriko	Deputy Secretary in charge of Primary Exams
Mr. Peter Kagaba	Research Officer, Research and Data Section
Mr. Patrick Odeke	Deputy Secretary in charge of Teacher Education Exams
Dr. David Ongam	Secretary, Executive Head
Dr. Primo Okebwange	Deputy Secretary, Research and Data (Head)
Mr. Leo Okol	Principal Assistant Secretary, Primary Section
Mr. Saverio Pido	Deputy Secretary in charge of Secondary Exams

ATTACHMENT F:

Discussions Held Regarding Uganda Primary Education Reform

DISCUSSIONS HELD REGARDING UGANDA PRIMARY EDUCATION REFORM

Mr. Arthur Bagunywa	Curriculum Advisor
Mr. Richard Cartier	Finance/Administration Manager
Dr. Katigo	TDMS Coordinator
Mrs. Noreda B. Kiremire	Deputy Director Project Implementation Unit Ministry of Education and Sports Crested Towers P.O. Box 10505 Kampala, Uganda Tel: 011 256 41 241 658/241 302/241 347 Fax: 011 256 41 244 394
Dr. William Kromer	Chief of Party c/o USAID/Uganda P.O. Box 7007 Kampala, Uganda Tel: 011 256 41 241 658 Fax: 011 256 41 244 394
Dr. Colin Sentongo	Chairman Centre Point Ltd. Box 2844 642/3 Mutungo Hill Cul de Sac Kampala, Uganda Tel: 011 256 41 221 567 Fax: 011 256 41 221 892
Mr. Ian Smith	Project Coordinator Project Implementation Unit Ministry of Education and Sports P.O. Box 2450 Kampala, Uganda Tel: 011 256 41 241 658 Fax: 011 256 41

476

ATTACHMENT G:

Bibliography of Materials

BIBLIOGRAPHY OF MATERIALS

UNEB Papers

Bukenya, M.B.B. "UNEB Staff Training Strategies." A Paper presented at the Seminar of Top Management of Ministry of Education and Sports. Uganda: April, 1994.

Okelowange, Primo. "National Assessment System for Education." Paper presented at Senior Management of the Ministry of Education and Sports Seminar. Uganda: April, 1994.

_____. "Feedback, Dissemination and Utilization of Assessment information and Co-Ordination of Educational Units." Paper presented at the Seminar of Top Management of Ministry of Education and Sports. Uganda: April, 1994.

Ongmon, D. L. *The UNEB Newsletter, Vol 1., Number 2, 1993.* Kampala, Uganda: Marianum Press, October 1993.

Pido, S. "Role of Examination Subject Panels in Assessment Reform in Education."

Uganda National Examinations Board. "Towards Improvement of Education Through Assessment: Costed Action Plan." (Submitted to Project Implementation Unit. Ministry of Education and Sports for World Bank Consideration). December, 1993.

"Objective of UNEB Seminar on Examination Reform." (6 April 1994)

"Monitoring Indicators." (6 April 1994)

"Assessment of Higher Order Cognitive Skill." (6 April 1994)

"Continuous Assessment." (6 April 1994)

"Validation and Monitoring Studies." (6 April 1994)

General Information on Uganda:

Nzitka, Richard. Peoples and Cultures of Uganda.

Uganda: 1993 Yearly Review.

AED Document. "Support for Uganda Primary Education Reform." 1993 Work Plan.

478

"Cohort Survival Rates 1990/92."

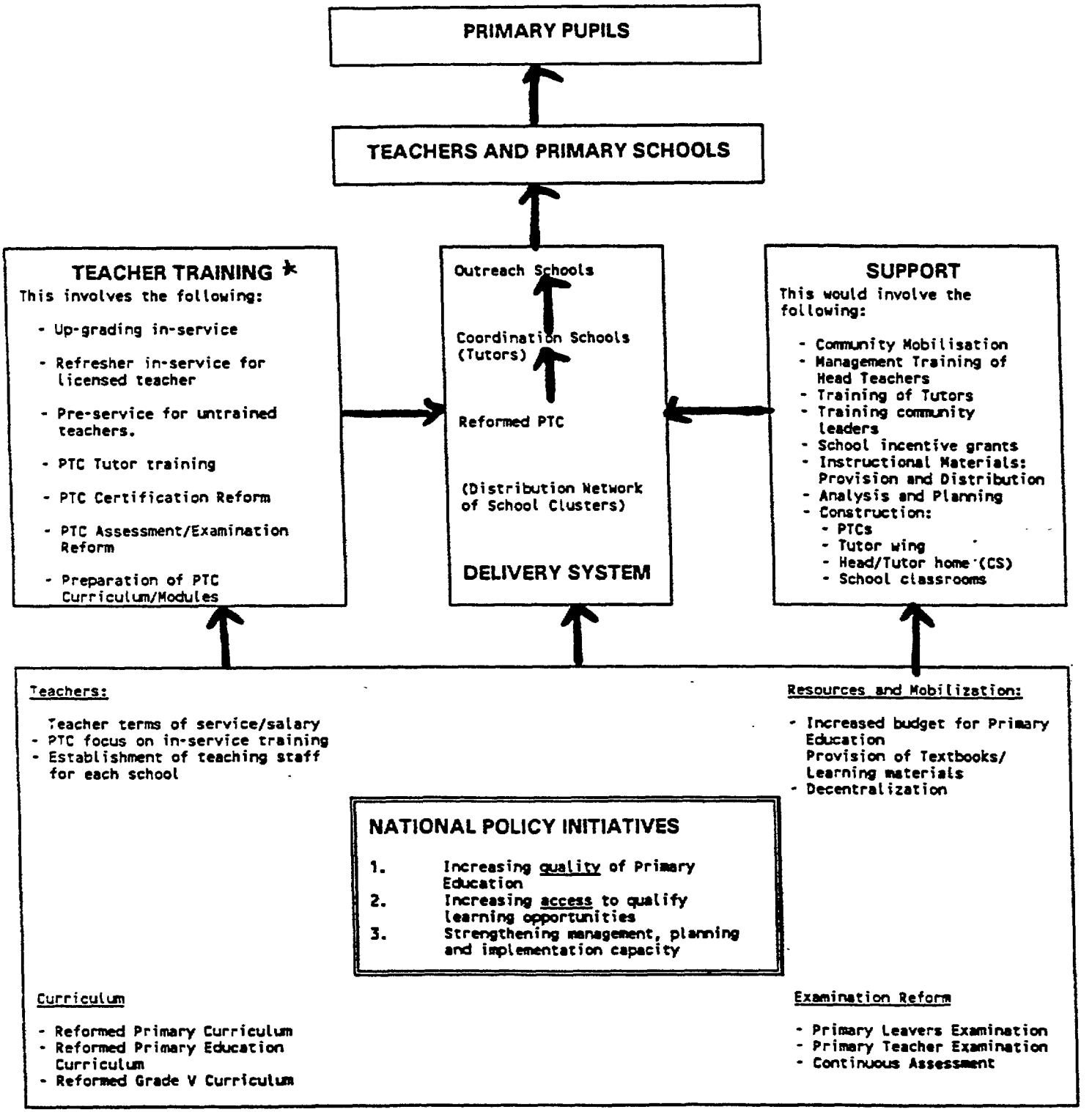
479

ATTACHMENT H:

Primary Education and Teacher Development Focus Chart

THE REFORM OF PRIMARY EDUCATION IN UGANDA

PRIMARY EDUCATION AND TEACHER DEVELOPMENT PROJECT FOCUS CHART



TDMS (Teacher Development and Management System) is a system designed to be used in the Reform of P Education. It has been designed by the Government of Uganda to be developed and implemented by the te Head Teachers, PTC Principals, PTC Tutors and many other education Offices and institutions, in collab with parents and community leaders.

SUPER (Support to Ugandan Primary Education Reform) is a USAID funded project designed to provide tec assistance and resources to the MoES in developing the delivery system (TDMS) and in supporting other el of the Reform of Primary Education.

481

Attachment 7*c*

Trip Report #26
(Mali, 21 April-7 May 1994)

482

Improving Educational Quality Project

Mali Trip Report

21 April - 7 May 1994

Prepared for:
Office of Education
Bureau for Research and Development
United States Agency for International Development
Washington, DC

Project undertaken by:
Institute for International Research
in collaboration with
Juárez and Associates, Inc.
and
The University of Pittsburgh

Prepared By:
Josh Muskin and Rick Donato
Institute for International Research

Contract #DPE-5836-C-00-1042-00
Trip Report #26

6 June 1994

483

TABLE OF CONTENTS

I. Mali Trip Report, 21 April - 7 May 1994, by Dr. Joshua Muskin 1

Terms of Reference 2

Execution of Terms of Reference 3

Relation to IEQ's Broader Agenda and Priorities 10

Next Steps: Short and Medium-Term Prospectus 11

II. Mali Trip Report, 24 April - 4 May 1994, by Dr. Richard Donato 13

Introduction 13

The Mali Seminar 14

Phase II and Language Learning: Visions of Innovation 16

Phase II Research 25

The Kolondiéba Project 29

Time-Line until Project Completion, September 1996 31

A Final Word 33

Appendix Documents:

Appendix A: Mali IEQ April Seminar Draft, prepared by Muskin and Donato at IIR, 4 March 1993.
Appendix B: *"Programme du Séminaire de la Phase I, PAQE,"* annotated seminar program with seminar assignments for IEQ/Mali team members.
Appendix C: Invitation letter to IEQ/Mali partners to Friday session of the seminar," *"Chers Collègues."*
Appendix D: *"Séminaire sur l'Apprentissage du Francais Dans les Première et Deuxième Classes de l'Ecole de Base au Mali,"* introduction to the seminar.
Appendix E: *"Consignes pour les Commisiions de la Session I du Seminaire su l'Apprentissage de la Langue dans les Prèmiere et Deuxième Classes,"* instructions for Seminar breakout groups
Appendix F: *"Enquête sur le Processus du Programme de Recherche-Action sur l'Apprentissage de la Langue dans les Prèmiere et Deuxième Classes de l'Ecole de Base au Mali mené par PAQE,"* prepared by Koné, Diarra and Muskin.

Appendix G: *"Questions d'Embarquement pour la Phase II du PAQE,"* guiding the breakout session discussions of Friday morning.
Appendix H: *"Documentation du Séminaire,"* content of final report and distribution list.
Appendix I: "Draft --IEQ Mali/Project Components: Phase II and Proposal for USAID/Mali By-in."
Appendix J: *"Programme de la Semaine Deux de Rick Donato & Josh Muskin Mission A Bamako du 21 Avril au 7 Mai 1994."*
Appendix K: Intervention descriptions and operational outlines for the three major Phase II interventions: *Cantines Scolaires, Cercles d'Etudes Communautaires,* and *Formation des Maitres."*
Appendix L: *"Les Interventions Proposées par le Séeminaire PAQE du 26-29 Avril 1994,"* hand-out and overhead copies.
Appendix M: "Appointment Agreement between the Institute for International Research Inc. and Joshua Muskin," scope of work for periods 15 April to 31 May 1994.
Appendix N: "Developing Consensus Around Quality in the Classroom: an action research agenda for improving language acquisiton in grades one and two of Malian primary schools," initial article outline.
Appendix O: Copy of fax from Joshua Muskin to Jane Schubert on initial mission reactions and immediatė issues, from 6 May 1994.
Appendix P: Copy of fax from Ray Chesterfield to Joshua Muskin on "mini-research project" on IEQ/Mali seminar process.

Note: The following trip report consists of two sections. The first section was written by Dr. Joshua Muskin, Florida State University; the second section was written by Rick Donato, University of Pittsburgh.

Consultant's Report of Joshua A. Muskin

**Technical Support of IEQ Activities in Mali:
Phase I Concluding Seminar Support & Initial Planning for Phase II**

Bamako, 21 April - 7 May 1994

The present mission to Mali represented the capstone for Phase I of the USAID/IIR Improving Educational Quality (IEQ) activities in Mali. In collaboration with Richard Donato, the consultant supported the Mali IEQ team in the final organization and the implementation of the Phase I concluding seminar on French language learning in grades one and two of Mali's primary education system. The major aims of the seminar were (i) to develop a consensus view among the many participants in the Malian primary education system of the prominent factors (school-based and extra-scholastic) affecting French language acquisition among beginning students and (ii) to identify a series of interventions to improve language learning in the Malian classroom, for implementation on a pilot basis as IEQ Phase II. The seminar was a great success in this regard, resulting not only in a discrete series of relevant, realistic interventions (see Appendix L) but also in a sense of collective ownership and commitment by all the seminar participants, including parents, teachers, and local and regional administrators. The second week of the technical assistance mission involved collaboration between the two consultants and the IEQ/Mali team on developing the implementation and research aspects of the proposed IEQ Phase II interventions. The consultants also conferred with the USAID/Mali Mission about the tentative Phase II program to assure its suitability with the planned USAID/Government of Mali education sector amendment.

The prospects for Phase II look very good for two reasons, and a bit ominous for a third. The promise for Phase II is perhaps most great due to the fine work of the IEQ team in organizing a seminar that was truly inclusive. The facilitation provided collectively by the team members assured a strong sense of ownership and commitment at all levels of the education systems for the four regions involved -- Kayes, Mopti, Ségou and Sikasso -- along with a set of meaningful, practical interventions. Virtually all seminar participants look forward to contributing further in the subsequent stages of the quality program. The second cause for optimism is the evident commitment by USAID/Mali to incorporate the IEQ agenda as one of the pillars of its upcoming education sector program amendment. A buy-in to IEQ by the Mission is being discussed most seriously.

However, the burden of promise is the obligation to produce. The successful implication of the parents, educators and regional education administrators in the IEQ process must be maintained; a commitment to which the IEQ/Mali team adheres firmly but that also demands significantly more time, effort, creativity and resources. Similarly, the interest of USAID/Mali to incorporate the IEQ agenda into its plans suggests a much greater level of activity, especially on behalf of the Malian IEQ team, along with any associated consultants. The Project has gotten big fast. Even at the present level of activity, the involvement of the IPN and ISFRA

486

researchers exceeds their official availability to the Project. With all there is to gain from expanding the IEQ program in Mali, the practical demands must be studied closely and accommodated to maximize the prospects of success.

It must be said that there is no doubt that the IEQ team is fully committed to fulfilling the promise of the Project and is excited by the present positive developments. There is no real burden, as they see it, just opportunity. This attitude and dedication has grown continuously since the start of the IEQ technical assistance program in Mali. Considerable admiration and gratitude are due to the whole team for the marvelous job they did preparing and assuring the fine operation of the seminar, especially to Sékou Diarra and Mamadou B. Koné, who took on the lion's share of this task. The same appraisal pertains to the work of the whole IEQ team in finishing up their Phase I report and processing the Phase I seminar products with the consultants the following week. Similarly, gratitude is due to the Directors of IPN and ISFRA, and their deputies, for their continued, active endorsement and support of the IEQ/Mali project, as well as to their respective Ministers. The IEQ/Mali team acknowledges with gratitude the active and moral support that USAID/Mali and ABEL continue to provide, seeing this as crucial to their work. Finally, the able assistance and total support of IEQ/DC, especially from long distance, proved invaluable.

The next steps for IEQ/Mali involve pursuing two basic paths. Phase II is in its early design stage, meaning that the IEQ/Mali team must prepare an implementation plan and budget for developing the specific interventions in each of the four regions, which must begin to be executed starting in June if implementation is to start with the new school year in October. The broad elements of these strategies were accomplished during the technical assistance mission. The IEQ/Mali team committed to sending a draft detailed action plan and budget to IIR by 23 May. The second path is a proposed plan of action submitted by IIR to USAID/Mali for the Mission's education sector project paper that will serve as the basis for a likely eventual buy-in to IEQ. This is due to Mali by 20 May. Continued technical support by e-mail and, eventually, as another mission to Bamako, will be very important throughout the Summer.

Terms of Reference

The basic purpose of the present mission was to assist the IEQ/Mali team in bringing to conclusion the Phase I activities and set the course for the Phase II program. (See appointment agreement in Appendix M.) This involved basically aiding in the facilitation of the national seminar on educational quality and organizing the seminar outcomes into a plan of action for Phase II. Specifically, the tasks associated with the technical assistance mission were:

1. Provide assistance and guidance as requested my IEQ/Mali team in the final preparations for the IEQ Mali Phase I Seminar;

2. Participate in the 26-29 April seminar, with a view toward production of a seminar final document;

3. Facilitate the group process in summarizing outcomes of the seminar;

4. Cooperate with a Malian counterpart in producing a final seminar document which will be featured as an "IEQ Occasional Paper;"

5. Discuss with stakeholders in the Malian education community perceptions of the seminar;

6. Coordinate and supervise production of a video documenting the seminar process and outcomes;

7. Attend a two-day meeting de-briefing with IEQ colleagues in Washington and submitting a trip report.

Execution of Terms of Reference

The tasks associated with the mission terms of reference were largely fulfilled completely by the consultant. A summary of the activities as relate to the specific terms of the mission follows:

Task 1. Assist in final preparations for seminar. The IEQ/Mali team had done an excellent job in preparing the logistical and substantive components of the seminar. The consultant met with the IEQ/Mali team, and separately with the two main organizers, Sékou Diarra and Mamadou B. Koné, on Friday 22 April and Saturday 23 April to review the program (which resembled closely the agenda prepared in December), plans, documentation and remaining tasks. Two major needs were emerged: (i) refine some of the operational documentation for the seminar; and (ii) designate specific responsibilities for the actual operation of the seminar. Mostly in consultation with the organizing committee (Diarra and Koné), the consultant helped revise the "instructions" (*consignes*) document for the different breakout commissions (Appendix E), prepared a seminar introduction sheet (Appendix D), and drafted a "reminder" invitation to the Friday seminar session for the "development partner" organizations (Appendix C). Although there was agreement on the seminar program, no decisions had been made concerning who would assure the proper execution of each step. The consultant went through the program step by step with the team as they designated roles and responsibilities among themselves. The consultant then prepared an annotated seminar agenda that listed who would be in charge of each step (Appendix B). Final review of the seminar program occurred on Monday, with Donato in attendance; a last chance to emphasize that the seminar was not about the Phase I research findings, but rather about the experience and beliefs of the many participants concerning language learning in grades one and two of the Malian primary education system. Preparations for the seminar also involved working with Diarra to

instruct the video person on what was expected for the documentation of the seminar.

It bears repeating that the preparations of the IEQ/Mali team prior to the arrival of the technical assistants was superlative, as was the team's execution of the seminar once it began. The level of detail involved in arranging such an activity in Mali, particularly when bringing in participants from four regions (including parents!) plumbs a level of complexity that greatly surpasses the imagination of this consultant. The organizing committee anticipated the needs of the seminar participants and, with the help of a highly capable support crew, satisfied these needs with respect and promptness. They are to be congratulated for their excellent work.

Task 2. Participate in seminar. Participation in the seminar involved a few functions. Primary among these was that of co-facilitator, both cooperating with IEQ/Mali team members in stimulating and nudging debate around the major questions of the seminar and discussing with them how we could all best fulfill these facilitation duties. This was especially meaningful at the point of the seminar when a final set of recommendations was being proposed and debated along with a program for follow-up by IEQ/Mali in Phase II. Also important was the support offered to Sékou Diarra, directing the seminar behind the scenes, and to Hassimi Maïga, named President for the seminar, particularly to deal with unexpected situations such as the need to revise completely the Friday program (see Appendix G). The IEQ/Mali team formalized this function by proposing to the seminar participants that the consultant be appointed as Maïga's Vice-President, which was done. Each day of the seminar ended with a meeting in which the two consultants helped the team to assess the day's events and to make adjustments as necessary to help guarantee the next day's success. Other tasks conducted during the seminar included directing the filming of the video person, moving equipment, preparing documentation for distribution, and helping to brief commission presidents and reporters.

Task 3. Facilitate seminar summary process. Week two of the mission for both consultants was devoted to working with the IEQ/Mali team to turn the seminar results into an explicit plan of action for Phase II. This involved two basic elements: (i) design the strategic and research dimensions for each of the three interventions that emerged from the seminar; and (ii) articulate a detailed implementation plan to design and launch the interventions, using an action-research, participatory model, as pilot activities in the regions of Kayes, Mopti, Ségou and Sikasso. The consultants prepared an outline for the discussions related to these two elements that guided the collaborative work of the second week of the mission (see Appendix J).

The strategic and research dimension dealt mostly with issues concerning the content and operationalization of each intervention. These included variations on the following questions for each of the proposed interventions:

a. What is the explicit relevance of the intervention to the goals of IEQ?

b. What are the specific functions and activities associated with the intervention, and

what are the roles of the different associated partners?

c. What criteria should be used to select the pilot schools and communities?

d. What research questions and methodology will be used to monitor and assess the intervention?

e. What expertise will be required to help design, operate, monitor and evaluate the intervention?

The debates concerning these questions were exhaustive and, especially for the Teacher Training intervention, occasionally quite challenging. The IEQ/Mali researchers undertook these discussions seriously and generated what both consultants consider to be realistic, creative and promising programs, presented in Appendix K.

The implementation plan discussions dealt more with the logistical programming of Phase II: how actually to do the plan. The specific issues and questions requiring treatment (for each intervention) within this element were:

a. Identify the goals and objectives of the intervention, along with its actual content, in collaboration with the local and other partners: parents, teachers, school directors, pedagogic advisors, regional advisors, and outside experts.

b. Select the pilot sites based on criteria devised jointly with school inspectors, local educators and relevant experts, and including consideration of the practical and financial constraints associated with the IEQ/Mali project.

c. Prepare a budget for the design stage of Phase II and for any preliminary research.

d. Contact the diverse partners in Phase II -- technicians/educators, administrators, specialists, beneficiaries -- in order to plan the actual intervention elaboration process, anticipated as a series of regional workshops to "define" the content, organization and execution of the interventions in the pilot schools and communities. This planning exercise will address such matters as the distribution of roles, the calendar of execution, specific goals and objectives, pilot sites, etc.

e. Address for each pilot site questions relating to: (i) the precise nature of the intervention; (ii) the specific preparatory steps, such as training, organization, site development, materials purchase, etc.; (iii) the identification of individuals for each role; (iv) the naming of individuals to monitor and oversee implementation; (v) the preparation of implementation budgets, along with the identification of the sources of funds and other resources; and (vi) the specification of the functions to be carried out by IEQ/Mali team members and their colleagues at IPN and ISFRA.

f. Formulate a research protocol for the three interventions, including attention to the following matters: (i) specific research questions; (ii) research instruments and protocols: (iii) the designation of research teams and roles, directly involving local partners; (iv) the establishment of baseline data, relevant to each intervention; (v) a research plan and calendar; and (vi) a research budget.

Due to time constraints (and, quite frankly, fatigue from the pressure and energy expended prior to and during the seminar), the consultant was unable to develop each of these issues satisfactorily with the IEQ/Mali team prior to the end of the mission. Rather, discussion was limited to reviewing each matter and specifying the sorts of information required to address each within the context of an exhaustive implementation plan. It was agreed that a tentative plan covering these issues, and budget, would be prepared by the team to share with the consultant for review, comment and assistance by 23 May. All understand the urgency of this plan as actual initiating activities for Phase II must begin with early June. This process will not be easy, but getting it right now will make it much easier later, and is crucial to the budgeting of Phase II.

The actual execution of the initial stage of Phase II should last through the summer until the start of the new school year, at which time the pilot interventions will hopefully be ready for implementation. This will require significant effort on the part of the IEQ/Mali team members, involving time that may not be available to them due to their regular and other supplementary responsibilities at IPN and ISFRA. This is an issue that may be taken up with the Directors of IPN and ISFRA and that the consultant suggested that the IEQ/Mali researchers consider themselves in their initial design of the final Phase II program. A related consideration is that of providing extended technical support to the IEQ/Mali team over the summer, with the present consultant potentially available for July and August.

Task 4. Cooperative preparation of an "IEQ Occasional Paper." The exact nature or intent of this task is a bit confusing. The consultant had been contacted by Ray Chesterfield concerning what the consultant had understood to be the idea of drafting a journal article on the process of the seminar and the overall development of the Phase II agenda. (See Appendix P.) Was an "IEQ Occasional Paper" what was really intended? Regardless, the consultant did draft an outline for a journal article on which he received comment from Donato. (See Appendix N.) The outline was left with Diarra to review with Bréhima Tounkara with an invitation to comment and revise and to identify those sections of the paper which they would like to prepare. It is the expectation that this will constitute a medium to long term activity. If something other than a journal article is intended, this should be indicated to the consultant along with a more explicit explanation of what is really expected.

Tasks 5 & 6. Record seminar process and participants' perceptions of the process. The anticipated documentation described in Task 4 will be based largely upon two sets of data gathered during the seminar. A videotape was taken of several hours of the different debates, both plenary and in breakout commissions, to record the nature and content of the exchange

promoted by the process. An observation and interview protocol was also developed for the same purpose (see Appendix F), applied during the seminar by Diarra, Koné and the consultant. Together, these will permit an analysis of the impressions and actual behavior of the various seminar participants as regards their sense of (i) contribution to the final seminar product, (ii) ownership of the proposed interventions, (iii) commitment to collaborating in their implementation, and (iv) involvement as one of many integral partners in the overall education process.

The consultant gave the video person basic instructions to document the nature of the various exchanges set up by the seminar program, concentrating mostly on the evolution of ideas by means of dialogue. There are surely many hours of videotape, all of which have value as a database for analyzing the seminar process and the nature and content of the many debates. The full tape should be saved for this purpose. For documentary purposes, significant editing will be necessary. The consultant has a copy of the tape, done on a PAL system. He will send this to IIR for transferral to SECAM and requests that a second copy be sent to him.

Task 7. Attend two-day de-briefing with IEQ colleagues in Washington, and submit trip report. The de-briefing session seems to refer to a meeting in Washington, DC on 4 March 1994 which can be considered more a briefing conference to establish what precisely IEQ-Washington was expecting of the upcoming Phase I concluding seminar. The planning work of the December Mission by Muskin and Donato was reviewed and consensus was found concerning the objectives and approach to be proposed to the IEQ/Mali team for the final seminar format. There was very little divergence from the original seminar plan prepared with the IEQ/Mali team in December.

A true de-briefing session for the present mission is highly desirable. IIR seems to be looking at this for the first week of June. The objectives of such a meeting might fruitfully include: (i) a presentation of the seminar process and products; (ii) an analysis of Phase II initiation and implementation requirements, for the IEQ/Mali researchers, for technical assistance, and for IIR resources; and (iii) a discussion of the prospects of a USAID/Mali buy-in to Mali and the implications for the current project there. It would also be helpful to look at the long-term roles, as relevant, for Muskin and Donato in Mali, as well as for other possible technical assistants.

Other tasks. Several other tasks were undertaken by the consultant during the two-week mission. Among the most important of these were **meetings conducted with USAID and Ministry officials.** Whenever possible, these were done in complete collaboration with Donato. The major issue emerging from the conversations Muskin and Donato held with Freda White-Henry and Chahine Rassekh at USAID was that of the apparent likelihood of a buy-in by USAID/Mali to the IEQ project. The Mission is currently looking at a $16 million (if memory serves well) education sector project amendment for the period 1994/5-1998. It seems that a significant portion of this amendment has been reserved for a quality component, for which the IEQ buy-in is being considered. The Mission is presently completing a Project Paper in which

the overall content of the amendment program will be articulated, and White-Henry requested that Donato and Muskin prepare a draft proposal covering IEQ/Mali's program (through, or up to, 1998) to submit to Yolande Grandvaux-Miller for incorporation into the final Project Paper document. Donato and Muskin reviewed with both USAID and Grandvaux-Miller the basic content of the present tentative IEQ/Mali Phase II agenda, which received a very strong response (except for the school cantine and transport component, which was more acceptable when it was described as no more than a sensitization and research component). The outline and descriptions for the tentative (it was explained that IIR approval was still pending) Phase II program were presented to USAID and Grandvaux-Miller in the form appearing in Appendix I. Muskin and Donato divvied up the Phase II components to prepare as elements of the project paper and are working on these now, with an over-ambitious submission date to Grandvaux-Miller of 20 May. The lead on the final form of this document, for which an illustrative budget is also required, obviously resides with IIR. Prompt communication between Muskin, Donato and IIR on this matter would seem crucial to supporting USAID in their present intentions to go the buy-in route.

Meetings with ministry officials, specifically the Ministers of Basic Education and of Higher Education and Scientific Research and the Directors and Deputy Directors of IPN (*l'Institut Pédagogique National*) and ISFRA (*l'Institut Supérieur de la Formation et des Recherches Appliquées*), were conducted to present the seminar results and plans for Phase II. The Minister meetings were mostly courtesy visits, although the session with the Minister of Basic Education lasted about 45 minutes and involved a substantive exchange on the importance and relevance of the IEQ/Mali agenda. The Minister was particularly interested in the relationship of maternal languages to foreign language instruction, as evident in his speech at the closing ceremonies of the seminar. He did support the French language focus of the Project, satisfied with the assurance offered that maternal languages would figure heavily in the pedagogic strategies to be applied. Other points of interest he raised during the meeting included the importance of bringing coherence to the disparate initiatives currently operating within the Ministry, and the crucial role for action-research. There was also a great quote, the full significance of which still eludes the consultant: "*Quand on oublie qui on est, on meurt dans la perplexité de son existence.*"

Satisfaction with the work of the IEQ/Mali project is equally high at both IPN and ISFRA. Dr. Ky and Dr. Diarra, as well as their respective deputies, were unequivocal in their interest that the project continue in its prominent role. Dr. Diarra raised the issue of a new agreement between IIR and ISFRA for the conduct of Phase II of the Project. The idea of a single agreement for both IPN and ISFRA was greeted positively by ISFRA. Although not addressed directly with IPN, related discussions seemed to suggest that this would acceptable there as well. Muskin indicated he was unaware of the formalities of the IIR-ISFRA and IIR-IPN agreements, but he would relay the issue to IIR for them to pursue.

A special effort was made to address clearly with IPN and ISFRA four points related to the continued ability of IEQ/Mali to perform at its present high level. These issues emerged

directly, although not always explicitly, from discussions with the team members and Donato. (1) The program for IEQ/Mali Phase II that emerged from the seminar looms as a potentially monumental effort, spreading the seven IEQ/Mali researchers out over as many as 10-20 pilot project sites with three distinct interventions in each of four regions, plus Kolondiéba. The present arrangement by which the IEQ/Mali researchers must balance their Quality Project activities with several other priorities will likely limit or compromise Phase II considerably. It will be very important, the argument was made (and may be reinforced), that some relief be found for the researchers to permit them to devote themselves adequately to the IEQ/Mali efforts. (Grandvaux-Miller indicated that the Monitoring and Evaluation efforts of the ABEL Project suffered from the same situation, but managed to operate successfully.) (2) The Project would like IPN or ISFRA to hire a full-time coordinator. A job description for this post was prepared in collaboration with the IEQ/Mali team members but has not yet been submitted officially to anyone. It was felt that a request for this position might best come from IIR to IPN and ISFRA, perhaps sent through the present IEQ/Mali team leaders. (3) The collaboration between IPN and ISFRA has developed into a strong working unit, the whole of which far exceeds the sum of the two parts. The two institutes are to be congratulated for their support of this collaboration, novel for Mali, and are encouraged to continue to take administrative actions that facilitate the ability of the researchers to work in harmony. (4) The tentative Phase II program was presented along with the possibility of a buy-in to IEQ by USAID/Mali. Unequivocal satisfaction and encouragement were expressed by both directors concerning both issues.

Although Donato took on most of this responsibility, which he performed with grace and generosity, Muskin was also happy to **help host and orient the IEQ-Ghana colleagues** attending the seminar. The participation of Albert Koomson and Hubert Quist in the seminar was very positive, appreciated by both the consultants and the IEQ/Mali team members.

Encouraged by the discussions with USAID and the Minister of Basic Education's special interest in maternal languages, Muskin and Donato **met with Save the Children-Mali,** represented by Peter Laugharn, Field Director, to investigate a possible contribution by IEQ/Mali to the SCF education project at Kolondiéba. This project is highly touted by both USAID and the Ministry, and nonformal education activities of this nature are expected to figure prominently in the upcoming USAID education sector project amendment. Laugharn was very positive about the prospect and articulated five main priorities (see Appendix I) where he thought the Project's focus and expertise could be useful, all coinciding very closely with the present areas of emphasis of IEQ/Mali. USAID, IPN and the IEQ/Mali researchers all endorsed this possible collaboration highly, and it currently figures in the proposed IEQ/Mali Phase II program.

Finally, a stop in Paris provided a chance to **meet with Gabriel Caron, IIEP** to discuss what they are presently up to with quality in education in Africa. Coincidentally, IIEP has already taken the first step to launching a quality initiative in Mali, although they have yet to articulate the exact nature of an eventual activity. The conversation with Caron and his assistant

explicitly. The dialogue occurred with considerable openness, successful in minimizing common rhetoric, emphasizing instead constructive debate concerning the issue of language learning in grades one and two. There seems to be complete consensus by all involved to develop further the collaboration around this initiative. The only members absent from the seminar were the international partners, who were invited but were unable to attend due to student unrest in Bamako. The IEQ/Mali team will be consulting with these partners and share the seminar documentation with them.

Goal #4 Maintain an on-going history of the Project to document the rationales for choices made, opportunities and constraints encountered, and lessons learned.

The official report of the seminar is being prepared by the IEQ/Mali team and should be ready shortly. The contents and basic distribution list for this report appear in Appendix H of this report. Similarly, other documentation associated with the seminar and the subsequent Phase II planning sessions of the IEQ/Mali team appears in Appendices I and K. There are plans for two of the team members and Muskin to prepare a journal article on the process of the project. A video-tape documenting the process of the seminar was also produced.

Next Steps: Short- and Medium-Term Prospectus

A series of immediate steps must occur to assure the proper and positive evolution of the IEQ/Mali Project into Phase II. Some of the more pressing of these issues were already communicated by the consultant to Jane Schubert in a fax sent from Mali (Appendix O).

1. *Prepare detailed implementation plan for the design of Phase II.* The IEQ/Mali team will prepare a plan following the model for "*Programmation Logistique*" presented in Appendix J. The plan will include a calendar of activities for this Summer along with a proposed budget. It was agreed prior to the end of the technical assistance mission that the IEQ/Mali team would prepare and transmit this plan to IIR by 23 May. Prompt comment from IEQ and Muskin and Donato will be necessary.

2. *Consult with ministerial and international partners.* The IEQ/Mali researchers must meet with those individuals, offices and organizations concerned by the same issues covered in the IEQ/Mali Phase II program: teacher training, school cantines, local language use in the classroom, etc. The main purposes of these contacts are to (i) prevent overlap and redundancy of efforts, pursuing complementarity instead, as possible, (ii) solicit technical support from local experts, (iii) receive feedback on the proposed Phase II program, and (iv) discuss the possibility of other sorts of support or cooperation for Phase II initiatives. These contacts should be finished by mid-June and the team should report on these meetings to IIR and the consultants.

3. *Prepare and initiate region-level intervention design and planning sessions.* This effort will be conducted by the IEQ/Mali team in collaboration with relevant colleagues at IPN --

Patricia Hurtebize-Alves did not extend much beyond a commitment to exchange information and to be sure to consult in the future to assure complementarity as IIEP moves towards the design of its work in Mali. A good contact and worth pursuing. Tounkara has already worked with Caron and IIEP considerably.

Relation to IEQ's Broader Agenda and Priorities

Goal #1 Understand how and why each country's classroom-based interventions influence pupil performance.

The level of understanding concerning learning in the Malian primary classroom was heightened in at least two respects as a result of the Phase I concluding seminar. First, the conjunction of diverse perspectives -- parents, teachers, school directors, inspectors, regional directors, and researchers -- occurring during the plenary and commission sessions added both depth and breadth to the Phase I research findings of the IEQ/Mali team. Perhaps more significant was the impact of the exchange of perceptions, experience and observations of the different seminar participant groups on the understanding by each group of the range of relevant factors affecting language learning in primary school, as well as of the importance of their inter-relatedness. School inspectors as well as parents and teachers commented that they had "discovered" something new during the debates and left the seminar with a true appreciation for the complementary roles of the family, community and school in educating the Malian child.

Goal #2 Demonstrate a process whereby classroom research on improving educational quality is integrated in the educational system.

The seminar represents the initial step in what may now be considered a true action-research program in Mali. Perhaps the greatest impact of the three-day effort is the complete appreciation by all the participants, including the research team, of the role of consultation and collaboration in all stages of the education reform process. The depth of contribution may not have been equal among the many groups, but there is seemingly unanimous acknowledgement of the importance of including all the parties in the debate. How this commitment gets translated into action must still be resolved, but there is definite interest by all concerned to undertake this next step. This stage will constitute the Phase II activities of IEQ in Mali. Specifically, the IEQ/Mali team will be collaborating directly with teams of teachers, pedagogic advisors, inspectors and regional advisors in the four project regions to design, plan, implement, monitor and evaluate each of the various interventions.

Goal #3 Create opportunities for dialogue and partnerships among researchers and educators who are seeking to improve educational quality at local, regional, national, and international levels.

The Phase I concluding seminar was organized in a manner that addressed this goal most

researchers, trainers, pedagogic advisors and curriculum developers -- and other ministries and with the school inspectors who participated in the Phase I concluding seminar. This work should be finished before the end of June. The potential benefit of a technical assistant in this stage of Phase II should be discussed with IIR; it has already been addressed favorably as a tentative option by the consultant with the IEQ/Mali researchers, the IPN and ISFRA directors, and USAID.

4. *Prepare IEQ prospectus for incorporation into USAID/Mali education sector project paper.* Donato and Muskin have discussed this already at some length with Grandvaux-Miller, giving her the basic outlines for the tentative Phase II program as appears in Appendices I and K. A loose guideline for a document was provided by White-Henry and a tentative (ambitious) deadline of 20 May. The substance of the program must be approved by IIR. Muskin and Donato have divvied up responsibility for preparing an initial draft document. The actual staffing and budget implications would best be developed by IIR, with Muskin and Donato certainly willing to contribute. There appears to be some urgency for this document as it will form the basis of the USAID buy-in to IEQ, which in turn has significant implications for the eventual form taken by the Phase II and subsequent actions. More practically, the deadline for USAID to submit its Project Paper is fast approaching. It would seem crucial not to miss this train.

5. *Complete and distribute Seminar report.* At the time of the consultant's departure, the Seminar report was well on the way to being completed. This responsibility was being managed by Diarra and Mountaga Lam.

6. *Distribute tasks related to the article on the IEQ process in Mali and begin writing.* The consultant is awaiting communication from Diarra and Tounkara on this matter. This will likely be a more long term venture.

7. *Possible need to renew agreements between IPN and ISFRA for IEQ/Mali.* ISFRA's director and Urbain Dembele indicated that the IIR-ISFRA agreement need renewed for Phase II. If this is true, the same is likely so for the IIR-IPN accord. It would seem consistent with the progress of IEQ in Mali to forge a single accord with the two institutes as co-partners; permitting both symbolic and practical benefits. The accord might address, in addition to the normal matters, the questions of a team coordinator and of assuring adequate availability of the designated IEQ/Mali researchers for project efforts. Based on the discussion with the ISFRA director, renewal talks might best be initiated presently by a letter from IIR.

8. *Recruit and hire an IEQ/Mali coordinator.* A job description has been prepared in collaboration with the IEQ/Mali team. The team proposed that this be transmitted by IIR to the IPN and ISFRA directors through the IEQ team leaders, accompanied by a request that the post be recruited and filled by IPN or ISFRA in the near future. This might be included in the new IIR-IPN/ISFRA accord.

Consultant's Report of Joshua A. Muskin
Mission to Bamako, 20 April - 7 May 1994

9. *Possible technical assistance provided over the Summer.* As the IEQ/Mali team initiates the action-research component of the Project, emphasizing local-level collaboration to define and plan the specific interventions, all parties involved -- IPN, ISFRA, IEQ/Mali, USAID -- agreed that there would be benefit in having technical support. Muskin may be available to collaborate with the IEQ/Mali team in organizing and conducting the regional Phase II design and planning sessions during July and August. An August mission by Donato to confirm and finalize the technical content of the various interventions may also be desirable. Discussions of these options should occur immediately, especially to assure the availability of necessary funding and of the two consultants.

10. *Consult with Save the Children on the Kolondiéba component.* Special attention must be made to the organization of the Kolondiéba component of the Phase II program, mostly as this does not emerge naturally from the Phase I and seminar processes. This should be undertaken jointly by the IEQ/Mali team (assigned presently to Koné) and the two consultants. The possibility of e-mail contact with Laugham should facilitate this.

Technical Support of IEQ Activities in Mali
Phase II Conceptual Framework, Interventions, and Research

Bamako, April 24 - May 4, 1994

Richard Donato
University of Pittsburgh

Introduction

The purpose of this trip report is to present the results of the IEQ seminar held in Bamako during the last week of April, 1994 and to report on discussions held with the IEQ team during post-seminar debriefing sessions on Phase II interventions and research. This report is intended to serve as a complement to the thorough and well-documented trip report of Dr. Joshua Muskin (May 19, 1994).[1] and, as such, should be read in conjunction with his report. Taken together, the two reports will document the process of collaborative educational research and innovation, and the products deriving from this effort. I will highlight in this report the following areas:

1) The Mali Seminar
2) Phase II and Language Learning: Visions of Innovation
3) Phase II Research
4) the Kolondiéba Project
5) Time-Line until project completion (Sept., 1996)

This report will also attempt to provide a *vision* for the project. That is, although the broad strokes of Phase II have been articulated, how the actual educational interventions and classroom-based research will take place in practice have yet to be established in any great detail with the IEQ team. In this report I will discuss Phase II interventions and research by combining both the current status of Phase II (the most recent work of the IEQ team and consultants) with some of my own reflections on the IEQ project making specific reference to language learning, curricular innovation, and a research design. It is my hope,

[1] For future trip reports, I would recommend that when two consultants work on the same project, a collaborative trip report be written rather than two separate reports that risk summarizing the same information. For this reason, I will limit my comments to the issue of interventions, research, and language learning.

that this report will provide a frame of reference for anchoring future discussions of the IEQ Phase II activities by the Mali IEQ team and its consultants. Taken in conjunction with Dr. Muskin's report that accurately and thoroughly documents the project's recent past and current status, I hope that this report will also shed some light on a possible future (or futures) for the project within the now well-defined and coherent conceptual framework for Phase II in Mali.

1) The Mali Seminar

The IEQ team is to be congratulated and applauded for the seminar they hosted during the last week of April, 1994. The event was a tremendous success bringing together several constituencies concerned with the issue of educational quality and language learning in Mali. Upwards of 60 attendees, participated in vigorous debates over a four day period. In a symbolic show of support, the two ministers of education addressed the seminar attendees at the opening and closing ceremonies. Reports of the seminar were made on national news and part of the opening and closing ceremonies was videotaped for television broadcast. The seminar revolved around three major themes: 1) *the condition of the child*, 2) *the context of learning and teaching*, and 3) *teaching strategies*. Workshops provided participants (regional directors, ministry personnel, teachers, parents, NGOs, educational researchers) with the opportunity to discuss each theme in an effort to arrive at a plan for action in the form of specific interventions and research. The themes of the seminar also reflected the interests of the two institutions (IPN and ISFRA), thus integrating the team in a collective discourse with a wider community of educational specialists (see Donato's trip report, Implications for Phase II, pp 15-18, January, 1994; see Appendix E, Muskin's trip report, May 1994).

The outcome of the seminar was the identification of three categories of interventions and research for Phase II. These categories were decided upon in debriefing sessions where the IEQ team reflected upon and prioritized what they perceived to be the most salient issues being reported by each workshop. The specific process leading to these

interventions was a) discussion by the seminar participants in workshops based on Phase I concerns and research, b) follow-up discussions on the workshop reports by selected members of the IEQ team with Muskin and Donato, and c) selection of interventions based on the discussions of each workshop. The resulting interventions are grouped under three superordinate categories linked to each of the three workshop themes: 1) School Cantines, 2) Teacher Training, and 3) Transportation to School. Under each of the three superordinate categories, specific interventions are addressed. The following is a brief summary of each intervention. A more detailed account can be found in the Appendices accompanying Muskin's trip report and in Part II of this report.

School Cantines

The seminar participants identified a need to account for the physical condition of the child as it relates to his/her learning. Researching the effects of school cantine programs on academic achievement was proposed. Additionally, it was decided that the issue of community-supported Study Centers would be a good extension and practical use of the physical space of the cantine. A detailed account can be found in Muskin's trip report, Appendix L.

Teacher Training

Teacher Training is the most extensive intervention proposed. It includes five areas for teacher education that would be immediately applicable to language teaching in the framework of the existing curriculum. This intervention is designed to instruct teachers on how to a) use textbooks effectively, b) incorporate the use of pair-work activities in class, c) use local folktales and legends as a core text for language learning, d) create visuals and manipulatives for instruction out of locally-found and easily accessible materials, and e) understand the role of the maternal language in French language instruction.

Transportation to School

Transportation to school is the least specified of the three interventions proposed. At present the idea is that there may be a positive correlation between the achievement of students and the degree of fatigue brought about by the physical distance the child needs to walk in order to attend school.

The seminar was successful for several reasons. In addition to allowing a broader dissemination effort and public awareness of the work of the Mali IEQ team, the seminar created a clear conceptual framework and coherence for a heretofore exploratory project experiencing some difficulty in integrating research teams, finding a focus, and coming to terms with issues of classroom-based research vs. experimental design in tightly-controlled conditions. The future looks bright for Mali.

2) Phase II and Language Learning: Visions of Innovation

The purpose of this section is to link the previously discussed interventions with language learning which has become a central focus of the work in Mali. This section will attempt to answer the question "what relationship is there between the interventions, as formulated by the seminar participants and the IEQ team and language learning?" Further, each intervention will be discussed with an eye toward the future, i.e., how these interventions may be carried out within the framework of current research and theory on effective language instruction and the contextual factors surrounding the specific situation in Mali. Each intervention has a direct relationship with academic achievement in general and, to a greater or lesser degree, language learning in particular.

Teacher Training

Clearly *teacher training* is the most pertinent intervention directly affecting the way language is presently taught in Malian public schools (see Donato trip report, January 1993)[2] The specific details of the training include information on the use of pair-work activities, better use of textbooks, the creative use of visuals and manipulatives, the introduction of folktales and legends to enrich the linguistic input the student receive in classes, and the role of the mother tongue in French language instruction. These interventions fall into two categories: ***supplemental*** and ***developmental***. That is, certain interventions would supplement or be added on to the existing curriculum. Others would require a degree of reconceptualizing language instruction in the minds of teachers. The purpose of this section is, therefore, to attempt a very preliminary answer to the question "How might these interventions be operationalized by the team and introduced to teachers?" This issue has not been addressed in detail but will certainly figure as the next important step in moving IEQ/Mali forward. In other words, what will constitute the actions to be taken? In this section I would like to posit a few possible ways that these interventions may be defined in the current framework of the curriculum. It is not my intention to define these interventions before serious discussion with the IEQ team and other key participants. Rather, I would like to reflect upon them, posit possible directions the interventions may take, and anticipate what issues are important to consider when operationalizing specific interventions in the Malian context. Muskin's report lists the specialists needed to be consulted and involved in the final elaboration of these interventions and for the actual training of the first and second grade teachers.

---

[2] The majority of Malian schools use a modified audiolingual approach to instruction. The new textbook published by Hatier incorporates audiolingual techniques with simple decoding skills and some reading and writing. I have the impression that these books are not available to all students. The new series, however, emphasizes lower-level skills (letter recognition, word recognition, artificial texts used to practice the phonetic objectives of each lesson) to the detriment of developing real comprehension of print and oral language in students. The use of the new series, an improvement over Le Language par Le Dialogue, is further frustrated by the fact the vast majority of teachers do not have the *teacher guides* which detail how instruction should occur or what language should accompany the visual materials in the first 6 lessons. The accessibility of materials, both for students and teachers, will have a direct impact on the quality of the Teacher Training intervention.

Small Group Instruction[3]

Referred to by the Malians as "Large Group Pedagogy" (the logic is that large groups of students necessitate pair-work or group work activity), this intervention will introduce teachers to the need for children to interact verbally with each other. Small group interaction does not prevent large-group teacher fronted instruction, nor should it. The use of pair-work activities is intended to increase the quantity and quality of student practice and allow students more time to interact with each other using the language they are learning. This intervention is also quite feasible in the context of the existing curriculum.

As a first attempt at implementing the intervention, teachers could be instructed to review each chapter of the textbook to determine where exercises or activities lend themselves well to student-student interaction. For example in Lesson 10 of the first-year book (pp 25-28), an uncomplicated way to introduce students to pair-work and thus increase the quantity of practice in the classroom is to a) model the words containing the sound of /i/ on page 27, b) tell students to turn to a partner and say the words to each other, and c) as one student listens he/she can monitor the sound of /i/ in the production of the other students and keep score of all the correctly pronounced words. Another variation on this activity using pair-work is to allow students to work with a partner and create a sentence orally for one of the pictures in the exercise. In this way the children will be at the same time practicing the objective of the lesson (the sound of /i/), creating meaningful language with target words, embedding the sound into pre-existing phonetic knowledge, and producing language at the sentence level rather than arbitrarily restricting verbal production to the word.

[3] This intervention would most likely be restricted to pair-work activity (two students working together) rather than cooperative learning groups of more than two students. Given the overcrowded conditions of the Malian classroom, the mere physical space for group formation and movement may prevent the use of groups larger that two. In a pair-work task the children could simply work with someone in close proximity thus alleviating the need to move about in the classroom or rearrange benches and tables.

By systematically reviewing the curriculum (in this case the textbook) and deciding where in each lesson focused pair-work tasks can be used, this intervention could be achieved with a minimum of supplementary material development or drastic changes to the language program. Additionally, teachers will be given specific suggestions for how pair-work activity can be included in each lesson. Thus, they would also learn the principles of material adaptation and the ability to create interactive tasks for new lessons in which pair-work activities have not been included.

Use of the Textbook

Closely aligned with using the textbook to incorporate pair-work activity is the general need to present teachers with strategies for effectively using commercially-prepared textbooks. Initially, this intervention would necessitate the distribution of textbooks to the students and teacher guides to the instructors. Ensuring that all students have textbooks (or at least one textbook for two or three students) and that teachers or teams of teachers in one schools have appropriate teacher guides would be a pre-requisite to this intervention. I reviewed the teacher guide during my December visit to Mali and found it to contain several ideas for presenting dialogues, conducting activities, and introducing new materials. Certainly access to this guide and a systematic introduction to its contents would improve how teachers are presently using the new Hatier series in the first and second grade. As part of their training, the teachers could be supplied with teacher guides that could form the basis for sessions on how the new series differs from the older Langage par le Dialogue approach. Further, teachers could work in teams (thus, modeling for them the use of Large Group pedagogy) review the guide and practice suggested techniques for stimulating active class participation. Finally, specific instruction on introducing and using the readings of each chapter (edited readings based on phonetic objective and comptines) can be presented. This training would include the use of pre-reading activities (e.g., prior knowledge of the topic, graphic organizers), while-reading activities (e.g., involvement strategies such as the use of gestures and sounds to accompany the text and

comprehension questions), the importance of silent reading, and post-reading comprehension checking, language arts exercises, and extension activities.

The Use of Didactic Materials: Visuals and Manipulatives

Materials to supplement instruction and clarify the meaning of new language are critically important to language learning. In Mali, as in most developing countries, these materials are in short supply and teachers do not have the necessary training to create materials on their own. The purpose of this intervention is to raise the awareness of teachers concerning what can be used as visuals and manipulatives.[4] Simple found objects or materials that already exist in the classroom are good candidates for increasing motivation and illustrating concepts. The IEQ data from Phase I indicate that a few of the teachers observed make regular use of visuals and manipulative in presenting and clarifying the meaning of new language. A member of the ISFRA portion of the IEQ team has also written a manual on the "classroom museum" which introduces teachers to the notion of using objects from the community and the immediate environment to support instruction. This manual could be a point of departure for discussions on what objects can be used, for what purposes, and how they might be integrated into existing lessons.

The Use of Folktales and Legends

The Phase I report of IEQ indicated that the linguistic environment of the first and second grade was impoverished. Simple stated, children hear in effect very little French in the classroom and the French they are exposed to is repetitive and often uninteresting. In several classes I observed in December and in my visit to the schools with the IEQ team,

[4] Manipulatives refer to concrete items that are used to motivate interest, illustrate a new concept or vocabulary item, and provide hands-on learning opportunities to students. Objects representing new vocabulary in a text or dialogue are examples of manipulatives. Manipulatives differ from visuals in that they need not be representational. For example, pebbles or blocks may be used to illustrate arithmetic operations.

we observed that repetition of the same word, phrase, or short dialogue filled most of the class period. Moreover, these dialogues are often vacuous in terms of the episodic, narrative quality and are intended primarily for the introduction of new vocabulary, a grammatical structure, or a single phonetic feature. The team's interest was peaked, however, during their Phase I research when they discovered the facility with which Malian children recited stories and the enjoyment they expressed at hearing them told. The use of folktales and legends was suggested by Donato as a way to enrich the language students hear, create meaningful and interesting language learning lessons, unite the classroom and curriculum to the wider sociocultural context of the child, and introduce strategies for building language learning on the knowledge children bring to school. Further, the use of stories facilitates language acquisition since stories are coherent, sequential, interesting, predictable, and dramatizable.

This intervention could supplement and enrich each lesson and be used to develop listening comprehension skills, vocabulary, and speaking proficiency. To incorporate stories in a language lesson, a template could be established outlining the procedures for using a folktale or legend in the classroom. This template would fulfill two functions. First, it would provide a systematic approach to introducing the children to the story they will hear, guide teachers to think about how the story could be told to ensure comprehension, and finally suggest what could be done as a post-storytelling activity to check for comprehension and to present language arts lessons. Second, the use of the template would not restrict a school or teacher to pre-selected stories but would also allow the flexibility to choose different story relevant to the community. That is, teachers could begin to select their own stories based on their knowledge of their students and the communities in which they live. As the research of Fuller and Clarke (1993)[5] point out, it is only in practice where interventions or "inputs" take on their meaning. That is, interventions cannot be defined a priori but only in relation to how

[5] Fuller, B. & P. Clarke. 1993. *Raising School Effects While Ignoring Culture? Local Conditions and the Influence of Classroom Tools, Rules, and Pedagogy*. Harvard University, unpublished manuscript.

teachers assign them cultural meanings and mobilize these inputs in different ways. Therefore, allowing teachers and communities to decide which stories would most likely be known and enjoyed by children and how these stories may reflect community values, beliefs and assumptions would acknowledge and even promote the cultural variability in meanings attached to pedagogical interventions. The template developed for these story lessons would address, therefore, the need for a systematic and principled approach to using stories for language learning and the issue of local ownership of a truly student-centered curriculum.

The Role of the Maternal Language

Although not a direct outcome of the seminar, the issue of mother tongue instruction appears to be uppermost in the minds of many. In his concluding comments to the seminar participants, the Minister of Higher Education stated that although the teaching and learning of French is one of the ministry's most important preoccupations, the issue cannot be discussed in the absence of the mother tongue. The IEQ team is in a unique position to address the role of the mother tongue particularly as it relates to the interventions proposed. As background to this issue it is important to be aware of two distinct positions on the issue. The first position reflects that of French curriculum specialists and teacher trainers. This position accepts that the mother tongue plays a critical role in language instruction as a means of facilitating the acquisition of French as a second language. However, this position does not explicitly acknowledge that national languages need to be maintained. The "facilitative position" is best known in the literature as transitional bilingualism. The second position, that of the Ministère de l'Education Nationale, is that bilingualism is a way of life for the people of Mali and therefore full *orality* and *literacy* in the mother tongue needs to be fostered and developed. This position has been introduced and explored in an innovative methodology introduced in 1979 in selected schools and referred to as the *Convergent Method*. Full documentation and evaluation of this method have been conducted by the ministry and the results seem promising and robust. The objective of this method is summarized in the 1987 report *Convergence Méthodologique: Français*

-*Langue Nationale Bambara.* The report states "if the child begins instruction in his/her national language, one creates for them learning conditions that facilitates the acquisition of French which becomes the medium of instruction from grade four. Moreover, evaluations of the program have shown a reduction in drop-out rates, higher rates of continued schooling, and a greater acquisition of knowledge in subject areas other than French. One problem with this approach is that no attempt is made to maintain mother tongue skills after grade three.

This short trip report will not allow a full discussion of the issues surrounding the role of mother tongue and schooling, such as the selection of mother tongue in multilingual schools, the bridging from mother tongue to French and related strategies for successful transition into French academic discourse, the relationship of Cummins' notion of basic interpersonal competence and cognitive-academic language ability, the role of materials, teacher linguistic competence, and maintenance and continual development of the mother tongue literacy skills after grade four. However, it seems that the IEQ team is in a unique position to contribute to the discussion. Woven into each intervention is, therefore, the question of the "judicious and principled use of the mother tongue" (IEQ Phase I Report). Each intervention will allow, at the very least, a discussion of how the mother tongue could be used to introduce new concepts, check for comprehension, and clarify meaning. For example, related to second language reading, it has been shown that native language recalls are the best indicators of understanding and yield measures of comprehension far superior to multiple choice questions or wh- questions written in the language of the reading, in this case French. Further, introducing children to readings or stories in a second language by activating prior knowledge in the mother tongue has been shown to be an effective strategy for fostering and increasing comprehension. The IEQ team will, therefore, be able to discuss the role of the mother tongue in light of the interventions proposed and research the effects of using the mother tongue in "judicious and principled ways." However, the present interventions do not contribute to the discussion of the maintenance question. This issue is beyond the present scope of the

project but could conceivably emerge as a topic for intervention and research as we move through Phase II and Phase III.

Cantines

Hungry and malnourished children do not learn well. The IEQ team, in an effort to research the effect of school cafeterias on academic achievement, have proposed to research exisiting school programs that provide food for children. As stated in the recent project proposal of Muskin and Donato concerning the possible USAID buy-in, at the very least this intervention would permit IEQ researchers to consult agencies and existing research reports in an effort to document effective cantine programs and their effects on student learning. This "literature review" approach would be cost effective and would inform directly subsequent actions taken, if any, of a more substantial nature.

As a subcategory of the research on cantines, the seminar participants identified the development of *Community Study Centers* as an efficient way of maximizing the cantine space after school hours. These Study Centers would provide the necessary support to allow children to complete their homework in areas where light, materials, and assistance can be provided. Managed by the community, the centers would bring students together to collaborate on assignments and would promote helping each other when needed. Language use in these centers could also be monitored and studied. Phase 1 data indicated that students who heard French in the home performed at higher levels on measures of reading, writing, and speaking in French. These centers could, therefore, provide a setting for using French outside the immediate school-based language lesson and thus provide a context for purposeful and authentic language interaction. In addition these centers would also send a message to the children on the importance of schooling and its integratedness into to the life of community.

Transportation

The least developed of the three interventions, research on the relationship of travel by foot to school to academic achievement and language learning in particular will be conducted. As with research on the cantines, this effort could be "literature-based.", i.e., researching documenting and distributing information on existing transportation programs. One could envision a positive and action-oriented outcome of this research. A dissemination effort headed by the IEQ team to discuss the importance of proximity could encourage communities to consider organizing schools. This intervention could have, therefore, as its by-product a commitment to establish and maintain schools for children in communities where schools do not exist.

3) Phase II Research

Consistent with IEQ's Goal #1, the research component of Phase II is designed to "**understand how and why each country's classroom-based interventions influence pupil performance.**" Discussions were held with the IEQ team following the seminar to plan the research component of Phase II. A critical task for the consultants at this point was to guarantee that the team was operating from similar underlying assumptions about classroom-based research. Initial discussions with the team indicated that this shared orientation to research was not established. Assisted by Yolande Grandvaux-Miller, Muskin and Donato lead a discussion concerning classroom-based research and how it differs from experimental studies based on highly controlled conditions and assignment of randomly-sampled subjects to treatment. It appeared that some of the team members approached classroom research experimentally and were unaware of the difficulty and perhaps even incompatibility, of using this research tradition for the study of intact groups. It was pointed out that the myriad of contextual factors, shifting patterns of interactions among subjects, and uncontrollable classroom conditions make experimental research in the classroom problematic and, at worst, reductive, uninteresting or inaccurate. It was also discussed that rather than using hypotheses (as is done in experimental studies where the researcher tries to trace causality back to

the independent variable), well-written and precise research questions were better suited for the type of study the team wanted to conduct and the story they wanted to tell. Finally, it was agreed that documenting and evaluating educational interventions require a "wide-angle approach" necessary for capturing a host of behaviors, changes, interaction patterns, achievements, attitudes, and classroom experiences. The reductive nature of experimentally-designed research (i.e., reducing the evaluation of effectiveness to a number) risks overlooking important contextual factors and changes to classroom life brought about by the introduction of specific interventions.[6] Muskins' trip report (Appendix K, pp 7-9, D & E) summarizes the results of the discussion on research. I will summarize the research rationale and design for Phase II as it is currently being conceived and constructed.

Research Rationale and Design

It was agreed that both quantitative and qualitative methods would be used in an effort to capture the maximum amount of information about life in IEQ classrooms. The aim of the research would be to measure and document the effects of Phase II interventions on the academic achievement related to language learning in the context of the total experience of the child (as opposed to measuring performance on a test exclusively). The rationale for this approach is that the aim of researching a cluster of classroom interventions is to document and evaluate the positive contributions these interventions make on the classroom experience and academic achievement of children rather than attempt to discover "the single magic intervention" responsible for improving performance in reading, writing, and speaking. An approach seeking to trace the cause of improvement to a single factor is misguided and fails to acknowledge the interactive quality of the classroom (among teachers and students, the interventions themselves, the community, etc.) and the rich diversity of classroom life.

[6] The use of classroom-based, context-sensitive research on intact groups does not preclude using quantitative data in the final analysis. The point here is that quantitative data may be *necessary*, but alone it is *insufficient* for capturing the effects of innovation and educational change.

512

For the reasons stated above, Phase II research will be divided into two major components: ***language achievement*** and the ***classroom culture.*** Research on ***language achievement*** will be conducted by comparing base-line data on the language abilities of students in the pilot schools of the four regions selected (Sikasso, Ségou, Kayes, and Mopti) with performance on these measure at the end of Phase II (June-July, 1995) and at the mid-point of Phase III (March, 1996). The purpose of two years of data collection and analyses is to ensure that the interventions have been used a sufficient amount of time to have an effect on French achievement.

Base-line data will be drawn from the IPN study (1992 and 1993) on the language achievement of second and fifth grade children in public schools (1993). The purpose of using these data is to avoid spending time and energy on collecting base-line information on language achievement that is already well documented and known. The IPN data is divided into 6 categories covering skills as 1) visual recognition of letters, syllables, words, 2) auditory-visual matching, 3) auditory and reading comprehension of texts, 4) copying, 5) dictation, and 6) translation from the national language to French. The results of these test for both 1992 and 1993 are not encouraging. On no test, with the exception of copying, were children able to perform at 75%, the level set by IPN as the indicator that the specific skill was mastered. Student performance ranged from 8% to 67% on these tests. However, on the test of copying words and phrases, students performed at the 75% and 93% level respectively in 1992 and even improved their ability in 1993 performing at the 86% and 97% levels. These robust test results on copying words and phrases and the weak results on listening and reading comprehension are related in part to the type of instruction that occurs in Malian classrooms (see Donato trip report, December, 1993).

The team was asked whether it was possible to separate from the aggregate data the test results of second graders in the schools of the four IEQ regions. They informed us that it was possible to do this. These data will then become the base-line indicators of pre-intervention achievement. Post-testing will use the same measures. The use of IPN

data is desirable for a number of reasons. First, it will prevent to needless collection of base-line data on language performance that is already well known and documented. Second, certain members of the IPN team are already familiar with the tests and have administered them and analyzed their results. Third, the content of the tests (vocabulary, grammar, phonics, etc.) are connected to the curriculum and the tasks-types represent what students are exposed to in their current textbooks. Finally, the IEQ team can contribute to the larger research agenda of the Ministry of Education by contributing to some of the data collection and analysis for 1995 and 1996.

Research on ***classroom culture*** will aim to document and analyze the context of instruction, how this context changes and improves over time, and how it compares to the classrooms studied during Phase I of the project and other non-intervention classes. These data will be collected in the following ways:

1) ***questionnaires*** distributed to a stratified random sample of parents, teachers, directors aimed at assessing their reaction to the interventions and their opinions of how the intervention effects students' classroom performance;

2) ***Interview*** data from a subset of the sample aimed at deepening information collected in the questionnaires;

3) ***Videotapes*** of selected classes in the four regions for analysis on classroom interaction and student participation;

4) ***Class averages*** compared to performance of classes the year before the interventions were in place.

5) ***Individual student observations*** using a time-sampling technique.

By combining language achievement and classroom culture data, the IEQ team will be able to present a thick description of the effect of the previously discussed classroom interventions linked to specific indicators of quality. These indicators of quality were identified by the team through the skillful assistance of Muskin. They include a) *language*

acquisition (reading, writing, and speaking[7]), b) *comprehension* of print and oral language, c) *classroom atmosphere* (student alertness, curiosity, unsolicited participation, self-discipline, attendance, work habits), d) *class averages* and the homogeneity of these averages, and e) *satisfaction* of parents, teachers, directors, and students.

4) The Kolondiéba Project

In addition to our work on the immediate concerns of IEQ in Mali, Muskin and I had the opportunity to meet with Peter Laugharn, director of Save the Children-Mali (SCF). The purpose of the meeting was to discuss the possible involvement of the IEQ/Mali team to SCF's maternal language community school initiatives. Muskin discusses this meeting in his report (p. 9 and Appendix I) so I will not reiterate its contents. I would like to document how I see our involvement with SCF as contributing to the broader goals of IEQ/Mali and what specific activities could be carried out by the team and consultants. I will also try to elaborate the outline included in Muskin's report. My aim here is to document our present thinking and provide a context for future discussions on the IEQ-Kolondiéba connection.

The Kolondiéba project represent a small minority of nonformal schools experimenting with exclusive use of the mother tongue for instruction. Existing in approximately 10 schools in the region, the Kolondiéba system offers three years of elementary instruction in reading, writing, and calculating skills taught in Bambara, the local language of the village. The curriculum is built upon four themes: village life, health, work, and enterprise and is designed to instruct rural youths in relevant life skills. Laughran informed us that work on the project was blocked because curricular expertise was not available. The type of work needed falls into two interrelated categories 1) curriculum review and revision, and 2) the introduction of French language instruction in

[7] The measure of spoken language ability needs further elaboration. It appears that the team views the measurement of spoken proficiency as the ability to say the letters of the alphabet, words and sentences. A more interactive assessment of spoken ability is necessary to capture the children's discourse competence. The assessment of speaking ability of first and second grade children needs to be discussed in more detail.

grade 3. According to the SCF report of November 1993 [8] "The possibility that some of the younger children might seek to enter the formal system after three years meant that the Village School would have to include intensive French lessons as an optional part of its third year curriculum (p 4)."[9]

One possible way of introducing French in the framework of the exisiting curriculum is through *content-enriched French lessons* based on the thematic units already in place. This technique, used in many elementary foreign language programs, provides students with the opportunity to learn, review, or reinforce topics with which they are already familiar in a new language. Since the pre-requisite knowledge is already established, the task of assigning meanings to new language forms is greatly facilitated. Moreover, the content-enriched lessons serve to reinforce the material taught in other classes and integrate the foreign language component directly into the total school curriculum. Finally, content-enriched lessons offer a context for learning cognitive-academic language, as opposed to everyday interpersonal competence, needed for academic achievement in the formal school setting.

The IEQ team could couple its review of the curriculum with designing content-enriched lessons. Indeed, the two activities go hand-in-hand. In order to write content-based lessons, complete familiarity with the curriculum is necessary. In reviewing the Kolondiéba curriculum, the team can also inform themselves about curricular areas that lend themselves to content-enriched lessons. The team will need some training in developing content-enriched lessons in order to carry out this task.

A second possible way of introducing French into the third year curriculum is directly connected with Phase II interventions, in particular *the use of folktales and legends* for language learning. In the unit on village life, local stories could be chosen as centerpiece texts for

[8] *A Step Toward Education for All: report on the first year of the village schools*. Save the Children/USA. Kolondiéba, Mali, November 1993.

[9] It appears that 25% of all third grade students seek to enter the formal system in grade 4.

516

language learning. The stories would engender not only new language and structures to be learned but their contents would be interesting to the students and would reflect certain beliefs and values of the community.

In addition, the use of similar instructional strategies for teaching French (stories and related language arts activities) would also provide an interesting *research component*. Comparisons can be made of the French achievement of children in non-formal maternal language schools who will begin their study of French in grade 3 with children in the formal, public system who are immersed in French instruction from grade 1. Additional research on how students transition from mother tongue instruction to an official language is urgently needed. This need is also echoed by SCF in their November 1993 report where they state that "passage into the formal school system will be a major topic of discussion and experimentation for the third year of the village school." Even if the IEQ team conducted the most basic form of classroom observational research, their findings and discussions would contribute significantly to the research literature on language learning in multilingual settings. It is well know that crossing the bridge from mother tongues to the official language is not always a smooth ride. Some research on indigenous language use in Malian schools indicated that making a sharp transition from mother tongue instruction to the use of French as the sole medium of communication in schools resulted in poor academic achievement in children and difficulty in developing proficiency in French.[10] The Kolondiéba project will, therefore, provide a rich source of data for addressing these critical issues both in Mali and in other multilingual settings..

5) Time-Line until Project Completion, September 1996

The purpose of this section is to project into the future what tasks need to occur and when to bring IEQ to a successful completion. I do not intend for this section to impose a structure on the project that is, in the end, the intellectual and social property of Malian educational

[10] This observation was made by Dr. Yolande Grandvaux-Miller.

community and the people it serves. This projection can be viewed as an exercise in sequencing Phase II events, as it is presently conceived, to initiate educational innovation, monitor and evaluate its effects, and report the results of the project to the people who are most directly affected and who will benefit most from the information collected.

Summer 1994 -	Establish base-line Operationalize interventions Firm-up research design and sample Schedule data collection activities Organize teacher training sessions Logistics for teacher training
September 1994	Train teachers and trainers Review data collection procedures and schedule
October 1994- July 1995	Interventions in the classroom carried out Data collection
February, 1995	Site visit by consultants to review data collection and monitor effort to data
March 1995	In conjunction with CIES conference, representatives from the Malian IEQ team visit University of Pittsburgh to work with Donato and Muskin on preliminary data analysis Plans for possible articles on Phase II
July 1995	Data analysis of Phase II carried out
September, October 1995	Seminar held in Mali to report Phase II results Phase III established Interventions refined Data collection procedures refined
October 1995 - March 1996	Phase III of project initiated Phase III interventions in place Systematic data collection
March 1996	In conjunction with CIES conference, representatives from the Malian IEQ team visit the University of Pittsburgh for Phase III data analysis with Donato and Muskin Plans for possible articles on project

September 1996 Final seminar IEQ in Mali
Final reports written
Plans for articles and monographs discussed

A Final Word

A number of positive outcomes occurred during this past visit to Mali. First, the team has arrived at a coherent conceptual framework in which to discuss, implement, and research educational innovation and change. Second, interactions with the broader educational community heightened awareness of IEQ activities to the point where IEQ participation is now being solicited by other educational organizations (Save the Children, USAID[11]). Third, progress was made in understanding research design for classroom-based interventions moving it from purely experimental studies to more thoroughly documented quantitative and qualitative accounts of educational change and innovation. Finally, on a personal note, I found my time with Dr. Joshua A. Muskin a valuable learning experience in development education in particular in the context of Mali. He and I work well together, meet frequently to plan, debrief, and reflect on activities, and, most importantly, respect the expertise that each other brings to the project. It is truly a collaborative and complementary partnership that has assisted the Mali IEQ project to move forward in a positive and productive direction.

[11] The possible buy-in by USAID to fund IEQ activities on a larger scale is not discussed in this report. See the preliminary project description written by Muskin and Donato on possible IEQ activity as part of the Amendment to the BEEP project.

Attachment 7*d*

Trip Report #27
(Ghana, 6-28 May 1994)

Improving Educational Quality Project

Ghana Trip Report

6 - 28 May 1994

Prepared for:
Office of Education
Bureau for Research and Development
United States Agency for International Development
Washington, DC

By:

Aida L. Pasigna
Abi M. Harris

Project undertaken by:
Institute for International Research
in collaboration with
Juárez and Associates, Inc.
and
The University of Pittsburgh

Contract #DPE-5836-C-00-1042
Trip Report #27 June 1994

521

TABLE OF CONTENTS

Purpose of the trip 1

Itinerary 1

Status and Outcomes 3

Goal 1 4

Goal 2 7

Goal 3 7

Goal 4 9

Appendices:

A: Overall Summary Tables from the Phase II Baseline Data Collection

B: Summary Tables by School for the Phase II Baseline Data

C: Professional Development Seminar Programme and Selected Supporting Materials

D: Pupil Observation System

Observation Guidelines
Pupil Observation Form
Sample of Completed Form

E: Pupil and Classroom Observation Form

F: Follow-up memo to Beatrice outlining design decisions.

G: Listing of materials distributed to teachers, sample programme for school level training, and the pattern for the "Action Person".

H: Daily Log

I: How to Teach Basic Reading Skills: An Instructional Designer's Manual by Aida Pasigna

GHANA TRIP REPORT

Purposes

1. Collaborate with the CRIQPEG research team in preparations for the professional development seminar on selected interventions to be introduced into the intensive involvement schools.

2. Conduct professional development seminar for the CRIQPEG team members, Circuit Supervisors, and head teachers to enable them to conduct their own seminars for the teachers of the seven intensive involvement schools.

3. Assist in the preparation of a preliminary report on findings from the baseline data collected from 14 participating schools.

4. Pilot test pupil observation instrument and train CRIQPEG team members in the use of the instrument and in strategies for monitoring reliability.

5. Adapt Phase II research design to incorporate procedures that support the monitoring of the intervention implementation.

Team/Itinerary

Team

Aida Pasigna of the Institute for International Research and Abigail Harris, Associate Professor of Education at Fordham University (a consultant).

Itinerary:

Aida spent two weeks in Ghana (May 7th - 21st), with the second week deliberately overlapping with Abi's first week in the country. This overlap ènabled Aida and Abi to finalize plans for the Professional Development Seminar with Beatrice and to share in the responsibilities for the presentations and discussions during the seminar itself which lasted for two and one-half days (May 19-21). Abi spent an additional week observing and participating in the school level teacher training and training CRIQPEG members in the use of the pupil observation instruments. Abi was in Ghana from May 13-27.

523

Meetings

May 9	Aida and Beatrice met with Dr. Habib Khan, Dr. Jan Orlanski, and Dr. Stan Derry at USAID to brief them on the objectives of Aida's trip, the activities planned for the two-week period, and to update them on the project's progress over the last few months.
May 16	Abi and Beatrice met with Dr. Jan Orlanski and Dr. Stan Derry at USAID to brief them on the objectives of Abi's trip and the activities planned for the two week visit. Dr. Richard Craft, a PREP consultant sat in on the last part of the meeting.
May 17	Abi, Aida, Beatrice, and Dr. Derry met with Acting Director General Attay-Quayson of the Ghanaian Education Service. Phase II research activities were described and tables summarizing the results of the baseline pupil performance data were provided and discussed (Appendix A). Dr. Attay-Quayson shared that these findings corroborate recent performance on the secondary exam and he expressed support for CRIQPEG activities.
May 20	Abi, Beatrice, and visitors from Swaziland (Hibajene Shandomo, Happy Luhlanga, Cynthia Hlephe, and Concillia Munroe) met with the UCC Vice Chancellor, Dr. Samuel Kwasi Adjepong.
May 21	Jan and Aida met again in the morning of May 21st for a debriefing meeting, during which they were joined by Dr. Richard Craft, a PREP consultant who needed information about the activities and findings of the IEQ Project in Ghana.
May 24-26	Abi and Beatrice visited 6 of the 7 intensive involvement schools and met with local teachers and administrators. In 4 of the schools, Abi and Beatrice participated in the teacher training.
May 27	Abi met with Dr. Orlanski for a debriefing meeting.

Status and Outcomes

Baseline data collection has been completed in the 14 participating schools in the Central and Western Region. Data analysis and the preparation of the preliminary report on findings from each team have been completed and discussed among the team members. The Coordinator is in the process of consolidating these reports. Tables summarizing pupil performance in reading, writing, and oral language have been prepared for each P2-P5 classroom, each school, and overall (across all 14 schools). Sample tables are provided in Appendix B. Uncertainty remains about the target audience and thus the optimal format and organization for the report.

The professional development seminar was held on May 19-21 for all of the 36 CRIQPEG team leaders and members (including their alternates), 7 head teachers, and 7 circuit supervisors. The focus was on selected interventions to be introduced in the seven intensive-involvement schools. A copy of the seminar program is provided in Appendix C. Although the invitation to the head teachers and circuit supervisors was only for the first day of the seminar to allow them to also take care of their other responsibilities in their various offices, they decided to also come on the second and third days in order to get the full benefit from the seminar--a decision that was extremely encouraging to both the CRIQPEG staff and the two consultants. The Programme was opened by Dean Mensah. Beatrice presented findings from the baseline data collection and introduced the goals of the seminar. Aida made presentations and coordinated the discussions and working sessions on the instructional interventions (Day One and the morning session of Day Two) and Abi was responsible for the topics on how to conduct feedback sessions for teachers and post-observation conferences, and how to collect formative evaluation data from the schools (afternoon session of Day Two and Day Three).

Two observation forms were developed to help monitor the implementation of the interventions. The "Pupil Observation form" uses a time sampling approach and is designed to monitor pupil exposure to and use of print and oral English. A high and low performing boy and girl in each classroom (plus alternates) have been targeted for observation. Copies of the observation form, observation guidelines, and a sample completed form are provided in Appendix D. The "Pupil and Classroom Observation form" will be used to monitor teacher efforts to link instruction to the instructional needs of pupils. It will also serve as a tool for post observation conferences (Appendix E).

525

The plan for end of year data collection has been adapted to (1) facilitate monitoring the implementation of the intervention, and (2) collect data on revised pupil performance instruments. Classroom and pupil observation schedules have been developed. Pupils were selected for observation in the intensive involvement schools. A discussion was held with team leaders to determine a reasonable schedule for the remaining months of this academic year. A memo to Beatrice from Abi summarizes the decisions that were made (Appendix F).

Actions:

* Abi will discuss with Jane the audience and format for the Phase II report. Input will be provided to CRIQPEG.

* Abi will select pupils and alternates to be observed in the non-intensive schools.

* Abi will revise the reading comprehension questions for passages to be used in the end of year data collection.

* CRIQPEG will revise the oral proficiency instruments so that scores on the measures used across grade level represent incremental learning. Thus, P5 pupils will be asked questions from P2-P5 objectives, and so on. Revised instruments will be administered to pupils in all 14 schools during the end of year testing.

Goal #1 Understand how and why each country's classroom-based interventions influence pupil performance.

A professional development seminar was held on May 19-21 to train the CRIQPEG teams and the head teachers and circuit supervisors of the seven intensive schools where the selected interventions are to be tried out. The training of trainers was to serve as a model for the trainers to follow when they go out to their respective schools to conduct their own seminars with the teachers--using the same training approach and training materials.

The interventions to be introduced into the intensive schools were selected on the basis of the most common learning difficulties revealed by the baseline data for all the grade levels examined--difficulties in the areas of listening comprehension,

oral expression, and reading (decoding and comprehension). The interventions therefore focused on three major goals for the pupils in the intensive schools: (a) constant practice in oral English, (b) constant exposure to print, and (c) instruction geared towards making every pupil a successful learner.

The first two goals require as much "immersion" as possible in the oral and written/printed English--increasing proportionately in both frequency of usage and scope of content/skills as the grade level goes up. The suggested English teaching strategies to be shared with the teachers emphasize fundamental principles of learning the four basic linguistic modes: listening, speaking, reading, and writing. The third goal borrows the basic concepts and teaching-learning philosophy from the mastery learning model--emphasizing the fact that the school and the teachers have as their main responsibility that all pupils are helped to learn and that all pupils be given the opportunity to attain their fullest potential. It was emphasized that the only goal of instruction is learning and that, in the final analysis, the child is every educator's "boss."

The first goal includes encouraging the teachers to constantly use English in the classroom to provide practice in both listening comprehension and oral expression--particularly in meaningful situations and in routine classroom activities--to enhance the assimilation and internalization of functional and conversational English usage. This also involves requiring the pupils to interact with each other and with the teacher not only during the English period but also during other periods for subject areas such as Maths and Science in which many concepts are to be learned using English labels/terms. The seminar participants were also trained how to use simple but "fun" ways of teaching oral English, using inexpensive improvised teaching aids and devices such as the use of hand puppets made out of the common brown lunch bag, cutouts and figures such as the "Action Man" suggested by one of the circuit supervisors, etc. During one of their group working sessions the teams were asked to list common functional and conversational English expressions that the teachers and pupils will be encouraged to use everyday as they go about their daily routine activities in the classroom, during transition times between classes, and in the school premises. These expressions were consolidated into a list that was provided to each team (Appendix). The teams also constructed puppets for distribution to the teachers of the intensive schools.

The second goal includes encouraging the teachers to literally surround the pupils with reading opportunities--e.g., taping printed labels on common objects found in the classroom, using the textbooks as frequently as possible in the

classroom, allowing the pupils to take the textbooks home, obtaining copies of old English newspapers and magazines and having the pupils circle all the words they can read from these materials and/or cut out words and phrases/sentences they recognize and make flashcards out of them; etc. The participants were also trained in the use of specially designed self-contained instructional posters that can be used for testing and remedial instruction. Selected instructional strategies from the manual, "How to Teach Basic Reading Skills," were explained and demonstrated to the seminar participants. The teams' practicum exercises included micro-teaching activities using the posters and other teaching aids demonstrated by the consultant. Other sample remedial materials made available to the participants are: flashcards (letters, words, phrases, sentences, punctuation marks), and a simple home-made tachistoscope to be used for teaching word groups (words with common structural patterns).

The third goal involves making sure that learning does take place after initial instruction and providing timely and appropriate remedial help to the pupil(s) who have learning difficulties. Emphasis was placed on assessing for learning during and after instruction, both informally and formally, in order to make sure that all the pupils are learning. (Future seminars will deal with the "fast learner" and how to provide enrichment activities that enhance further learning within the same objectives.)

During the week following the Professional Development Seminar, the research teams traveled to the intensive school assigned to them and in collaboration with the head teachers and circuit supervisors trained the P2-P5 teachers in the use of the instructional strategies and materials from the Professional Development Seminar. It was typical for other teachers in the school to participate in the 2-day training even though they were not part of the research and knew that they would not receive their own set of the instructional aids.

Actions:

* During June and July, teams will make weekly visits to the schools to provide collaborative support for the teachers as they implement the strategies.

* CRIQPEG will continue its efforts to secure textbooks from PREP for use by teachers and pupils in the intensive involvement schools.

* Pupil and Classroom Observation data will be collected in the intensive involvement schools during June, July, and August. Similar data will be collected in non-intensive involvement schools in July and early August.

Goal #2 Demonstrate a process whereby IEQ classroom research on improving educational quality is integrated into the educational system.

1. Participating Circuit Supervisors provided administrative sanction for teachers to deviate from the prescribed syllabi. Continued efforts by CRIQPEG to involve the Circuit Supervisors proved useful in the school level training. Circuit Supervisors took an active role in the training and served as models in some classrooms. Also, during the school level training Circuit Supervisors were instrumental in responding to teacher concerns about implementing the intervention strategies. In two instances teachers expressed concern about the existing policy against using English for lower primary instruction in subjects other than English. In both cases the Circuit Supervisors indicated that they would support the teachers in a systematic transition from vernacular to English. Also, one beginning teacher asked about whether his lesson plans would be evaluated critically if they focused on remediation rather than the lessons in the syllabi. The Circuit Supervisor reinforced that the CRIQPEG data suggested pupils needed more help with basic skills. If the teacher's lesson plans and the exercises in the exercise books reflected this need, they would be praised rather than criticized.

2. Head teachers were integrated into the delivery of training process and served as valued role models. They provide local level support and continuity. Head teachers appeared to appreciate the opportunity to hone their skills and to serve as models for other teachers in their schools. They alerted teachers to the forthcoming training and helped conduct the training.

3. Findings from the Phase II baseline data collection were shared with key leadership prior to providing feedback at the regional and local level. Acting Director General Attay-Quayson of the Ghanaian Education Service affirmed the importance of the CRIQPEG findings and welcomed CRIQPEG efforts to intervene. He expressed continued support from his agency for the research.

Goal #3 Create opportunities for dialogue and partnerships among researchers and educators who are seeking to improve educational quality at local, regional, national, and international levels.

1. Local: School level teacher training in the intensive schools is open to all interested teachers. In the 4 schools that were visited at the time of school level training, teachers not included in the research volunteered to participate in the training despite the knowledge that they would not be receiving the training materials.

2. Local and Regional: Circuit Supervisors and head teachers were active participants in the Professional Development Seminar at UCC. One Circuit Supervisor (Gertrude Dublin from Cape Coast) provided an example (the "Action Man") of a useful and easy to make instructional tool for helping children to learn action verbs. The pattern for this visual aid was copied and distributed with the teacher materials (Appendix). In addition, Circuit Supervisors, head teachers, and CRIQPEG team members collaborated in planning the implementation of the strategies at the school level. The local level educators provided valuable insights into how to conduct the training and they took an active role in leading the school level training.

3. Faculty in the USAID supported UCC Primary Unit are members of CRIQPEG. The Coordinator of the Primary Unit, Dr. Ben Eshun, as well as other faculty from the Unit were active participants in the UCC Professional Development Seminar.

4. National: Stephen Yaw Manu, the Project Manager from PREP, who had just returned from an overseas study tour to Jamaica, visited the Professional Development Seminar at UCC for one day. He expressed interest in the research, in the strategies that were being discussed, and in the possibility of future cooperative efforts between PREP and CRIQPEG.

5. National and International: Dr. Richard Clark a consultant to PREP from the University of Colorado expressed interest in the materials and findings generated by CRIQPEG. It would appear that part of his role is to examine the relationship between the Ghanaian syllabi, textbooks, and CRT and to suggest a mapping of the objectives covered in each. His initial briefing with Dr. Orlanski followed her meeting with Beatrice and Abi on May 16. In addition, he attended Aida's debriefing on May 21 and Dr. Khan's meeting with CRIQPEG on May 26. Hopefully, a mutually useful dialogue between CRIQPEG and Dr. Clark will follow.

6. International: Several months ago, Beatrice attended a conference in Swaziland. The Ministry of Education and members of the National Curriculum Centre who attended the conference were impressed by Beatrice and by the

CRIQPEG research. As a consequence, authorization was requested and approved for Hibajene Shandomo, Happy Luhlanga, Cynthia Hlephe, and Concillia Munroe (all of the National Curriculum Centre, P.O. Box 73, Manzini, Swaziland) to visit CRIQPEG to learn more about the qualitative methods and observation strategies used in the CRIQPEG research.

Goal #4 Maintain an ongoing history of the Project to document the rationale for choices made, opportunities and constraints encountered, and lessons learned.

1. The body and appendices of this report include documentation of activities and decisions.

2. Circuit Supervisors and head teachers were asked to keep a log of any actions or activities they perform in support of the intervention or promoting language learning. CRIQPEG teams will collect this information in their next interview with Circuit Supervisors.

3. CRIQPEG teams were asked to keep a log of what occurs at each school site: who participates, what changes do the team members notice, and so on.

4. A challenge in Ghana is maintaining the balance between providing direction to CRIQPEG while simultaneously empowering the UCC researchers to assume ownership and responsibility for the research and its utility in Ghana and elsewhere. A case in point is the Phase II report. When asked about the status of the report, team leaders indicated that team reports had been drafted, with each report describing the findings in the two schools visited by the team. While these profiles provide useful documentation for the qualitative aspects of the research, they do not lend themselves to publication or have utility with decision makers. Suggested strategies for integrating the data analysis and reports had not been followed, principally because the ultimate choice had been left with CRIQPEG and the rationale for a combined report had not been explicitly discussed. A lesson to be learned is that the parameters of decision making need to be considered carefully. If CRIQPEG had been asked to decide, "What kind of report would be most useful?", would they have chosen to write 7 reports instead of one? If IEQ had clearly stated: "There is one research design, there should be one research report." would the teams have been able to produce one report that integrates the findings? Perhaps the individual team reports are a necessary first step in

preparing to integrate the findings? These "post scripts" are not intended to suggest blame or to imply that there is a problem to be "fixed". Merely they are to open a discussion of how to make a transition in ownership from IEQ to the HCRT.

Attachment 7*e*

Trip Report #28
(South Africa, 6-28 June 1994)

Improving Educational Quality Project

South Africa Trip Report

6 - 28 June 1994

Prepared for:
Office of Education
Bureau for Research and Development
United States Agency for International Development
Washington, DC

Project undertaken by:
Institute for International Research
in collaboration with
Juárez and Associates, Inc.
and
The University of Pittsburgh

Prepared by:
Jane G. Schubert and Patricia B. Campbell

Contract #DPE-5836-Q-00-1043-00

Trip Report #28 **June 1994**

534

TABLE OF CONTENTS

Page Number

Summary 1

Goals of IEQ Project 2

IEQ Mandate in South Africa 2

Background of IEQ Project in South Africa 2

Summary of Accomplishments 3
- The Workshop 3
- Impact Evaluations 4
- Project Administration 6

Summary of Discussions at USAID/South Africa 7

Major Outcomes Related to Four Project Goals 7
- Goal 1 7
- Goal 2 8
- Goal 3 9
- Goal 4 10

Next Steps 11

List of Appendices:

- Appendix A: Letter of Invitation
- Appendix B: List of Workshop Participants
- Appendix C: Draft Schedule
- Appendix D: Daily Summary Notes of the Proceedings
- Appendix E: Workshop Activities and Accomplishments
- Appendix F: Program Evaluation Designs by Participants
- Appendix G: Draft Educare Impact Evaluation Plans
- Appendix H: Analysis of Participant Evaluations of the Workshop
- Appendix I: Status Report: Memorandum from Jane Schubert to Jonathan Jansen
- Appendix J: Project Programme: January - June 1994

535

SUMMARY

Team:

Dr. Jane G. Schubert, IEQ Project Director, and Dr. Patricia B. Campbell, Director of Campbell-Kibler Associates.

Pat Campbell's purpose in working on-site in South Africa with IEQ staff and SABER grantees was to:

- conduct a week-long training session in program evaluation for mid-level managers and other staff members of the SABER grantees (reviewed all documentation on grantees' monitoring and evaluation systems collected and summarized during the January/February site visits);

- meet with IEQ staff, directors and evaluators/researchers from the four Educare grantees to discuss the possibilities of collaborative evaluation, the content of individual evaluation plans, and possible designs;

- continue discussions with Educare staff of each center "on site" about existing data (review of some data) plus data analysis capacity as well as visit sample Educare programs and draft preliminary designs of the Educare impact assessments; and

- conduct an evaluation seminar with 15 South African professional evaluators from local universities, non-governmental organizations, and local evaluation associations.

Jane Schubert's purpose was to:

- visit the newly established Durban office and meet with IEQ/RSA staff; review operational procedures;

- meet with Jonathan Jansen to review progress to date on Phase 1, clarify IEQ plans from July-September 1994 and begin discussion for Phase 2; and

- participate in the program evaluation workshop and in the discussions on the Educare impact assessments.

A briefing was held with USAID/South Africa on 24 June 1994.

Itinerary:

Name	Durban/ Scottsborough	Cape Town	East London	Jo'burg
Jane Schubert	14-18 June 22-24 June	18-22 June		24-26 June
Pat Campbell	7-18 June 22-24 June	18-22 June	22 June	24-26 June

536

The overall goals of the IEQ Project are to:

1. Understand how and why each country's classroom-based interventions influence pupil performance;

2. Demonstrate a process whereby findings from classroom research on improving educational quality is utilized by the educational system;

3. Create opportunities for dialogue and partnerships among researchers and educators who are seeking to improve educational quality at local, regional, national, and international levels;

4. Maintain an ongoing history of the project to document the rationales for choices made, opportunities and constraints encountered, and lessons learned.

In South Africa, the IEQ mandate is to:

1. Conduct impact assessments of SABER grantee products and services that influence instruction and learning at the school/classroom level;

2. Strengthen SABER grantees' capacity to establish and maintain monitoring and evaluation systems for individual projects;

3. Strengthen SABER grantee staff expertise in educational research and evaluation methodology;

4. Facilitate professional linkages between SABER grantees and the educational research and development community within and outside of South Africa.

I. BACKGROUND

The South African Basic Education Reconstruction (SABER) Project is a six-year project that runs from July 1992 - September 1998. It aims to improve the quality of education for disadvantaged South Africans through the development and implementation of innovative curriculum and training models, plus the development of policies leading to a unified education system. Eleven SABER grantees address pre-primary and primary education in four key areas: school administration; teacher training; curriculum development; and

537

provision of materials and technology. Issues that cross each of these three areas include: improvement of current NGO and ultimately new government monitoring capacity; promotion of nonsexist role models; and development of new education policies.

II. SUMMARY OF ACCOMPLISHMENTS

A. THE WORKSHOP

1. Pre-Workshop Activities

Pat:

- met with Jonathan Jansen, Doreen Musson and Roseline Ntshingila-Khosa to review draft plan for workshop;
- revised the plan for workshop to include a greater emphasis on the analysis and presentation of data; and
- worked with Nadia to set up the handouts for the workshop.

2. Activities During the Workshop

Pat:

- conducted a forty-hour, five-day **workshop on program evaluation** including: a) using outside evaluators; b) the development and refinement of goals and evaluation questions; c) evaluation designs; and d) data analysis and presentation.
  (See Appendix C for workshop outline; Appendix B for a list of workshop participants; and Appendix F for overviews of the evaluation designs participants developed during the workshop).
- **With a few exceptions, the participants were novices in evaluation. However, were extremely hardworking, committed individuals with a great interest in the evaluation.** As a result, their skills and confidence in program monitoring and evaluation increased greatly through the week. For the most part their end-of-week evaluation plans are an important "next step" to increasing the role that evaluation plays in their projects.
- **From a variety of sources, it appears that the workshop is having an impact.** For example, Thuli used techniques covered in the workshop (graphs, categorization of open ended questions) to summarize the final evaluation plan, and others report using workshop knowledge to revise questionnaires and to participate in the development of the IEQ related impact evaluation plans.

538

Feedback from project directors and workshop participants to Jonathan, Jane and Pat, discussions at the 20 July meeting, evaluation results, and evaluation plans all indicate that the workshop was a success.

3. **Recommendations for Future Workshops:**

- One person (not the primary trainer) should be put in charge of on-sight logistical issues (eg copies, problems with food, rooms, etc). Ideally this should be the person who made the original arrangements. If that is not possible, a person who will be present at the conference should be given that responsibility and all such issues should be referred to them.

- Handouts used in the workshop should be separated from resources (e.g. articles, glossaries). Handouts from different components of the workshop should be separated from each other and numbered.

- For a workshop of this size (25 participants) and duration (40 hours over five days) there needs to be more than one trainer who is an expert in the field.

B. THE IMPACT EVALUATIONS

1. Accomplishments

- Jane chaired a meeting among IEQ staff and staff and directors of TREE, BELC, Grassroots and ELRU to beginning planning Educare evaluation design;

- Pat and Rose wrote up an initial evaluation overview that suggested evaluation at four levels:
  a) comparisons of Educare curriculum for similarities and differences;
  b) what teachers/child minders learned in training, particularly Level I training;
  c) impact of training on what happens in the earning sites/child minding centers; and
  d) impact on children.

- Pat and Rose met with directors and staff at the four centers, including meeting with staff members who attended the evaluation workshop. At each site we went discussed the evaluation/monitoring information they currently collected, their feelings about the four levels of evaluation brought up at the Monday meeting and if, or how they should be used in evaluation for their program.

  Meetings were held with the following people:
  Grassroots (June 20/21) Jinny Richards, Ursala Evans and Melanie Steele

539

ELRU (June 21) Linda Biersteker, Ann ? (former Director of ELRU), Carol Smith
BELC (June 22) Sal Muthayan, Flerie Tesado, Vuyelwa Jabangu
TREE (June 23) Snoeks Desmond, Shane Moonieya, Phendu Mkhize

- Pat and Rose revised the initial evaluation overview based on the results of the site meetings and individualized it for the grantees. Rose faxed initial draft designs to BELC and TREE for comments and suggested evaluation questions to ELRU.

- At three of the sites (Grassroots, BELC, and TREE), Pat and Rose provided staff with a little technical assistance on computer software.

- Pat conducted a two-hour seminar on "hot" evaluation issues with 15 professional evaluators from 4:00 pm to 6:00 pm June 23. Topics covered included: difficulties and advantages of combining qualitative and quantitative evaluation methods, ethical and methodological issues of related to the use of control/comparison groups in evaluation and of comparing the effectiveness of different programs with the same goals.

II. **Observations** (Pat Campbell)

1. At least two of the Educare projects (BELC and TREE) have collected a great deal of monitoring/observational data on teachers/child minders that can be used in a "post hoc" analysis of the impact of training on classroom practices.

2. There is potential for at least part of the evaluation to be common across three of the Educare sites (BELC, Grassroots, TREE). This could include components of what teachers/child-minders learn in training and how training effects classroom practice.

3. There may be some issues of competition related to any cross program evaluations. These include concerns about funding as well as how cross program information would be used. These need to be addressed before data is collected/analyzed.

4. There are a variety of steps that must be taken before a study of the impact of Educare training on children can proceed. At a minimum, it needs to be ascertained what, if any, aspects of the learning sites/centers are changed by having the teachers/child-minders go through Educare training.

5. With TREE, there is great potential for collaboration with their other evaluations, particularly their Kellogg project which will begin training in southern Natal in August. The evaluator, Dr. Michael Peacock, has indicated an interest in using a

540

data collection protocol for classrooms based on what Pat, Rose and Shane have begun. The protocol needs to be expanded and refined and shared with Dr. Peacock in the immediate future.

6. With BELC, there is a need to begin collecting data in July as workshop participant, Vuyelwa Jabangu, is starting a new training program there. Discussions about data collection methods have begun and a draft has been faxed to her. However, more work and planning needs to be done.

C. PROJECT ADMINISTRATION

Jane prepared a summary of her discussions with Jonathan and other IEQ staff in the South Africa office. The "draft" form of this document appears as Appendix I. The highlights are:

1. Procedures for communication among IEQ/DC, IEQ/RSA, and USAID/South Africa have been clarified, particularly regarding approvals for major expenditures and trip reports. All documents requiring USAID/South Africa approval must be received and approved by the Project Director or her designate in DC prior to sending them to USAID/South Africa. The purpose is to respond to the USAID Project Officer's request that agreement exists within IEQ prior to requesting approval from USAID/South Africa.

2. The RSA professional staff hired by Jonathan is impressive. Rose, Thuli, and Nadia express a commitment to the principles of IEQ, bring a variety of skills to translate this commitment into practice, and are eager to develop their professional expertise. Rose and Thuli had opportunities to work closely with Pat. Their response to her leadership and guidance is a testament to their interest in learning and needs to be encouraged and supported.

3. I recommended releasing Doreen from her provisional contract with IEQ (have requested Jonathan's documentation on her performance) and strongly urged transferring some of Nadia's tasks to Nokuthula. If this cannot be done within the near future, then IEQ may require another staff member with stronger English speaking skills and some administrative skills to handle conference and travel arrangements.

4. The role and qualifications of Deputy Director needs to be rethought, as explained in my memo. The project needs additional expertise in program evaluation, particularly in quantitative analysis.

541

5. The extensive progress made with the Educare assessments requires immediate followup. IEQ has the grantees "on board" with the assessments and it is imperative for us to maintain the momentum that was begun in June.

6. It is also important for IEQ to "broker" the enthusiasm and capability demonstrated by the workshop participants when planning impact assessments with the directors of the NGOs. The workshop evaluations, the products produced and presented at the conclusion of the workshop and the feedback from the Directors send a very clear message to IEQ that workshops such as Pat's that reveal skills and empower grantees are to be incorporated in the overall evaluation and assessment activities we conduct with the grantees.

7. Plans are underway to support several representatives from South Africa to attend the Center for Evaluation Studies/CRESST conference in September and the USCEFA conference in Baltimore in December.

8. The use of external consultants in fulfilling the IEQ mandate must be clearly articulated. We will form teams (US and RSA) to conduct the Educare assessments who will organize in the US in September. I do not support the proposed visit by Myron Atkin as currently defined.

9. IEQ has the initial components for grantee portfolios, as discussed in January. I support the notion of beginning the development of individual grantee case studies, to be enriched and expanded as the project develops.

10. The Phase I accomplishments are presented in the matrix, Appendix J. The next step is to integrate the tasks specified in the Implementation Plan with these accomplishments. A similar matrix has been prepared for July-September 1994.

D. SUMMARY OF DISCUSSIONS AT USAID/SOUTH AFRICA

(Cheri Rassas, Hector Nava, Pumla Madiba, Mary Lou Johnson-Pizarro, Carina, Michelle Ward-Brent, Jane Schubert, Pat Campbell, Roseline Ntshingila-Khosa, Jonathan Jansen and Zodwa Dlamini from ABLE.

The briefing at USAID/South Africa focused on the following topics:

1. The status of IEQ activities in strengthening the skills and confidence of SABER grantees in organizing and implementing data collection tasks and in clarifying purposes for and utility of program evaluations;

542

2. The progress made in drafting preliminary designs of the Educare impact assessments;

3. The activities of and plans for the IEQ/RSA staff's technical assistance to other grantees such as TOPS, Handspring, ELTIC;

4. The contacts received by IEQ/RSA to discuss the possibility of working with HIID/Harvard to implement evaluation activities into the IDA/1,000 Schools project; and (look this up)

5. The meeting Jonathan and Jane had with Roy Padayachie, Director for the Centre for Early Childhood Development, Chairperson of the South African Congress for Early Childhood Educare Development to discuss his appointment as head of the Secretariat to establish EFA in South AFrica.

Pat and Rose presented a summary of the workshop and the work that had been done on the educare impact evaluation.

E. MAJOR OUTCOMES RELATED TO FOUR PROJECT GOALS

GOAL 1. CONDUCT IMPACT ASSESSMENTS OF SABER GRANTEE PRODUCTS AND SERVICES THAT INFLUENCE INSTRUCTION AND LEARNING AT THE SCHOOL/CLASSROOM LEVEL.

1. Met with Jonathan and Thuli Diamini to review and refine a maths program evaluation;

2. Met with Jonathan and staff to review educare evaluation plans to date and plan Monday, June 20 Educare meeting;

3. Reviewed a variety of materials on education in South Africa in general and on Educare specifically;

4. Conducted staff visit at TREE, including meeting with director Snoeks Desmond on evaluation issues and visited a children care center in an informal settlement.

5. Met with Directors and staff members from the four Educare grantees (BELC and CCDC, ELRU, Grassroots and TREE) who came together for a meeting to discuss the impact evaluations. Attending the meeting were:
   Grassroots, Jinny Richards, Ursala Evans and Eric ?
   ELRU, Roz Herbert, Linda Biersteker
   BELC, Sal Muthayan

TREE, Snoeks Desmond
USAID, Cheri Rassas
IEQ, Jane Schubert, Patricia Campbell, Jonathan Jansen, and Roseline Ntshingila-Khosa.

Based on that meeting some initial evaluation levels/models were developed. These initial efforts were shared with grantee staff at site meetings at each of the four organizations. Discussions were held and modifications and refinements were made. Based on these meetings, suggested designs for a draft were developed with two of the grantees and a series of draft evaluation questions were developed with the other two grantees. Grantee response to these documents will fuel the next step of modification and refinement.
(See Appendix G for copies of the suggested drafts).

GOAL 2. STRENGTHEN SABER GRANTEES' CAPACITY TO ESTABLISH AND MAINTAIN MONITORING AND EVALUATION SYSTEMS FOR INDIVIDUAL PROJECTS.

1. A week-long workshop, *"Program Evaluation: Let's Do It,"* was conducted for 25 staff members from Saber grantees on evaluation with an emphasis on monitoring and formative evaluation. Along with learning about evaluation theories and issues, participants:
   - developed and refined program goals and evaluation questions;
   - constructed data measures/questionnaires;
   - analyzed the responses to open ended questions and presented their results;
   - used spreadsheet software to develop graphs; and
   - developed their own draft evaluation plan.

   (See Appendix E for a copy of workshop activities and accomplishments and Appendix F for copies of the participants' evaluation plans).

GOAL 3. STRENGTHEN SABER GRANTEE STAFF EXPERTISE IN EDUCATIONAL RESEARCH AND EVALUATION METHODOLOGY.

1. As part of the Program Evaluation workshop, SABER grantees learned about a variety of evaluation areas including:
   - using outside evaluators;
   - the development and refinement of goals and evaluation questions;
   - evaluation designs; and
   - data analysis and presentation.

   The **data analysis and presentation** included:

544

a) the coding of open-ended questions;
b) presentations using graphing and tables;
c) the development of graphs using spreadsheet software;
d) an introduction to using spreadsheets in program monitoring; 5. selecting and developing measures such as performance assessment, questionnaires and interview schedules; and
e) generating conclusions and recommendations.

2. Fifteen SABER grantee staff and others involved in evaluation participated in a two hour seminar on "hot" evaluation issues covering such topics as difficulties and advantages of combining qualitative and quantitative evaluation methods, ethical and methodological issues related to the use of control/comparison groups in evaluation and of comparing the effectiveness of different programs with the same goals.

GOAL 4. FACILITATE PROFESSIONAL LINKAGES BETWEEN SABER GRANTEES AND THE EDUCATIONAL RESEARCH AND DEVELOPMENT COMMUNITY WITHIN AND OUTSIDE OF SOUTH AFRICA.

1. Pat presented the content for June 23 seminar "What's "Hot" In Evaluation." Thirteen poeple from different organizations and consultants in the Durban area came to the IEQ office to meet with Pat. The seminar was scheduled to last until 5:00pm but the participants stayed until 6:00 disucssing with Pat how issues she raised related to their own programs. Some of the topics they touched upon were about the ethics of evaluation. They talked about the implications of having multiple clients and to which client they owe their loyalty...the policy makers, the program, or the people who are being served. They discussed comparison evaluations and the issues of whether the evaluator must compare one program with a similar one or whether it is possible to compare it to a different kind of program with different goals. (See Appendices C, D, and E).

2. Pat's presence in South Africa represents a new linkage between IEQ/RSA, the SABER grantees and the broader educational research and development community. She is new to the USAID consultant circuit and brings a connection to a vast professional network of educational evaluators, Headstart and other early childhood education program managers and staff, and quantitative and qualitative methodologists. One advantage to working with Pat is her knowledge of and experience with the professional activities and projects in which many educators are engaged, which she shared with South Africans colleagues. A second advantage is her identification of possible consultants for the South Africa project from among this network, all of whom expand the currently used resource pool of experts.

545

F. NEXT STEPS

1. Create detailed plans for the TREE and BELC evaluations including the areas in common and share them with TREE and BELC. With their go ahead, start collecting data.

2. Discuss with Ursula and Melanie the TREE and BELC plans and see if they might be interested in something similar. Otherwise work with them on more specifics about how one would collect data necessary before a child study can be established.

3. Get the Grassroots data on educare facilities so it can be read into SPSS and begin analysis (Pat) and send revised data to Rose/Grassroots for further analysis.

4. Get SPSS up and running at IEQ office.

5. Hire a VERY COMPETENT computer consultant to help projects with their computer needs and to help IEQ staff as necessary. IEQ staff needs to be comfortable with the spreadsheets used by most projects. At this point they appear to be Quatro and Lotus, but this needs to be checked.

6. Follow-up needs to be done with workshop participants to see how they are doing, assist in the revision/implementation of their plans, and help them set-up and refine their plans to better use data they have already collected.

7. PUT IEQ ON E-MAIL!!!!!!

8. Have a data analysis workshop in September.

9. Have a measurement workshop in February including:
   a) collecting existing measures in areas needed by grantees;
   b) child development school readiness; and
   c) classroom interaction management style.

546

Attachment 7*f*

Trip Report #29
(Guatemala, 18-23 July 1994)

Improving Educational Quality Project

Guatemala Trip Report

18 July - 23 July 1994

Prepared for:

Office of Education
Bureau for Research and Development
United States Agency for International Development
Washington, DC

Project undertaken by:

Institute for International Research
in collaboration with
Juárez and Associates, Inc.
and
The University of Pittsburgh

Contract #DPE-5836-C-00-1042-00
Trip Report #29

Prepared by:
Paul Longo
Juárez and Associates, Inc.
27 July 1994

SUMMARY

Purpose

Guatemala

1. Assist in the development of video records of children in classroom and related settings

2. Assist in the design and refinement of a teacher- and parent-questionnaire to collect data on children's usage of classroom interactional strategies in out-of-school settings

Overview

Seven schools, four Escuelas Unitarias (EU) and three Nuevas Escuelas Unitarias (NEU), were visited. Video taping plans were executed by the IEQ Guatemala Team to record predetermined aspects of each school, including the school's immediate environment, general classroom instructional activities, and the specific classroom behaviors of designated students under longitudinal observation.

In addition, members of the team met to conceptualize and draft a questionnaire intended to assess whether or not and the degree to which students' participatory classroom involvement has improved since the beginning of the project and whether or not and the degree to which students' participation patterns are transferred from the classroom to the home.

OUTCOMES

Goal 1. Understand how and why each country's classroom-based interventions influence pupil performance.

Videography.
Video records were obtained on this trip in the 3 NEU schools and the 4 EU schools (See Appendix 1) to complement existing and forthcoming analyses of comparisons between EU and NEU schools. As the quantitative and qualitative findings are beginning to show, classroom participation patterns differ between EU and NEU schools, and these differences are dramatized in the video record obtained in this trip. Generally speaking, the video tapes corroborate research findings to date that classroom participation is more decentralized and instructional activities are more diversified in NEU schools than in EU schools.

An effort was made to develop a check list for the future video taping of the schools, classrooms, and preselected individual students (See Appendix 2). This check list was refined by the project coordinators, research associates, camera operators, regional supervisors, and local fieldworkers. Familiarity with the check list and basic video taping techniques will help the local IEQ team in Guatemala standardize video record keeping throughout the project; a similar strategy may be useful to IEQ teams in other countries.

Questionnaires for parents and teachers.
To examine the extent to which classroom-based interventions influence the behavior of students at home with parents and/or other guardians, the IEQ team in Guatemala has developed a research instrument that is intended to build upon and add to the data generated by interviews with parents. The instrument (See Appendix 3) is a questionnaire that primarily aims to examine whether and to what extent children's behavior at home has been modified by classroom-based interventions which stress cooperation and collaboration.

A related questionnaire was developed for teachers not to explore the classroom-home relationship, but rather to examine, from the standpoint of teachers, changes in student performance (primarily communicative competence within classroom settings) over time (See Appendix 4). As with the questionnaire for parents, this questionnaire focuses on collaboration and verbal participation on the part of students.

Goal 2. Demonstrate a process whereby classroom research on improving educational quality is integrated into the educational system.

The video tapes obtained during this trip, as well as those obtained previously, provide a unique and comprehensive record of student performance in school attempting reform as compared to schools not attempting reform. For those schools attempting reform having a video record is valuable way to evaluate the efficiency and equity of the intervention. It is important to note that, as research findings emerge from the ongoing qualitative and quantitative analyses, each new plan to videotape can be structured accordingly. That is to say, a deliberate effort can be made to videotape those student performance patterns that the research suggests are significant. The result is a video record that highlights research findings as they unfold.

Both of the questionnaires aim to ascertain measurements of intervention transferability and sustainability. It is expected that these data will be factored into the other analytical frameworks so that they will ultimately help to shed light on the effectiveness of the intervention strategies.

Goal 3. Create opportunities for dialogue and participation among researchers and educators who are seeking to improve educational quality at local, regional, national, and international levels.

The video tapes obtained during this trip will form the basis of a short video product to be presented at an October World Bank meeting in Coban, Guatemala. The short video will be assembled by editing into a single product select excerpts of the footage shot at each of the schools. The set of excerpts will accent the research findings to date.

Goal 4. Maintain an ongoing history of the project to document the rationale for choices made, opportunities and constraints encountered, and lessons learned.

Edited and unedited video records of the project constitute an unparalleled documentation format. As mentioned above, video taping can be seen as an integral part of research design. It can be used to answer existing questions and to raise new questions. In either case, having an ongoing video record of a project makes it possible to display findings in a convincing fashion.

Follow-up Activities

1. Review and index video tapes

2. Construct a storyboard for a 8-15 minute video product

3. Edit-assemble the video product

4. Prepare audio inserts and bilingual soundtrack

5. Field test questionnaires

APPENDIX 1

VIDEO TAPING/OBSERVATION SCHEDULE

#	DATE OF VISIT	REGION	NAME OF SCHOOL	TYPE OF SCHOOL
1	19 July 1994	II	San Antonio	EU
2	19 July 1994	II	Santa Marta	NEU
3	20 July 1994	II	Sacanilla	NEU
4	20 July 1994	II	Siguanha	EU
5	21 July 1994	IV	Tablones	NEU
6	21 July 1994	IV	Los Achotes	EU
7	21 July 1994	IV	Lazareto	EU

[Escuela Unitaria (EU), Nueva Escuela Unitaria (NEU)]

APPENDIX 2

Componente de Video de IEQ

Introducción

La producción de video en cualquier contexto, especialmente dentro de un contexto de desarrollo, es un empeño complicado, caro que consume tiempo. Los asuntos mayores involucran capacitación conceptual y técnica, la adquisición y/o arriendo de equipo, accesibilidad a y control sobre procesos de producción y editoriales, distribución y documentación, y sostenimiento y mantenimiento de equipo de producción de video. Hay, generalmente, tres fases generales de producción de video: pre-producción, producción, y post-producción. Cada fase ha complicado las dimensiones conceptuales así como también técnicas que pueden, si no bien pensados, devorar cantidades enormes de tiempo y otros recursos valiosos.

Usar esta estructura de tres partes (p. ej., pre-producción, producción, y post-producción), yo plantearé algunas de las consideraciones mayores a las que se necesita dirigirse en realizar la PRE-PRODUCCION y las fases DE PRODUCCION de grabar videos en contextos de investigación de escuela.

1. PRE-PRODUCCION:

Antes de considerar el equipo, capacitación, y cualquier otro aspecto técnico de la producción de video, debe establecerse la relación fundamental entre claramente identificar la "audiencia" y claramente adaptar el "propósito" del video. Hay que contestar las preguntas "Para quién es el video?" y "Qué tipo de historia va a contar el video?" antes de preguntar "Cómo vamos a usar el video para contar una historia?"

Entonces, hay el asunto de contenido de la historia y la cuestión de de quien trata la historia. Si, por ejemplo, se ha decidido que el énfasis general estará en el desempeño, interacción, y participación en los contextos de aula, entonces la próxima pregunta ha de ser "Está el énfasis particular en el maestro, los estudiantes, o en ámbos?" Si el énfasis está en los estudiantes, entonces está en todos los estudiantes, algunos estudiantes, o los estudiantes individuales preseleccionados?

Las actividades escolares consisten de fases diferentes (p. ej., calentamiento, instrucción, repaso, pruebas, limpieza, y tal), y cada actividad ayuda a formar el contexto. Aún dentro del contexto de actividades específicas a lo largo de cada fase de las actividades de aula, hay arreglos interacionales potencialmente importantes en los cuales hay que pensar mientras se diseña la estrategia de pre-producción. Por ejemplo, hay tipos distintos de actividades de grupo pequeño, individual, grupo grande, y en parejas, y según los embrollos informales y formales de estas estructuras de participación, la dinámica social que ocurre en ellos, y el intento pedagógica discreto de estas actividades, uno puede esperar encontrar comportamiento que corresponde de alguna manera.

La idea es normalizar tanto como sea posible antes de comenzar a grabar el video. Cuando está claro el énfasis, entonces será posible determinar el ángulo y

ubicación de la camera para consideraciones de iluminación y sonido. Si más de una persona está grabando y, por lo tanto, creando metraje crudo, es importante que el equipo grabe con una estrategia explícita y común para que el producto final aparezca coherente a la audiencia visual.

Ya que este proyecto involucra compromisos de investigación en tres países diferentes, con la posibilidad de más, es aún crucial especificar lo más posible desde el comienzo. Es una importante consideración de preproducción aclarar qué se grabará, como, y por qué.

Las decisiones con respecto al equipo de video deberían hacerse durante esta fase de producción también. Nuevamente, si más de una persona graba, entonces cada miembro del equipo debería usar el mismo formato de video. El formato más profesional sería el formate Betacam; sin embargo, éste es sumamente caro y sofisticado, y se usa generalmente por un equipo profesional. Otra opción, una menos cara, sería VHS Excelente (SVHS) o Hi8. Esta opción rendiría mayores resultados de post-producción. La tercera y final opción de video sería el formatode VHS regular, que rendiría menos opciones de post-producción desde el punto de vista de la calidad en vista de doblar y editar el metraje crudo.

EQUIPO: Quizás el formato más razonable de usar para este proyecto sería el formato VHS Excelente o Hi8. Como se mencionó esto permitiría mayores posibilidades durante la fase de post-producción. Puede que habría que considerar los asuntos de iluminación y sonido, pero en muchos casos las cámaras de video SVHS e Hi8 se ajustan sólos para iluminar y los micrófonos a bordo comúnmente capturan suficiente para la mayoria de las "historias," si se considera que la redacción ayudará plantear la historia para la audiencia meta.

PILAS: Pilas constituyen un factor importante, especialmente en áreas remotas donde no hay electricidad. Sería aconsejable tener la capacidad de grabar video por dos días consecutivos de 8-hour días, que quiere decir tener ocho (8) pilas de 2-horas. Estas pilas pueden cargarse adelante con el cargador de pila que viene con la cámara (sólo una pila puede ser recargada a la vez, así que cargar las pilas debería considerarse una parte esencial de la fase de pre-producción. También, mantener en mente que las pilas deben agotarse completamente antes de recargarlos). Las pilas se incluyen en la lista que sigue.

GRABACION: La posición de la cámara o el ángulo, especialmente en las ubicaciones de aula, es un asunto que no se puede acentuar demasiado. Usar la cinta video para contar la historia de estudiantes en contextos de aula es, al fin y a cabo, un intento de ordenar datos etnográficos en su ubicación natural o, en este caso, institucional. Colocar la cámara debe hacerse de tal manera para minimizar la interferencia con o influencia sobre actividades típicas. Esta es un asunto ético. La presencia de una cámara y un operador tiene influencia en el comportamiento, pero esta influencia puede mitigarse. Más importante, sin embargo, figuran los asuntos directamente relacionados a la continuidad en la grabación del video con respecto a los planes de post-producción. Cada operador de cámara debería tener una lista de comprobación común de escenas a grabar.

NOTA: El ángulo de cámara es importante pero no más importante que las actividades académicas que acontecen. Por lo tanto, mientras puede ser más interesante finalmente tener tiros desde una variedad de ángulos creativos, es imperioso que el operador de cámara reconoce y respeta la intimidad y honradez de la escuela y otras colocaciones institucionales. Establezca la cámara adonde quiera que sea menos intruso, y confie en las capacidades de encuadrar y enfocar. Recuerde, el zoom es un aspecto es una herramienta de encuadración para usar escasamente. Es mejor ubicar el tema en el centro del marco- usando el objetivo de ángulo grande descrito arriba - conjuntamente con sus compañeros (con el objetivo de capturar la interacción entera). Además, el aspecto zoom rápidamente agota el poder valioso de pila!

LENTE DE CAMARA: Tener un objetivo de ángulo grande ayuda a ensanchar el marco para incluir una vista más amplia del aula. Eso es importante porque el operador de cámara tendrá dificultad en adaptar la clase entera en el hallador de vista como típicamente hay poco espacio para que el operador guarde una distancia entre la cámara y la clase. A minimizar esto, una lente ángulo ancho ayuda. Esta lente se incluye en la la lista de arriba.

II. PRODUCCION...LISTA DE COMPROBACION DE GRABACION: Estrategia ENFOCADA EN ESTUDIANTES

Las siguientes escenas se deberían grabar:

1. Fuera de la escuela. Algo del área de circunvalación. La frente del edificio de escuela. Las características únicas del edificio de escuela y área de circunvalación. Algo de estos puede grabarse desde dentro del edificio escolar.

2. Dentro de la escuela. Si hay cualquier aspecto distintivo dentro de la escuela (aún más allá de la escuela) esto podría grabarse.

3. Dentro del aula. Repase paredes y estanteria y mesas/ pupitres para materiales y evidencia del ambiente de la escuela.

4. Interacción. Si el énfasis está en individuos predeterminados es importante grabar este individuo en tantos arreglos diferentes de participación (contextos) como sea posible (p. ej., actividad de grupo pequeño, actividad de grupo, trabajo de parejas, trabajo individual, y así). Aquí es importante predeterminar exactamente cuales son los contextos importantes...algunas sugerencias: [donde individuo = "S" actuando reciprocamente con el maestro y/u otros estudiantes].

a. grupo pequeño donde S es initiador y/o el moderador

b. grupo pequeño donde S es un participante y/o respondente

c. grupo grande donde S es initiador y/o el líder

d. grupo grande donde S es un participante y/o respondente

e. trabajo de pareja donde S es initiador

f. trabajo de pareja donde S es el respondente

g. trabajo individual donde S trabaja sola

5. Más allá de la escuela y del aula. Si el proyecto desarrolla planes para grabar temas en ubicaciones fuera del aula (p. ej., familiar, religioso, recreativo, cívico, educativo no-formal, etc.), grabar el individuo en interacciones según las sugerencias arriba.

IEQ Video Component

Introduction

Video production in any context, especially in the context of development, is a complicated, time-consuming, and expensive endeavor. The major issues involve technical and conceptual training, the acquisition and/or rental of equipment, accessibility to and control over editorial and production processes, distribution and documentation, and sustainability and maintenance of video production equipment. There are, generally speaking, three general phases of video production: pre-production, production, and post-production. All three phases have complicated technical as well as conceptual dimensions which can, if not well thought through, devour huge amounts of time and other valuable resources.

Using this three-part framework (i.e., pre-production, production, and post-production), I will outline some of the major considerations that need to be addressed when conducting the PRE-PRODUCTION and the PRODUCTION phases of shooting videos in school research settings.

1. PRE-PRODUCTION:

Before considering equipment, training, and any other technical aspect of video production, the fundamental relationship between clearly identifying the "audience" and clearly fashioning the "purpose" of the video must be established. The questions "Who is the video for?" and "What kind of story is the video going to tell?" need to be answered even before asking "How are we going to use video to tell a story?"

Then, there is the matter of the story's content and the question of who the story is about. If, for example, it has been decided that the general focus will be on performance, interaction, and participation in classroom settings, then the next question has to be "Is the particular focus on the teacher, the students, or both?" If the focus is on students, then is it on all students, some students, or predetermined individual students?

School activities consist of different phases (i.e., warm-up, instructional, review, testing, clean-up, and so on), and each activity helps to shape the context. Even within the context of specific activities throughout all phases of classroom activities, there are potentially significant interactional arrangements that need to be thought about while designing the preproduction strategy. For example, there are different types of small group, individual, large group, and paired activities, and depending on the formal and informal intricacies of these participation structures, the social dynamics that occur within them, and the discrete pedagogical intent of these activities, one can expect to find behavior that corresponds to some extent.

The idea is to standardize as much as possible before videotaping. When it is clear what the focus is, then it will be possible to determine the angle and camera positioning for lighting and sound considerations. If more than one person is videotaping and, therefore, generating raw footage, it is important for the team to shoot with a common and explicit strategy so that the final product will appear coherent to the viewing audience.

Since this project involves research undertakings in three different countries, with

the possibility of more, it is all the more crucial to specify as much as possible from the very beginning. It is an important preproduction consideration to clarify what will be videotaped, how, and why.

Decisions regarding video equipment should be made during this phase of production as well. Again, if more than one person is doing the videotaping, then all members of the team should use the same video format. The most professional format would be the Betacam format; however, this is extremely expensive and sophisticated, and it is generally used by a professional crew. Another option, a less expensive one, would be Super VHS (SVHS) or Hi8. This option would yield greater post-production results. The third and final option video option would be regular the VHS format, which would yield fewer post-production options in terms of quality in light of dubbing and editing the raw footage.

EQUIPMENT: Perhaps the most reasonable format to use for this project would be the Super VHS or Hi8 format. As mentioned this would allow greater possibilities during the post-production phase. Lighting and sound issues may need to be discussed, but in many cases SVHS and Hi8 video camcorders self-adjust for lighting and on-board microphones usually capture enough for most "stories," considering that editing will help frame the story for the targeted audience.

BATTERIES: Batteries constitute an important factor, especially in remote areas where there is no electricity. It would be advisable to have the capability to videotape for two consecutive 8-hour days, which means having eight (8) 2-hour batteries. These batteries can be charged ahead of time on the battery charger that comes with the camcorder (only one battery can be recharged at a time, so battery charging should be considered an essential part of the pre-production phase. Also, keep in mind that batteries must be completely discharged before they can be recharged.). The batteries are included in the list below.

SHOOTING: The position of the camera or angle, especially in classroom settings, is an issue that cannot be over stressed. Using video tape to tell a story about students in classroom settings is, after all, an attempt to marshal ethnographic data in their natural or, in this case, institutional settings. Positioning the camera should be done in such a way so as to minimize interference with or influence over typical activities. This is an ethical matter. The presence of a camera and an operator is bound to influence behavior, but this influence can be mitigated. More important, however, are those issues directly related to continuity in video taping with regard to post-production plans. Each camera operator should have a common checklist of scenes to be shot. NOTE: The camera angle is important but not more important than the learning activities taking place. Therefore, while it may be more interesting ultimately to have shots from a variety of creative angles, it is imperative that the camera operator recognize and respect the intimacy and integrity of the school and other institutional settings. Set up the camera wherever it is least obtrusive, and rely on framing and zoom capabilities. Remember, the zoom feature is a framing tool to be used sparingly. It is better to position the subject in the center of frame - using the wide-angle lens described above -along with his or her companions (for the purpose of holistically capturing interaction). Besides, the zoom feature quickly uses

up valuable battery power!

CAMERA LENS: Having a wide-angle lens helps to broaden the frame to include a wider view of the classroom. This is important because the camera operator will have difficulty fitting the entire class in the view finder since typically there is little space for the operator to keep a distance between the camera and the class. To minimize this, a wide-angle lens will help. This lens is included in the above list.

II. PRODUCTION...SHOOTING CHECKLIST: A Student-Centered Strategy

The following scenes should be videotaped:

1. **Outside of school.** Some of the surrounding area. The front of the school building. Unique characteristics of the school building and surrounding area. Some of these may be shot from within the school building.

2. **Inside of school.** If there are any distinctive features inside the school (yet beyond the school) these could be shot.

3. **Inside of classroom.** Scan walls and shelves and counter/desk tops for materials and evidence of school environment.

4. **Interaction.** If the focus is on predetermined individuals it is important to videotape this individual in as many different participation arrangements (contexts) as possible (e.g., small group activity, large group activity, paired work, along, and so forth). Here it is important to predetermine exactly which contexts are important...some suggestions: [where individual = "S" interacting with teacher and/or other students].

a. small group where S is initiator and/or leader

b. small group where S is a participant and/or respondent

c. large group where S is initiator and/or leader

d. large group where S is a participant and/or respondent

e. paired work where S is initiator

f. paired work where S is respondent

g. individual work where S is working alone

5. **Beyond the school and classroom.** If the project develops plans to videotape subjects in extracurricular settings (i.e., familial, religious, recreational, civic, non-

formal educational, etc.), videotaping the interacting individual can follow the suggestions above.

APPENDIX 3

CUESTIONARIO PARA PADRES

NOMBRE DEL NIÑO_____ID_____

FECHA_____ ESCUELA_____

ENTREVISTADOR_____

PERSONA QUE SE DEBE ENTREVISTAR:

_____ _____ _____
madre padre otro

Que cambios ha visto en su hijo/a durante el año en relación a:

1. Aprendizaje en la escuela:_____
_____
_____

2. Le ayuda voluntariamente más en cosas de la casa a la madre?
_____
_____

3. Ha visto si hace más cosas junto con sus hermanos?_____
_____
_____
_____

4. Ha visto algún cambio en la manera de hablar de _____ ? (participa más en las platicas de la familia, habla más con personas que los visitan)
Si_____ NO_____
Explique_____
_____

5. ¿Se ha dado usted cuenta si _____ hace este año más preguntas que el año pasado? (pregunta sobre lo que ustedes hablan o sobre cosas que pasan en la casa o la comunidad)
Si_____ No_____
Explique_____
_____

6. ¿Porqué decidieron que _____debía entrar a la escuela?
_____

7. ¿Va a mandar a _____a la escuela el proximo año?
Si_____ No_____
Porque?_____
_____

8. Si la respuesta es si ¿hasta cuando lo/la piensa dejar en la escuela?
_____

9. Si la respuesta es no, ¿que va a hacer _____el próximo año?

_____

10. ¿Platicó usted con otros padres de familia durante este año sobre cosas de la escuela?
Si_____ No_____

11. ¿Cuantas veces habló con el maestro/a en la escuela durante el año?
Si_____ No_____

12. ¿Ha visto usted algún cambio en la escuela durante este año
Explique_____

_____

APPENDIX 4

ENTREVISTA MAESTROS

1. ¿Cómo promueven a los niños de :
a. Primer grado

_____
En qué se basan_____

b. Segundo grado

_____
En qué se basan?_____

c. Tercer grado

_____
En qué se basan?_____

2. ¿Cree usted que este año los niños le hacen más preguntas en general? (relacionadas con el material dado en clase).
Si_____ No_____
Explique_____
_____

3. ¿Ha visto usted algún cambio en la manera de hablar de los niños? (por ejemplo: Empiezan más interacciones?, Dan más sugerencias?, Hacen más comentarios?, Corrigen más a menudo a sus compañeros?)
Si_____ No_____
Explique_____
_____

4. ¿Ha visto usted algún cambio en los niños en cuanto al aprendizaje?
Si_____ No_____
Explique_____
_____

5. ¿Ha visto usted algún cambio en la conducta de los niños hacia los compañeros en este año?(por ejemplo hacia los compañeros de clase, los maestros u otros adultos).
Si_____ No_____
Explique_____
_____

Attachment 7*g*

Trip Report #29B
(Uganda, 30 July-4 August 1994)

564

Improving Educational Quality Project

Uganda Trip Report

30 July - 4 August 1994

Prepared for:
Office of Education
Bureau for Research and Development
United States Agency for International Development
Washington, DC

Project undertaken by:
Institute for International Research
in collaboration with
Juárez and Associates, Inc.
and
The University of Pittsburgh

Prepared by:
Simon Ju
Institute for International Research

Contract #DPE-5836-C-00-1042-00
Trip Report #29 B

August 1994

565

Trip Report
Kampala, Uganda
Improving Educational Quality (IEQ)

July 30 - August 4, 1994

Submitted to:
Jane G. Schubert
Director, IEQ
Institute for International Research

Submitted by:
Simon S. Ju
Institute for International Research

Purpose:

To meet with USAID and UNEB representatives and discuss the following:

- Potential research topics under the IEQ buy-in and their relevancy to the IEQ objectives;
- The status of the IEQ buy-in by USAID/Uganda and associated implementation strategies overall;
- The institutional capacity of UNEB and its functional linkage with the buy-in activities;
- Data/information requirements for IEQ buy-in activities and UNEB's operational capacity to respond to them;
- Utilization or reflection of the products/outcomes of IEQ activities to the national education system in its planning and policy development process;
- Aiding the launching of the IEQ buy-in; and
- Initial orientation to the UNEB counterpart in preparation for both the launch and the start-up activities.

Duration:

The originally scheduled number of working days at Kampala : 4 days

Actual Activities:

July 30, 1994 (Saturday)

Arrived in Kampala from Addis Ababa.
Checked in Sheraton Kampala Hotel.

July 31, 1994 (Sunday)

Met Ian Smith. We agreed on the general view that the IEQ project would become a good functional linkage between the SUPER and PETD programs. Called Patrick Fine at home to be informed that a meeting was set at 9:30 next day (Monday) at USAID.

August 1, 1994 (Monday)

At USAID/U

Met with Patrick Fine and Christine Kiganda at 9:30 in Fine's office. Fine mentioned that the final scope of work which described complete accounts of the buy-in activities, including information on research topics, had been drawn up and sent to USAID/W. Fine added that the contract was being delayed not because of USAID/U but because of Washington (linking the contracting office and IIR). I intervened to mention that IIR should not be responsible for the delay). Fine mentioned that most of my assignments, as described in the terms of reference (memo from Jane Schubert to Frank Method regarding request for Ju's travel approval) would concern matters subsequent to the signing of the contract. In response, I suggested curtailing of the length of my trip. Fine told me it would be okay with him, except that changing my reservation would be almost impossible due to the heavy traffic at Entebe caused by the Rwanda situation.

Fine mentioned that he hoped Ash Hartwell would be able to come to Kampala for 3 - 4 weeks to start up the project, once the contract is signed. In view of the busy working schedule of UNEB, the most probable kick-off times (windows) for the project would fall either in September of this year or January of next year. Between the two windows, January would be more feasible, considering all the circumstances involved, including the contract signing.

To my mentioning that IEQ might be able to play an effective role of linking two related projects (SUPER and PEPD), Fine suggested that such a role might not be necessary, as the SUPER and the World Bank had been working well together under the supervision of the Management Council of the Ministry of Education and Sports. Instead, he felt that IEQ was expected to make substantive contributions to the two projects by producing useful classroom-based information through appropriate research activities as described in the scope of work. He said he would like to see IEQ conduct 3 - 4 research activities in the first year. Thereafter, IEQ activities would be determined based on the requirements at that time. UNEB was chosen to house the project, Fine said, because it was assessed as having the most reliable institutional and research capacity.

At my inquest on possible processes of reflecting IEQ research findings on the education system, Fine informed me that as the principal investigator of the IEQ project at UNEB was a regular member of the Management Council, IEQ already had a channel of communication between the project and the education system.

At this point, I mentioned that community participation would become a critical facet for improving the quality of education in third world countries and that relevant information would be integral in facilitating that participation. For that purpose, IEQ might look more specifically into the domain and flow of such information between the school and the community. Fine considered it an interesting concept and urged me to meet and share it with Mr. Mohamed Ndaula, who is in charge of the community participation component under the SUPER project in the MOES.

Fortunately, I was able to reschedule my flight from Kampala (from the 5th of August to the 3rd) and received verbal approval from Fine on the change.

At UNEB

I arrived at UNEB accompanied by Ms. Christine Kiganda around 2:30 PM. Dr. David Ongam (Secretary and Executive Head), Dr. Cyprian Cele (Senior Deputy Secretary), and Dr. Primo Okebwange (Research Head) were there to meet with us. They said they were ready to initiate the IEQ project, waiting only for action from the project. At my inquiry about the availability of space, Dr. Cele responded that although UNEB did not have much room in general, the IEQ project would be well accommodated. Ms. Kidanga explained the time frame (either September or January) of the project initiation and kick-off, upon which the UNEB side agreed without reservation.

August 2, 1994 (Tuesday)

I visited the MOES accompanied by Ms. Christine Kiganda to meet Mr. Mohamed Ndaula, as suggested by Patrick Fine. I described to Mr.Ndaula what I had done in Ethiopia, especially concerning the advocacy of taking education from the central office (Ministry headquarters) to the community level, which may be a critical facet for improving the quality of education in most third world countries. Furthermore, this community participation should occur in a voluntary manner with minimal outside enforcement. The role of the government or related outsiders should only nurture or facilitate conditions to trigger and expand the degree of participation, as appropriate. In other words, the community should become a critical actor in the education processes, rather than merely contribute resources. The meeting lasted only about 20 minutes because of Ndaula's other engagements.

Telephone Conversation with Fine

In the evening, I returned Fine's call from earlier in the day. I expressed to Fine that I felt my current trip to Kampala was obviously not well organized and that I was leaving without having accomplished a great deal. Fine said he could fully understand my feelings on this subject.

Discussing the IEQ project, Fine mentioned that the approach being taken by Uganda was somewhat unique and different from other IEQ countries in that researchers would be recruited. I warned him that the project should tightly monitor the performance of such researchers, especially in the early stages of the project, as such researchers may easily become tardy and ineffective, especially if the research work was to be done on a part time basis.

When I asked about the research capacity building in conjunction with the IEQ project, Fine mentioned that Uganda might not consider it as the primary objective of the project. I suggested that developing "research management capacity" in addition to research itself through IEQ/UNEB might be something very useful not only for Uganda but for the global objectives of IEQ as well.

August 3, 1994

Left Uganda heading for home.

Attachment 7*h*

Trip Report #30
(Mali, 15 July-2 September 1994)

570

Improving Educational Quality Project

Mali Trip Report

July 15 - September 2, 1994

Prepared for:
Office of Education
Bureau for Research and Development
United States Agency for International Development
Washington, DC

Project undertaken by:
Institute for International Research
in collaboration with
Juárez and Associates, Inc.
and
The University of Pittsburgh

Prepared by:
Joshua Muskin
Richard Donato
Alimasi Ntal-I'Mbirwa
Institute for International Research

Contract #DPE-5836-C-00-1042-00
Trip Report #30 **October 1994**

511

Report of Alimasi Ntal-I'Mbirwa

Technical and Administrative Support of IEQ Activities in Mali: Phase II and Teacher Training Workshops

I. BACKGROUND

This three-week mission, from August 9 to August 30, 1994, was part of a three-person technical assistance to the IEQ/Mali Research Team that took place in Bamako and Ségou. Professor Richard Donato of the University of Pittsburgh (who stayed in Mali until August 19) and I joined Dr. Joshua Muskin of Florida State University, who had preceded us in Bamako on an extended technical assistance mission since mid-July.

Our overall goal was to collaborate with the IEQ/Mali Research Team in the transition from the project's Phase I research and collaborative seminar to the Phase II pilot interventions. This involved the conception, organization and initiation of four regional workshops conducted to design and plan the IEQ/Mali Phase II pilot interventions and implement these in grades one and two of 40 primary schools.

Tasks specifically associated with my visit included assisting Donato in developing and presenting teacher training procedures, conducting orientation sessions for the Malian team and the to-be-hired-Coordinator on IIR's administrative procedures, assisting in establishing an IEQ/Mali Coordination office, familiarizing myself with the technical aspects of Phase II, and getting to know colleagues at the Ministry of Basic Education.

This report does not intend to chronicle the succession of events. Rather, I would like to look at different events with a particular focus on their "raison d'etre" -- the whole rationale behind them which may ultimately help draw IEQ's salient accomplishments in the Malian context.

A slight flashback to my August 1 - 4, 1994 trip to Pittsburgh will help to better understand some important developments that took place during this mission. I joined the IEQ Project in mid-July to provide stateside backstopping to the Project in Mali. Meanwhile, IEQ/Mali had requested technical assistance from a "pédagogue à profil pointu" in the areas of pedagogy of folktale and legends, "small group" techniques in very large classes, creation and use of didactic materials, and use of maternal languages. Professor Donato, a long-term consultant with the IEQ Project from the Department of Language and Learning at Pittsburgh, fit the description, and arrangements were made for a technical assistance mission to Mali from mid-August to mid-September.

It was not until the last week of July when Donato accepted a nomination as the Vice-Chair of his department and had to re-focus his availability to Mali that necessity unearthed the assistance that my background in education and linguistics -- specifically teacher training and formal (classroom) and informal foreign language

572

teaching -- could technically contribute to the Project. My other field of expertise, i.e. Community Economic Development, most often overshadows my work in Education.

We, at IIR, had two basic preoccupations at heart as new arrangements were made for the trip. First, Phase II was to start with the beginning of the new school year in October. Second, we had to arrive to a satisfactory plan for all parties involved, meeting IEQ/Mali expectations being of particular importance. Thence, we agreed to advance Donato's visit to early August, not only to allow the team to keep its start of school year objective, but also to allow Donato to return to Pittsburgh in time to get his department ready for the beginning of the new academic year. Donato and I would work as a team to present teacher training procedures, and I would carry on after Donato's departure from Mali.

My trip to Pittsburgh was thus a direct consequence of the new arrangements and the preparation of the technical assistance mission to Mali. In Pittsburgh, Donato and I designed our training sessions and distributed roles: the theoretical aspect for Donato and the practical for me.

During the Pittsburgh trip, Donato and I also shared with each other professional thoughts on the Project; this conversation would, unawares to us then, be of critical importance during our mission to Mali. In the report of the Phase I Concluding Seminar, it read that the new Minister of Basic Education, Mr. Adama Samassékou, had in his closing address stressed the necessity of including national languages and re-focusing the Project's activities (Report of the Seminar, p.9). I always had the gut feeling that there was more to this point than the report addressed.

I asked Donato to share with me his recollection of the Minister's closing remarks, and that led us to a heart to heart discussion on linguistics. We found we shared similar views on pedagogy and language learning in multilingual environments. We debated on the educational policy issues, and we shared the view that decisions in this area should be solely left up to nationals. In the case of Mali, our opinion was that the Malians must decide, for they know what is best for their children.

On the one hand, I believe this conversation has been the subconscious element of our team work. On the other hand, when subsequent events brought forth challenge in these areas, I daresay, it met us mentally prepared.

II. EXECUTION OF TASKS AND IEQ ACCOMPLISHMENTS

2.1. USAID/Mali

Prior to meeting the IEQ/Mali team, Donato, Muskin and I met with Freda, Chahine and Aly Cissé at the Mission. This meeting was an opportunity for Freda to share with us the details behind the delay of Muskin's Mission clearance. We also

573

learned of the PI/OT Report, in which the Malians not only set criteria for technical assistance in their country, but clearly state their preference for national and regional African consultancies.

Freda took the opportunity to discuss with us the Project's results and pointed out to us that many IEQ successes are not included in the Project's scope of work. She specifically suggested that one such accomplishment, the process which led to ISFRA-IPN cooperation and the expected signing of a joint agreement, is nonetheless very important and should be documented. IEQ's biggest accomplishment has indeed been the "harmonious and successful collaboration between two institutions from different ministries around the same project." This may not be significant in another country, but in the Malian context, the IPN - ISFRA collaboration is a grand premiere (for more information, please see the Summer 1994 issue of The Quality Link, p.8). Another such accomplishment is the Minister of Basic Education's involvement, which could ultimately lead to important reforms within the whole Ministry.

This meeting also provided an opportunity to discuss how the project's subsequent activities fit into the Mission's and Mali's vision of education. Freda suggested a number of people for us to meet during our mission -- including the Mission Director. Other names included people who are going to be key players when the buy-in kicks in, such as Fodé Koumaré, Abdul Aki, Boubacar Diarra --the Minister's Cabinet Director and "the gate keeper" at the Ministry-- and IPN's Assistant General Director, Dr. Abou Diarra. Although, due to a communication glitch we were unable to meet with the Mission Director, I had several meetings with Boubacar Diarra and Dr. Abou Diarra, while Donato and Muskin were able to meet with Fodé Koumaré. Donato also had several meetings with Dr. Diarra, and we all joined the IEQ Research Team in a working session with his "Méthodologie Convergente" team, which included Jean Vendras, the French Consultant working with the Minister.

2.1.1. Buy-In

Freda touched on the Buy-In. Of course, at the time we had this conversation, nobody knew that the Minister was opposed to IEQ's presence in the Buy-In. The conversation, however, gives an insight to what happened later on.

Freda suggested that we feel free to redesign the course of interventions as far as the buy-in was concerned. We could redesign interventions so as to give equal focus to French and maternal languages. Or else we could altogether make a change of emphasis to maternal languages. In view of Donato's new responsibilities, we could redesign the training format to provide extended training sessions for Malians in the US.

I suggest we give serious consideration to Freda's suggestion that we try to pair a Malian linguist with Donato. If I could advance a name at this stage, I would suggest that we twin him with Dr. Abou Diarra, IPN's Assistant General Director. Both strategic and intellectual reasons support this suggestion. First, Dr. Diarra is a

very competent and obviously well-trained linguist. Second, he has been part of the first teacher training workshop and is in charge of the new educational policy (known at this point as "Méthodologie Convergente") within the Ministry of Basic Education. Third, he and Donato hit it off and seem to appreciate each other.

2.2. IEQ/Mali Team

Before our meeting with Freda, Muskin had updated Donato and me on the progress made by the IEQ/Mali team in planning Phase II. The team had divided itself into five commissions working on different aspects of Phase II. At our arrival, only two of the commissions were still working on their tasks, namely the Budget and the Monitoring/Evaluation and Research Commissions.

This initial meeting was important to Donato and me. It gave us a clearer idea of the kind of assistance the team wanted and the manner in which to share the knowledge. We had to particularly keep in mind that some members of the team could very well know about these notions without being aware of the theory. This would be better circumscribed in the afternoon plenary with the team. They only expected from these workshops to pose some questions and discuss answers and possible scenarios on how to use folk tales, legends and native language(s) in the learning process.

Prior to the plenary meeting, Donato and I joined the team and Muskin in commissions. Donato worked with the Monitoring/Evaluation and Research Commission, while I joined Muskin, Dramane Coulibaly, and Dennis Dougnon on the Budget Commission. Although the latter thought that my presence helped them tremendously in the completion of the Budget, this Commission must be commended for the sense of detail they brought to the production of a very comprehensive Phase II Budget.

With the finalization of the budget, the team had completed one of the tasks that the Phase I Concluding Seminar saw as one of the basic paths for the Project (Trip Report #26, p.2). However, such late completion of the budget in the Phase II planning process could only create a heavy time constraint. There was not enough time given to IIR to review it thoroughly. And, in this respect, I commend the IEQ team at IIR and IIR's accounting department for their diligence and understanding in this matter. Without their remarkable cooperation, the Project would have miscarried in Ségou because of lack of funds.

For the Mali Research Team, administrative concern was one of the reasons why the office of Coordination of IEQ/Mali should be established. Because the team members have other obligations, the absence of a coordinating body hindered them a lot. Their terms of reference for the IEQ Mali Coordinator reflected this concern. When we later agreed that I would take over the Coordinator's recruitment and the preparatory discussions for the new joint agreement, I had to remember that the team considered leadership skills most important in selecting the Coordinator.

35

At this time, the recruitment and agreement processes were jammed because the General Directors of IPN and ISFRA had deferred to their respective Ministers for final approval of the joint agreement and the Coordinator's terms of reference. We felt that if freed of those two tasks, Muskin would better assist the team in the logistical planning of the Ségou workshop. He and Sékou Diarra were indeed able to leave for Ségou to meet with the Regional Director and inspectors the following day.

The plenary also set the tone of the pedagogical discussions that followed my presentation of a model lesson in which all the different pedagogic strategies were integrated in one lesson. According to the team and the IPN and DNAFLA consultants who would be participating in the teacher training, the model lesson helped them grasp better the language-learning theory. They could not only visualize the classroom action but also expand the situations in more creative ways.

The lesson underscored the basic idea that the student is at the center of this learning process and that only a teacher who is attentive to his/her class dynamics will make the learning interesting and pleasant. This discussion would continue later in Ségou among education practitioners to ensure a qualitative language learning.

2.3. IPN and ISFRA

Following Freda's suggestion to meet with key players in the Ministry, we made a list of members of the administration that we felt necessary to meet. Because of the composition of the team, it was logical and courteous to expand the list to the Ministry of Secondary and Higher Education and Scientific Research.

During the plenary, members of the IEQ Mali team from ISFRA informed us that their General Director, Dr. N'Golo Diarra, had, ahead of us, expressed a need to meet with me to discuss some administrative matters. In order to progress on the Cooperative Agreement and Coordinator issues, Dr. N. Diarra was anyway one of the two people that I needed to see. I knew he could help unjam the process from the bureaucracy.

Dr. N. Diarra assured us that he would diligently get the Cabinet's feedback, and at the end of the meeting, he informed us that a courtesy visit to the Minister of Secondary and Higher Education and Scientific Research had been arranged on our behalf. He would indeed personally introduce us to the Minister's Cabinet Director, who received us on behalf of the Minister.

The purpose of the visit was to update the Cabinet on the Project's progress and hear their concerns, if any. Partly because the Project concerned more directly the Ministry of Basic Education and partly because ISFRA is less bureaucratic than IPN, we had at the end of the meeting ISFRA's green light to proceed with the Coordinator's recruitment process and joint agreement preparations.

Since IPN's General Director, Dr. Abdoulaye Ky, was also out of town (the Country is engaged in a national grassroots consultation on decentralization), we

576

paid our courtesy visit to his assistant, Dr. Abou Diarra, who was also on Freda's list. We had already had an informal meeting with Dr. A. Diarra. As one of IPN's consultants selected by the team, he participated in the discussions that followed the model lesson.

Dr. A. Diarra informed us of an imminent educational reform (dubbed *Nouvel Enseignement Fondamental* or *NEF*) within the Ministry of Basic Education in the area of languages. We learned that the new Minister of Basic Education's policy is to valorize the status of national languages in the learning process: that he favors the "Méthodologie Convergente" approach which fosters functional bilingualism and advocates the use of maternal languages in first and second grades.

As such, the new reform objectives were believed to be in conflict with IEQ's, which sought to improve the learning of French in first and second grades. Dr. Abou Diarra saw, however, many similarities between IEQ's strategies and the methodology used in "Méthodologie Convergente" and thought that we should meet with Minister Adama Samassékou. A meeting was arranged for the next day to allow Donato to attend before departing Mali -- he was leaving the same day.

We planned to take advantage of a meeting at USAID --scheduled for the same day -- to share these developments with the Mission, but we were unfortunately unable to meet.

Our meeting with the Minister of Basic Education proved worthwhile. We learned first hand the cabinet's preoccupations and their vision for the future. We found that what we initially thought of as a 'bureaucratic jam' was actually a deliberate cabinet decision to freeze the whole process. The Minister was very clear on the issue. In the process of generalizing the "Méthodologie Convergente" as the Country's language learning policy, he insists that there be cohesion among all educational initiatives in Mali. Only after such cohesion was established would he allow IEQ activities to continue -- that included both the Agreement/Coordinator issue and the Ségou workshop. Until then, he would not authorize IPN employees' clearance to go to Ségou.

At the Minister's suggestion, we met afterwards with his Cabinet Director, Boubacar Diarra -- also on Freda's list -- and we ultimately found a point of cohesion. With the Minister and his Cabinet Director, who are both linguists, our argument was two-fold: first, IEQ's focus on French was a direct result of the educational policy which consecrated French as the medium of instruction in Mali (and was passed on to us by the Mission). Second, functional bilingualism was certainly the route to go in a multilingual context such as Mali, and IEQ strategies were rather a help than an obstacle in the process. IEQ language learning techniques apply to all languages, whether foreign or national.

Donato, Muskin and I also met at IPN with the "Méthodologie Convergente" team including Dr. Abou Diarra and the French Consultant, Jean Vendras. The Minister had suggested that we draw points of convergence and define parameters of

cooperation. As Dr. A. Diarra stated, as long as improving the learning of French in first and second grades remained IEQ's focus, our objectives would be fundamentally opposed. However, the pedagogic techniques that IEQ is fostering in classrooms will be very useful to "Méthodologie Convergente." Both teams agreed to keep in touch and share documentation.

Later on, I would meet again with Dr. A. Diarra in Ségou and Jean Vendras and Boubacar Diarra in Bamako. The Malians are not jumping head-on into reforms; they will implement them gradually. Nor are they ruling out the use of French. They just want more and better use of their national languages. They also want to see cohesion among all initiatives undertaken in Mali, whether it is the IEQ Project or Save the Children's "Ecole du Village."

By the time I left Mali, Minister Adama Samassékou's time was absorbed by the decentralization consultations; he had had no time to meet with his Cabinet Director and the "Méthodologie Convergente" team to draw his conclusions. This explains the present sense of inertia. However, the team is working to prepare the remaining workshops of Kayes, Mopti, and Sikasso in order to be ready to start when the Minister gives the green light.

Realistically, the IEQ Project will have to widen its scope and focus on improving language learning in first and second grades. Later, it will have the choice of working on improving the learning of French in third and fourth grades -- first and second year of French in the new policy-- or widening its scope to improving educational quality in other disciplines such as Math, Science, Environmental Studies, etc. Some members of the IEQ/Mali Research Team have already voiced this idea. Although it never emerged again in subsequent discussions, the Minister of Basic Education said that in his mind, improving educational quality could very well be the umbrella under which all the Ministry initiatives take place.

The IEQ Project in Mali has come a long way since IIR's initial agreements with IPN and ISFRA. It has built a team that scored a landmark achievement in the history of the Ministries' research collaboration in Mali. The Phase I Concluding Seminar caught the Minister of Basic Education's attention and triggered discussions that resulted in an important educational reform on the national level. It is further involved in bringing together key players in the field of Education -- i.e. teachers, principals, pedagogic advisors, inspectors, and educational regional directors -- in order to involve them and their communities in discussions on techniques of dispensing a quality education to Malian children. This process of empowerment and decentralization is dear to the new USAID/Mali and Government of Mali vision. Finally, IEQ/Mali has long been open to and laid grounds for collaboration with other educational initiatives in the Country such as the "Ecole du Village" and "Méthodologie Convergente." And, this is the route the new Education authority seemingly wants to go.

58

Establishing Connections with National Educational Reform

Technical Support of the IEQ Project in Mali

Richard Donato
University of Pittsburgh

October, 1994

Introduction

The purpose of this trip report is to summarize the present situation in Mali concerning the IEQ core project and its relationship with the Ministry of Education's initiative to generalize a bilingual education program throughout the country. For a reporting of the organization, planning, and results of the Ségou workshop and start-up activities for the research component of Phase II of the IEQ project, see Dr. Joshua Muskin's trip report (September, 1994). This report will treat primarily the issue of *language learning,* how it is conceived in the present IEQ model, the recent interest of the Ministry of Education in the role of national language competence and bilingual instruction, and IEQ's relationship[to this new language education initiative. The report will be divided into four parts. *Part one* discusses the plans being formulated by the Minister of Basic Education to generalize and expand an experimental bilingual education program in the Malian elementary school. *Part two* will present the current IEQ core program and its relation to this bilingual education initiative. *Part three* will propose how the IEQ project can support and be integrated into the current Minister's educational reform agenda. *Part four,* will pose of series of questions that still need to be answered if IEQ is to move forward in a timely and systematic fashion.

1) Bilingual Education in Mali

It appears that the Minister of Education has as his priority concern the development of a generalizable bilingual education program throughout the country. The Ministry's reform effort is best summarized in the Final Report on Experimentation in National Languages in the Republic of Mali: "What is proposed for educational reform is a functional bilingualism, an academic bilingualism" (p10)[1]. The program model being proposed is called *La Méthode Convergente,* a maintenance bilingual program introduced in Mali in 1979. Documentation and evaluation have been conducted by the Advancing Basic Education and Literacy (ABEL) Project resulting in an extensive report published in 1990. This report states categorically that "the present system (of educating Malian children exclusively in French) is no longer viable and that the solution for the future resides in a reform based on an educational system with academic bilingualism as fundamental" (pp 85-86). The

[1]"Evaluation de l'expérimentation en langues nationales dans l'enseignement fondamental en République du Mali," Creative Associates International, Inc. Washington, DC. May-June 1990.

rationale for this conclusion is drawn from research findings in experimental schools where it was found that the bilingual program model resulted in a reduction of drop-out rates, higher instances of continued schooling, greater academic gains in subject matter knowledge (in particular, mathematics), and increased literacy skills in national languages (sentence construction, composition, reading, and dictation).

The Convergent Methodology (CM) has as its primary objective the development of fully functional bilingual competence in Malian children. Theories and research on the development of bilingual competence maintain that in order for a child to make progress in second language, a certain degree of proficiency must be established in the mother tongue. This level of first language competence is referred to as the threshold level (Cummins, 1979) and is seen as an instrument for cognitive and linguistic development. Unlike submersion theories of second language acquisition, the notion of a "threshold level of competence" implies that development of the first language acquisition. Moreover, this first language competence needs to be of an academic nature. That is, the interpersonal abilities with oral language that a child possesses upon entering school are not sufficient for developing cognitive-academic language ability (or the language of school) in a second language. As Hukata and Snow point out "language used for conversational purposes is quite different from language used for school learning." This assertion relates directly to the situation in Mali where, aside for a few experimental schools, children are instructed directly in French with no attention to literacy development or academic language ability in the national languages. In contrast to this approach, CM provides a cognitive-academic language base in national languages upon which the acquisition of French can later be built.

The procedures for introducing two languages takes place over a five year period (grades one to five). In the first grade, children are taught academic subject matter and are introduced to language arts activities in one of four national languages (Bamanankan, Fulfulde, Songhay, and Tamasheq). In the second grade, children are introduced to spoken French as a subject of study while maintaining the use of the national language for academic classes. In the third grade, written French is introduced as a subject in the school program. By the fifth grade, when children have established some degree of academic language ability in French, a transition occurs whereby French becomes the medium of instruction and the national language shifts to a subject of study. The goal of this transition and the articulation of language use across five grade levels characterize what is referred to as a *maintenance bilingual program.* That is, although schooling by grade 5 is conducted primarily in French, concerted efforts are made to maintain the children's skills in the mother tongue through the introduction of language arts classes in the national languages. This program model contrasts with other models of bilingual education that make no effort to maintain the literacy and academic achievements of children in national languages (*transitional bilingual programs*).

I had an opportunity to meet with part of a larger planning committee established by the Minister whose charge is to develop a course of action for the implementation of this maintenance bilingual program. The meeting with these

language teaching specialists (M. Abou Diarra, co-director of IPN, M. Mamadou Diaby, DNAFLA and adult literacy specialist, and M. Cheik Kante, head of the humanities section of IPN) clarified several important points concerning the priority objectives of the present administration in the Ministry of Education: 1) the introduction of national languages as a means of instruction in the elementary grades, 2) a valorization of the child's language and culture, 3) literacy development in national languages and French, or a fully function bilingual child, 4) a plan for the generalization of the CM throughout Mali, and 5) *the requirements that a coherence and coordination exist between the IEQ project and the present educational initiative presented in 1-4.* The message was clear - there are to be no "parallel programs" but rather, a coordination of projects to assure a high degree of coherence of action. I will return to this point in part three and four of this report.

2) IEQ's Current Project and Malian Educational Reform

The IEQ project as it is presently conceived is an attempt to improve French language learning in grades one and two through a series of pedagogical interventions involving the use of small-group work, Instructional materials (visuals and objects), folktales and legends, and creative use of the textbook. In the spirit of "action research," the interventions are intended to be discussed and elaborated upon in a series of workshops for teachers and school administrators to be held in four regions (Ségou, Sikasso, Kayes and Mopti). After each workshop, systematic data collection on classroom instruction and student language achievement will be collected and analyzed. Base-line data taken form the 1992 and 1993 IPN study will be used due to the lack of time for collecting new base-line data. Although these data are not for the present group of first grade children, the generalizable profile of the French language ability of students in grade 1 will be useful for comparing pre- and post-intervention achievement.

It is important to note that IEQ project both resembles and diverges from the currently proposed model of bilingual education. While in Mali, I wrote a document concerning the issue of language and IEQ in which I attempted to elaborate some of the similarities and differences between the CM and the IEQ interventions. Similarities with the CM are found in the interventions themselves. For example, the use of folktales and legends for increasing meaningful language input to students is also advocated by the CM (p 17, Rapport Final, Evaluation de l'expérimentation en langues nationales dans l'enseignement fondamental en République du Mali). The use of active learning modes and the increase of language practice and production activities in the context of small group interaction are also compatible with the CM approach. The use of visuals and objects reflecting the socio-cultural context of the child and as a tool for instruction is also advocated in both the IEQ project and the CM.

IEQ departs, however, from some of the basic premises of a bilingual program in its minimal treatment of the role of national languages in instruction. As it is presently conceived, the IEQ project advocates the principled use of the mother tongue as a means of clarifying meaning, providing instructions and directions, and

preparing students for comprehending oral and written texts in French (pre-reading activities). The use of the national language is, therefore, a springboard for acquiring French and not a subject of study itself nor the language of mother tongue for instruction and study places the IEQ project apart from a fully developed maintenance bilingual program.

Those concerned with the generalization of the CM are well aware of the similarities and differences of IEQ and the national educational agenda. In a conversation with M. Fodé Koumaré, local consultant to USAID, it was noted that we need to direct resources that exist toward the expansion of the CM and avoid creating two "divergent programs." I feel this is a critical point and one that needs to be reconciled before IEQ can move forward with its workshops, interventions and research. The question of "harmonizing" the two approaches (IEQ and CM) is fundamental to working within the framework of the current administration of the Ministry. Indeed, the Minister of Education stated his desire to see clearly what the aims of IEQ were and how IEQ can support and assist his bilingual program expansion effort. Given the Minister's emphasis on the use of national languages for instructional and the development of literacy skills in these languages, it comes as no surprise that the inclusion of a project proposing to improve elementary school students' French language ability at the onset of schooling would be rejected from the recent USAID continuation grant proposal.

Another marked difference between IEQ and the CM is the time of introduction of the study of French. Although improved instruction for the acquisition of French represents one objective of the CM, it would, therefore, seem reasonable that IEQ could contribute in a significant way to the bilingual program expansion effort. However, the CM proposes that French be introduces in grade three after children will have established sufficient ability in reading and writing in one of four national languages. The IEQ project was designed at a time when French was ostensibly the only means of classroom communication when the child entered school in grade one. This change in the timing of the introduction of French to elementary students presents a complication to the IEQ project in the light of national educational language planning. However, research in the experimental schools found that the transfer of language ability from the national language to French around grade 4 and 5 was not smooth. According to some of the members of the committee charged with developing a plan of action for this educational reform, the transfer from instruction in national languages to instruction in French in grade four was problematic and remains an important question for investigation and research. Therefore, the issue of improved ability in French figures among the primary objectives of the CM and a point to which I will return in section three.

3) <u>Connecting IEQ to Malian Educational Reform</u>

The purpose of this section is to suggest possible ways that IEQ might integrate itself into current educational reform efforts, support the bilingual education initiative, and play a central role in ensuring its successful implementation in public elementary schools. These proposals are an attempt to align IEQ more closely with

the reform movement than at present and establish a coherent and coordinated effort between the Ministry and the project.

a) Dialogue

The host country research team (HCRT) will need to accept the Minister's invitation to participate in the discussions on strategic planning for the implementation of the CM in Mali. The charge to this committee is the development of a "schéma directeur", the absence of which would result in the irregular and unsystematic management of the bilingual innovation. The role of this committee, as suggested in the 1990 ABEL Final Report, is to make precise and explicit the necessary elements (pedagogical, linguistic, administrative, legislative, and financial tasks) for the successful implementation and operation of a bilingual program. Taken part in these discussions would place the IEQ team in a strategic position to offer its services and expertise as curriculum designers, teacher trainers and classroom researchers.

b) Training

The IEQ team is prepared to begin widespread training of teachers in selected regions. Since many of the interventions of IEQ are shared by the CM, the team has already established a format for enabling teachers to discuss and define language teaching pedagogy. Of course, the emphasis could by necessity need to shift to the acquisition of reading and writing skills in national languages in Grades one and two (in the CM French is not introduced until Grade three) but the principles of instruction remain the same active learning modes, use of authentic texts, opportunities for language use in small group and pair work activity, use of instructional materials, etc. One member of the HCRT has already been trained in the CM and has participated in researching student achievement in some of the experimental schools. His familiarity with the program would greatly assist the rest of the team in planning teacher training sessions. Given that widespread adoption of the CM is not possible and that the program will be phased in gradually. IEQ schools could become the seat for piloting the generalization of this bilingual program.

c) Research

An important aspect to the adoption of the CM is continued research on implementation and student achievement. A research design consistent with Goal #1 ("understand how and why each country's classroom-based interventions influence pupil performance") has been established. The design is divided into two components: ***language achievement*** and ***classroom life***. Indicators of quality include a) language achievement (reading, writing, and speaking), b) comprehension of print and oral language, c) classroom atmosphere (student alertness, participation patterns, curiosity, self-discipline, attendance, work habits), d) the homogeneity of class averages, and e) overall satisfaction of parents, teachers, directors, and students. This design could become the framework for monitoring the implementation of the CM.

583

Language tests for measuring achievement in national languages have already been designed as part of the experimental bilingual education project, but the 1990 report does not include documentation on classroom life. A fully developed framework for documenting the effects of an educational intervention has already been discussed and agreed upon by the HCRT. It appears that this design would be equally well suited for studying changes and improvements in the quality of instruction in schools adopting a bilingual program (see Donato trip report, April 1994, pp 14-17). IEQ could play a leading role in the research efforts during the generalization of the CM.

d) Improvement in French Language Instructions

The IEQ project is also well positioned to assist the educational reform movement in improving the teaching of French. As one of its original objective, the team is knowledgeable concerning recent approaches to foreign language instruction. Given the problem cited above of transitioning into French, the IEQ project could contribute to facilitating this bridge from French as a subject of study to its use as the primary academic language in the classroom. One caveat is in order, however. The introduction of French takes place in grade three and the focus of attention of IEQ is centered on first and second grade children. Two solutions present themselves. First, IEQ could expand its scope to include the teaching of French in grade three. Second, since the HCRT will be participating in discussions with the planning committee, it may be suggested that in light of the difficulty children had in transferring national language skill to French, an earlier start may prove advantageous. Thus, some lessons aimed at developing oral skills in French in first and second grade could be introduced in conjunction with academic subject instruction in national languages. Indeed, this suggested change to the orthodox model of the CM may result in a highly desirable research question (**"In bilingual education programs, does the early introduction of French as a subject of study facilitate the transition to using French as the means of instruction in year four and five?"**). This proposal is in keeping the most with the original IEQ project and would present no major change, with one exception - oral language development would be the primary area of investigation since reading and writing need to be delayed until some degree of literacy is established in the national language of the child.

4) Questions concerning the Future Direction of IEQ in Mali

A few questions require consideration and discussion in order for IEQ to integrate itself into a larger educational initiative and move forward in a complementary fashion with recent education reform efforts.

a) *How does the HCRT see itself at present in relation to the wishes of the current Minister of Education?*

b) *Is the HCRT willing to broaden its scope to include research on children's linguistic development in national languages in grades one and two?*

c) *How will the sample schools be chosen? Will the sample presently established be used to pilot the CM if IEQ becomes involved in researching the generalization of bilingual education in the public schools?*

d) *In light of the Minister's concern about incompatible innovative programs, will the team be permitted to maintain its present research agenda?* This question seems to have been answered during the last visit. Another possible scenario emerges, however - IEQ schools could be used for comparison purposes to public schools who are initiating a bilingual curriculum. This approach may not be wise, however, nor would it take full advantage of the potential to become involved in a truly innovative and worthwhile educational reform. Moreover, as Crawford (1992 p. 217) points out there is a "fixation of policy makers on a single, narrow issue: does bilingual education "work"? For the vast majority of researchers and practitioners in second-language acquisition, this is no longer a serious question."[2] The issue for IEQ therefore is whether it wants to be counted among those who are "fixated" on a question that is no longer relevant in the field of second and foreign language learning?

e) *What is the time-line?* How does the time frame of the planning committee compare to the time requirements of the IEQ project? Are the IEQ time constraints synchronized with the phases of the Ministry's planning and implementation of the bilingual education project?

Conclusion

Although it may appear that IEQ may have suffered a set-back during the recent work of August and September, a more positive perspective on recent events is that IEQ could become part of a noteworthy and internationally significant educational reform. Theories of language acquisition and research on dual language instruction have repeatedly indicated that if gains are to be made in the development of academic language necessary for schooling, a degree of competence is necessary in the first language of the child. Acknowledging the findings of this research and attempting to apply them to the critical significant problems of education is the challenge. It is desirable that IEQ/Mali become principal players in ensuring the success of this educational reform which has the potential to foster long-lasting and significant changes in the quality of education and life for Malian children.

---

[2]Crawford, James, 1992, *Hold your tongue, bilingualism and the politics of English only.* Addison-Wesley Publishing Company: Reading, MA

Consultant's Report of Joshua A. Muskin

Technical Support of IEQ Activities in Mali: Preparation of IEQ/Mali Phase II Planning and Design Workshops

Bamako, 15 July - 23 August & 1 - 2 September 1994
Ségou, 23 August - 1 September

The purpose of the present eight-week mission was to provide support to the IEQ/Mali researchers (see Appendix A for a list) in preparation for the Phase II planning and design workshops planned for the end of August and mid-September in the four Project regions: Kayes, Mopti, Ségou et Sikasso. Ironically, the need for this assistance was underscored by the sentiment expressed by the IEQ/Mali researchers immediately prior to Muskin's arrival that such an extended mission[1] was unnecessary. Rather, they had proposed to IIR that his services would only be necessary for about three weeks, and these not until the beginning of August. Once the collaborative work actually begun, the IEQ/Mali colleagues accepted that they had underestimated the quantity of work and breadth of tasks required to prepare both the workshops and the broader Phase II seminar. The plan and budget they had sent (by mail) to IIR constituted just a preliminary step towards the initiation of Phase II activities in Mali.

The actual work was executed by the Malian researchers with extraordinary dedication and their usual high level of competence and energy, as well as with considerable camaraderie and good humor. Without exception, the eight members of the IEQ/Mali research effort devoted themselves fully to their collective task, clearly placing this effort above their normal, abundant obligations at IPN and ISFRA. They are to be thanked and congratulated for their prodigious, extended collective labors. (On a more personal note, I wish to express my deepest gratitude to the researchers, individually and as a team, for their patience, endurance, energy and creativity as relate to their working with me during my on-going collaboration with IEQ/Mali.)

In order to permit the researchers to continue to satisfy their routine (and other, exceptional) obligations, the IEQ/Mali researchers proposed to Muskin that they adopt their normal approach of assigning discrete assignments to sub-groups. The planning and elaboration effort was consequently divided into distinct tasks (see Appendix B) for which *ad hoc* committees of two to four researchers were constituted. Plenary meetings for the full team occurred with increasing regularity as the workshop date approached in order to report and arrive at consensus on the various *ad hoc* committee products. The same format was maintained with the arrival of Donato, whose contributions related to specific issues of pedagogy to be covered at the workshop and were greatly solicited and successful.

The mission was largely a success. Despite a very tight timetable (the mission essentially involved executing tasks that should have begun in earnest two months earlier), the researchers

[1] – Previous missions by Muskin for IEQ/Mali had never exceeded two and a half weeks.

succeeded in planning and pulling off an overall successful pilot workshop in Ségou. This involved three major steps:

1. bringing more operational definition to what Phase II of IEQ/Mali might look like;
2. conceiving an eight-day training program for the elaboration and planning of the Phase II interventions and associated training program; and
3. organizing and executing trial-run workshop in Ségou.

Some qualifications to this favorable assessment pertain, however, relating both to the workshop itself and to the broader prospects for IEQ/Mali, the latter of which should be reported more fully in the trip report of Alimasi Ntal I'Mbirwa. Basically, this second aspect relates to a present (at least at the time of Muskin's departure) reluctance by the Minister of Basic Education to embrace IEQ/Mali Phase II, due to the Project's focus on French language-learning in grades one and two. The Minister is in the process of planning and design a nationwide generalization of the *Méthodologie Convergente*, the experimental program involving instruction in the early grades in the students' maternal language. In the experimental programm, French is only introduced as a subject in grade two. Clearly, IEQ/Mali's current formulation is inconsistent with the Minister's new initiative; although, the IEQ/Mali consultants and two of the researchers made it clear to the Minister and his Cabinet Director that the Project's goals and approach are fully consistent with a phased in institution of the *Méthodologie Convergente* (what the Ministry has formally dubbed the *Nouvel Enseignement Fondamental (NEF)*.) The Minister's advisors working directly on this initiative are collaborating closely with the IEQ/Mali researchers and appreciate greatly the opportunities for synergy. Their support has born witness, but has yet to bear fruit.

Most practically, this situation means that the IEQ/Mali efforts to receive authorization to hire an IEQ/Mali Coordinator and to negotiate a Phase II Agreement are on hold. ISFRA has responded positively on both matters. No reaction should be expected from IPN until the relationship of IEQ/Mali to the *NEF* initiative is resolved in the Minister's eyes.

As regards the workshop, four main criticisms pertain, neither of which is meant to attribute blame; the Ségou workshop was organized in order to permit such observations. First, the IEQ/Mali researchers did not possess an equal familiarity with the actual program, presented in the workshop Facilitator's Guide (see Appendix C). Consequently, the facilitation of the different break-out working groups resulted, in some instances, in products of varying quality and, even more so, of differing substance. This situation also had some negative (though not overly) repercussions in the plenary sessions.

The second criticism is that some of the substantive preparations -- mostly documents for distribution and planning for simulations -- were unsatisfactory.

Third, the actual production of the workshop as related to the elaboration of pedagogic strategies succeeded more in presenting objectives and guidelines for their adoption than specific operational strategies or techniques that the teachers can implement in their classrooms. This was an aspect that Donato had warned about. This was likely more related to the difficulties of being

587

practical in the abstract context of a workshop than to a specific flaw of the program design. It could also be a consequence of the exceedingly heavy agenda crammed into the five-day program. Notwithstanding these reasons, this criticism still constitutes a direct challenge for the IEQ/Mali researchers to try to meet with the Mopti, Kayes and Sikasso workshops.

Finally, the local level collaborators (the inspectors and regional education directorate technicians) were inadequately incorporated into the implementation of the workshop. Essentially, this was the consequence of the IEQ/Mali researchers' not having sufficiently briefed this group on the philosophy, strategies and content of the workshop. Consequently, worse than not being helpful, they represented at times, due to their customary inspector posture, somewhat of an obstacle to the desired broad-based participatory event. (Their departure in the middle of the fifth day yielded a palpable difference in this regard.)

To repeat, the criticisms should not obscure the overall success of the effort. The products related to the interventions are cogent and operable, and the teachers and school directors seem ready to introduce them in their classes -- for the pedagogic strategies -- and surrounding communities -- for the study centers. The school administrators associated with the research planning part of the workshop are both satisfied with the training element of this effort and are eager to collaborate on the implementation of the monitoring and evaluation program that they helped articulate. (A more complete report of the reactions of the participants in the Ségou workshop will be presented in the workshop report, which should include a summary of the final workshop evaluations completed at the end of the two sessions.)

Terms of Reference

Muskin's recent technical support trip to Mali involved a heavy scope of work, the full completion of which was not possible. Progress on all of the tasks was achieved, the degree of which related directly to limits of time and mitigating circumstances (the major one being the pending ministerial approval). Specifically, the following tasks were designated in the appointment agreement issued by IIR, dated 27 June 1994:

1. Coordinate the hiring and training of an IEQ/Mali Coordinator and help establish a functioning central office.

2. Collaborate with IEQ/Mali researchers, IPN and other Ministry of Basic Education (MEB) officials, and USAID/Mali to identify target schools and communities for the IEQ/Mali Phase II actions.

3. Collaborate with the IEQ/Mali research team to establish baseline data for Phase activities, drawing on existing IPN school and testing data. In the absence adequate data, devise a strategy to produce appropriate baseline information.

4. Help design and plan the regional workshop sessions... [for] the actual development of (i) the interventions as they will occur in the classrooms and communities, and (ii) the plan for the organization, execution and monitoring of the interventions...

5. Collaborate with Rick Donato in supporting the execution of the first, pilot regional workshop.

6. Provide weekly briefing (E-mail) to Rick Donato and IEQ/DC on the progress of the consultancy.

7. Collaborate with the IEQ/Mali researchers, central and local specialists, regional and local administrators (and Rick Donato, by E-mail) to plan and begin the organization of the support, monitoring, evaluation and specific research initiatives of the interventions.

8. Document, with IEQ/Mali colleagues, the action-research, participatory planning process of the design and planning of the IEQ/Mali Phase II interventions, and prepare drafts of journal articles on the Phase I and Phase I Seminar processes.

9. Facilitate IEQ's negotiations with IPN and ISFRA regarding the approval and execution of a new cooperative agreement for Phase II.

Execution of Terms of Reference

1. **Hiring an IEQ/Mali Coordinator and establishing an IEQ/Mali office.** Muskin had prepared a scope of work for an IEQ/Mali Coordinator jointly with the IEQ/Mali researchers at the end of the April-May 1994 mission. The need for a Coordinator emerged originally as a request by the IEQ/Mali researchers to IIR to hire someone who could work full-time on the Project and, especially, serve as a catalyst for the overall research and development activities. In the absence of such an individual, communication and initiatives by the researchers have tended to get bogged down more by bureaucracy and the competing demands of their abundant other responsibilities at IPN and ISFRA. (This observation should not obscure the highly laudable collaboration and production that the IEQ/Mali team has and continues to achieve, which would be admirable even if they did not face these constraints.) Upon approval of the proposed scope of work by IIR, the draft was submitted to the Directors of IPN and ISFRA for their accord. Instead of approval, a revised version was submitted to IIR in which the authority of the IEQ/Mali Coordinator was significantly limited, seemingly bound more tightly within the formal structure of the Ministry of Basic Education (MEB).

This was somewhat disappointing, and Muskin and the IEQ/Mali researchers undertook to retrieve some degree of functional autonomy for the Coordinator position by trying to demonstrate that there were abundant mechanisms inherent to both the post and the overall

Project by which the MEB would assure its full jurisdiction over the Project. The first step in this direction was to meet with Dr. Abdoulaye Ky (IPN Director) on 22 July. Dr. Ky explained that he understood that the Coordinator position had been proposed originally by IIR. He'd therefore concluded that IIR, and especially USAID, had wished to place their own representative back in the IPN to replace those leaving with the end of the ABEL project; to keep an eye on things. With the help of Dramane Coulibaly and Bréhima Tounkara, it was possible to correct this misinformation.

Subsequently, with Dr. Ky's new endorsement[2], the IEQ/Mali team designated Dramane Coulibaly and Urbain Dembele to collaborate with Muskin to prepare a revised scope of work for the IEQ/Mali Coordinator post. This was accomplished (see Appendix E), and the new draft was submitted to IIR, ISFRA and IPN for review and comment or approval. IIR and ISFRA both approved within a couple weeks. IPN passed the issue up to the ministerial level where a decision was withheld apparently due to two issues. The first related primarily to the relationship of the Coordinator and the IEQ/Mali office with the Ministry, and more specifically with the Director of the Cabinet. Recalling the Minister's admonition at the Phase I seminar that he was seeking greater "anchoring" (or centralization) of the abundant projects operating within the MEB, the Director of the Cabinet indicated in a meeting on 19 August (attended by Coulibaly, Donato, I'Mbirwa, Muskin, Tounkara, and a replacement for Abou Diarra, Associate Director of IPN) that the Ministry would insist on the IEQ/Mali Coordinator's being responsible directly to the Ministry. The Minister had already indicated in a meeting earlier in the day that the eventual Coordinator will report directly to the Director of the Cabinet. The outcome of the latter meeting was that the Director would discuss the matter further with the Minister.

At this point, the responsibility to pursue the matter of seeking approval for and enlisting an IEQ/Mali Coordinator transferred entirely to I'Mbirwa. Consequently, to learn the current status of this process, it is necessary to consult his mission report for August 1994.

2. Identification of Phase II target schools and communities. The selection of Phase II target schools required immediate attention in order to proceed with the planning of the *ateliers de démarrage*, the four regional workshops for the conception and planning of IEQ/Mali's Phase II program. The priority criterion for this selection was the availability of existing baseline data, which was assured only for those schools falling within the sample tested annually as part of the BEEP (USAID's Basic Education Expansion Project) initiative. (For the past four years, the BEEP has undertaken testing in French and arithmetic for students in grades two and five from about 100 schools in the four BEEP regions -- Bamako District, Koulikoro, Ségou and Sikasso --, and in two control regions -- Kayes and Mopti.) The participatory ap-proach adopted by the IEQ/Mali researchers required involving the school inspectors from each region in the final identification of Phase II schools. In order to assure the scientific integrity of the Project's

[2] -- Also helpful in gaining Dr. Ky's renewed support in hiring an IEQ/Mali Coordinator was the presentation of a guide to be followed by IIR and the IEQ/Mali researchers in the recruitment for this post. The guide was previously submitted by Muskin to IIR for their approval. (See Appendix F.)

research efforts, the inspectors were asked to choose from a list of schools for which baseline data already exists (with the BEEP). The researchers also provided the inspectors with a set of basic criteria to apply in whittling the full list down to the final ten pilot schools per region. This information was compiled by Tounkara and Lam, in consultation with Diassé Tankara, of the IPN Testing Unit, and was transmitted to the inspectors via the respective regional education director in an official letter signed by the Director of the IPN announcing the workshops and requesting full participation at the regional level. (See Appendix G)

Specifically, a list of schools for each region was prepared from the schools constituting the sample tested by the BEEP/IPN researchers for the school years 1992/93 and 1993/94. The reasons for choosing the two years were (1) to expand the number of options and (2) to take advantage of the different data available for the two samples; the first providing additional information on the teachers, the second furnishing greater insight into the backgrounds of the students. Although this diversity might compromise somewhat any formal statistical analysis attempted for the sample, the Malian researchers, Muskin and Donato all concurred that the contribution of this data to the richness of the qualitative analysis should be considerable. It took two attempts before a true list of tested schools was generated, the first effort identifying those schools comprising the preliminary list proposed by the BEEP researchers, not the final list of actual schools tested. This was made evident in the meeting with the inspectors from Ségou, who had facilitated the BEEP testing. Another problem with the BEEP list is that fewer schools were tested in Kayes and Mopti than are needed for the IEQ/Mali Phase II pilot effort. Again, the Malian researchers, Muskin and Donato deemed that this minor shortfall (about five) in schools with adequate baseline data was not critical. Especially considering that the target group for IEQ/Mali is students from grades one and two (for whom the level of French is barely discernible), it was agreed that post-intervention test results for these few schools would be judged against the baseline for other, comparable schools in the sample. The list of schools proposed to the inspectors for the four regions appears in Appendix H.

The specific criteria which the inspectors from each region were asked to apply when choosing the ten Project pilot schools from the list of tested BEEP schools were:

i. five urban schools and five rural schools;
ii. two schools with multiple-grade (*double-division*) classes and two dual session (*double-vacation*) schools;
iii. schools that were included in the IEQ/Mali Phase I sample;
iv. the existence of girls enrolled in grades one and two;
v. a certain number of schools with female teachers in grades one and two;
vi. schools where the teachers will participate voluntarily in the Project and possessing an openness to innovation; and
vii. schools where the teachers involved will not be re-assigned for the currently planned two years of the Project (requiring the joint complicity of the inspector and the teacher).

The principle of leaving the final selection of the pilot schools to the inspectors derives directly from the research-action approach applied by IEQ/Mali and the MEB's and USAID's regionalization efforts. However, this approach leaves the process vulnerable to an idiosyncratic application of the criteria by the respective inspectors. This situation was evident most blatantly in the selection of some non-grade one and two teachers for the Ségou workshop. Perhaps the most difficult criterion to assure is number *vii*, the maintenance of selected teachers in their present classrooms for two full years; a matter that routinely plagues similar initiatives in Mali. A risky business no matter how many guidelines and safeguards might exist.

3. Establishment of baseline data for Phase II activities. This task was directly associated with the pilot schools selection process, described in number two above. For all but a few schools in Mopti and Kayes, the IEQ/Mali researchers will have direct access to test scores for students from the last or prior year's grade two students. As indicated, further information on the teacher will be available for those schools selected from the 1992/93 BEEP sample and on the students for the subsequent year's sample. Although it is unlikely that the same teacher from the BEEP sample will still be in the sample classroom, this data should still prove interesting at least for qualitative comparison purposes. The inclusion of schools from the IEQ/Mali Phase I activities will permit important enhanced opportunities for analyzing the impact of the adopted interventions on classroom management, behavior, interaction and atmosphere variables. It should also make possible more robust analyses of out-of-school factors in the education process.

The IEQ/Mali researchers have yet to compile the baseline data, primarily because the final selection of the pilot schools has not yet occurred. Additionally, the specific topics of inquiry that will comprise the research agenda have still to be identified, one of the purposes of the regional Phase II planning and conception workshops. The test results are available on DBaseIV and the researchers even have access to the actual completed test sheets. Similarly, full access is guaranteed to the background data on the teachers, schools and students (as relevant) for the different years, and the questionnaire forms are in the IEQ/Mali researchers' possession.

The actual process of creating a baseline database will need to begin after the final regional workshop is held. This might best be considered a synergistic operation, specifying baseline items from the existing BEEP data based on research questions emerging from the IEQ/Mali Phase II workshops and, conversely, articulating individual research questions for Phase II to coincide with interesting information found within the existing BEEP data set. It is likely that the IEQ/Mali researchers will benefit from technical assistance in the establishment of this baseline, which should be able to be managed via electronic mail. Further communication (encouragement) from IIR and Muskin and Donato on this matter is indicated.

4. The design and planning of the regional Phase II workshop sessions. This activity consumed the vast majority of the time during Muskin's mission. The IEQ/Mali team had prepared prior to Muskin's arrival a basic budget for the workshops and an outline of steps for their organization and implementation (see Appendix I). There remained considerable need for

further elaboration of both the plan and the budget, the true extent of which task was not fully appreciated by the team prior to Muskin's arrival. At an initial meeting, Muskin and the team conceived and adopted a general plan of action for the joint preparation of the regional workshops. Specifically, this involved the following basic tasks:

a. Collaborate with the regional inspectors in the selection of pilot schools for Phase II.

b. Prepare a five-day training/planning program for the elaboration and operationalization of the Phase II pedagogic and community study center strategies.

c. Prepare a draft outline for a Phase II research activity and a three-day training/planning program by which to add further elements to the outline in collaboration with regional level partners.

d. Assure the logistical planning and organization of the actual workshops.

The complete, detailed version of this program of action for Muskin's mission in Mali, in the form agreed upon jointly with the IEQ/Mali researchers, is presented (in French) in Appendix B. In addition to *ad hoc* committees for each of these tasks, there were also *ad hoc* committees designated to assist Muskin on the other aspects of his terms of reference.

Also presented in Appendix B is the assignment of the individual researchers to the different *ad hoc* committees. Each *ad hoc* committee was responsible to prepare a plan or document to submit to the full group of researchers for approval and subsequent action, as appropriate. The small task group approach is one that the IEQ/Mali researchers had already adopted as normal operating procedure, with a regular full group meeting scheduled every Friday at which progress could be reported, specific issues and questions raised, and new tasks and responsibilities assigned. This proved a very effective way to operate, permitting Muskin to be engaged full-time while allowing the IPN and ISFRA colleagues not to neglect excessively their abundant non-IEQ/Mali functions. The full group meetings occurred more frequently than once a week, particularly as the time of the Ségou workshop approached.

The following paragraphs cover more closely the actions and issues associated with the four major tasks identified above.

a. *Collaborate with the regional inspectors in the selection of pilot schools for Phase II.* The *ad hoc* committee assigned the responsibility of preparing the baseline data for the IEQ/Mali Phase II research also assumed the task of identifying candidate schools to serve as pilots. As described above, the two operations were closely linked as the choice of schools was dictated entirely by the availability of the testing information that comprised the gist of the baseline. Also described above is the process proposed for the selection of the actual 40 (ten per region) pilot schools for Phase II.

b. *Prepare a five-day training/planning program for the elaboration and operationalization of the strategies that will constitute the IEQ/Mali Phase II interventions.* Very early in the mission, the IEQ/Mali team concluded with Muskin that only two of the four major interventions proposed during the Phase I seminar should be introduced during Phase II: (1) classroom-based pedagogical strategies for French language-learning -- small group work, strategic use of the local language, use of local tales and legends, and use of pedagogical materials; and (2) community study centers. The decision to limit the interventions to two was made based on the assessment that four interventions[3] would be excessive for all involved. The IEQ/Mali team would be over-stretched equally in the design and institution of a full set of interventions and in the monitoring and evaluation of their implementation. The teachers and local education officials and support agents (*conseillers pédagogiques* and *directeurs d'école*) would similarly be overwhelmed by being asked to learn, adopt and support too many innovations.

The purpose of the first stage of the workshop was to develop clear operational definitions and strategies for the two interventions proposed by the Phase I concluding seminar in April 1994. The sessions should yield direct answers to such questions as:

- What techniques are best suited for use with small groups, and what exactly constitutes a small group?
- What is an appropriate use of the maternal tongue in the classroom context and when is such use "abusive?"
- What techniques are available for passing from full comprehension by students of a tale or legend in their maternal language to a similar level of understanding in French?
- What pedagiogic supports are available, or might be prepared with local, low-cost materials, to promote better acquisition by grades one and two students of French at school?
- What should the role and functions of a community study center be, how can the school teacher take advantage of the operation of such a facility, and how can parents be encouraged to organize a study center for their children?

[3] -- The other interventions identified at the Phase I Seminar were: (i) the initiation and operation of school cantines (ia) (as part of the school cantine) the training of teachers for the execution of rudimentary student health diagnostic and basic remediation techniques; and (ii) the introduction and operation of community-based student transport systems. A fifth intervention for Phase II was identified outside of the seminar. This was the provision of technical support in the areas of French language learning, teacher training and curriculum design for the Save the Children community school project at Kolondieba. The IEQ/Mali team has scheduled the design and execution of these for later in Phase II or in Phase III, if the Project extends into the 1995/96 school year. The specific tentative content of the school cantine, student health, school transport and Kolondiéba activities is presented in Appendix N. A tentative timetable for their execution also appears in the Appendix.

The plan by which the IEQ/Mali researchers would elicit related responses from the participants in the regional workshops is presented in Appendix J, as elaborated by Muskin and the designated *ad hoc* committee (#5).

The teachers would hopefully return to their schools after the five-day planning/training program with clear ideas of how to introduce the IEQ/Mali strategies in their instruction. It was also hoped that they would leave the workshop highly motivated to execute the strategies and, further, to figure and try out variations of the strategies according to their particular context, constraints and professional imagination. (The specific objectives and themes associated with this part of the workshop, as prepared by *ad hoc* committee #5, are presented in Appendix J.)

The IEQ/Mali researchers adopted a design for the training/planning program that they felt would encourage the teachers (and the other partners) in this direction. Picking up from the fully inclusive process begun with the Phase I Seminar, they developed a participatory training approach, engaging the teachers actively in both the definition and design phases of the specific strategies. The researchers, both Malian and expatriate, believed that this would heighten both the quality and the level of the teachers' involvement in the Project. A sense of ownership should result, raising the degree of commitment by the teacher to adoption and successful application of the particular strategies. Joined with a more fundamental understanding of the rationale and substance of the individual innovations -- due to having participated in the conception of the strategies -- the execution by the teacher of the various techniques in the classroom should also be more reflective and critical. This should result in the teacher's adapting the strategies to suit both his/her and the students' needs and abilities, which should ultimately be evident in the language-related performance of the students in the classroom.

Participation in the workshop extended beyond the teachers to include the full constellation of other education partners. This was done in an effort to assure that the context for innovation was also conducive to adoption. Specifically, this meant involving in the workshop one representative of the parents' association (APE) and the school director (who also often serve as teachers) for each school, the general (and some technical) pedagogic advisors (*conseillers pédagogique*), the school inspector and one community development technician (TDC) for each district (*Inspection de l'Enseignement Fondamental, IEF*) in which a pilot school is found[4], the regional education directors, region-level trainers and researchers, and ministry-level education technicians. All of these individuals have some implicit or explicit role in sanctioning, formally authorizing and supporting technically the adoption and adaptation by the individual teachers of any classroom-based innovation. Their willingness and ability to endorse and support the teacher in this effort should also benefit from the same sense of ownership and understanding created by having participated in the development of the specific strategies.

[3] -- There are typically about four inspectorates per region.

The conception and planning of the IEQ/Mali interventions program of the workshop was essentially divided in a manner that devoted a single day to each of the five strategies, with some variation, as follows:

Day #1: Introduction to the Workshop

Strategies for Small Group Instruction (*La Pédagogie des Grands Groupes*)

Day #2: Strategies for Using Local Tales and Legends in the Maternal Language for the Teaching of French (*La Pédagogie des Contes et Légendes*)

Day #3: Strategic Use of the Maternal Language for Teaching French in the Classroom (*L'Emploi Stratégique de la Langue Maternelle*)

The Use and Development of Didactic Materials for French Language Instruction, combined with the other pedagogic strategies (*L'Exploitation des Matériels Didactiques -- et l'intégration des autres stratégies pédagogiques*)

Day #4: (continuation...): The Use and Development of Didactic Materials for French Language Instruction, combined with the other pedagogic strategies (*L'Exploitation des Matériels Didactiques -- et l'intégration des autres stratégies pédagogiques*)

Day #5: Community Study Centers (*Les Cercles d'Etudes Communautaires*)

Each topic was essentially divided into six related issues, presented in a way that permitted the development of one to build on the discussion of the prior: (i) the prevailing context and circumstances by which the relevance and importance of the particular strategy was determined at the Phase I seminar; (ii) a definition of the strategy; (iii) the past and current experiences of the participants with the strategy; (iv) the lived and anticipated positive and negative aspects of the strategy; (v) specific techniques proposed for the strategy's implementation in the classroom; and (vi) key notions or considerations associated with adopting and utilizing the strategy. The work was organized to occur in smaller break-out groups and full plenary sessions, the latter usually at the beginning and the end of the day. The break-out groups (four operated at Ségou, but three are planned for the other three regions) were planned with two thoughts in mind. First, it was felt that this would maximize the participation of the greatest number of people. In fact, at Ségou, it was obvious that many individuals (particularly teachers and parents) who were virtually silent in the plenary sessions were much more actively involved when in a group of just 15 to 20 people.[5]

[5] -- The IEQ/Mali researchers and Muskin observed that the presence and demeanor of the inspectors tended to have a particularly strong "muting" effect on the teachers and school directors. Having anticipated this phenomenon, the researchers had formed one break-out group that included no inspectors and only one pedagogic

Second, it was felt that the smaller group discussions should permit greater depth in developing the different strategies, in turn raising the quality of the conclusions generated by consensus in the plenary wrap-up sessions. This expectation was also confirmed by the experience at Ségou.

The plenary discussions were conceived in a manner that would involve the participants in simply continuing the discussions begun in the break-out groups. In this manner, the issues and conclusions of the break-out groups would be introduced implicitly into the plenary debate. Although, as indicated, this approach worked well at Ségou, the participants there regretted not being able to report explicitly the outcomes of the smaller group deliberations. Consequently, the plenary format was changed to include small group reports (*comptes-rendus*), although firm instructions were given to limit the accounts to the groups' responses to specific strategic questions. These were prepared for each module in order to guide the participants in the identification of aspects that will relate directly to the implementation of the different strategies in the classroom: (i) advantages and disadvantages associated with the strategy; (ii) particular techniques; and (iii) essential considerations, or notions related to the development and application of the various techniques. Each day yielded a document in which was presented the participants' collective consensus, thoughts and decisions on these three matters. (See Appendix J.) The full workshop program is presented in Appendices C and D, the former being the format employed at Ségou, the latter being the revised version, benefiting from the experience of the IEQ/Mali researchers at Ségou.

c. *Prepare a draft outline for a Phase II research activity and a three-day training/planning program by which to add further research elements to the outline in collaboration with regional level partners.* The execution of this task replicated that of the design and planning of the actual interventions and strategies, also occurring in two phases. The first involved the work of a four-member *ad hoc* committee to develop a tentative research plan, including a series of questions associated with each of the five main strategies, individually and collectively, and to devise a three-day training/planning program by which to prepare the final IEQ/Mali Phase II research agenda. (See Appendix L.) The second was the implementation of the three-day program, which was tacked onto the five-day session described in *b* above and involved most of the same participants/partners.

The particular purposes of the research component of the training/planning activity were: (i) the establishment of baseline data requirements and strategies by which to meet these (see Muskin mission task number 3, above); (ii) the articulation of specific sample research questions (see Appendix L); (iii) the identification of research tasks and roles, divided among the various central and regional level partners (see Appendix K, "*Jour #8: Le Programme de Recherche de la Phase II*"); (iv) the creation of an implementation plan and schedule (see Appendices C, D and K,

advisor. Although not major, the increased sense of liberty with which these group members expressed themselves encouraged the researchers to expand this format in the subsequent three regional workshops. Here, all the inspectors and high-level administrators will be situated in one break-out group, with the others comprised only of teachers, school directors, parents, pedagogic advisors, the community development technicians and the facilitators.

97

Jours 6, 7 and 8); and (v) the development of a set of research instruments and protocols (see Appendix K, "*Jours #6 & 7: Les Instruments de Recherche Qualitative*").

The IEQ/Mali research *ad hoc* committee (#1) articulated three over-arching research questions, for each of which more strategic questions were identified and categorized, applied to the two major interventions, as follow:

i.a How has the teacher applied (adapted and adopted) the strategies in the classroom?
- a. The experience of the teacher with the specific strategies.
- b. Initiatives undertaken and developed by the teacher.
- c. The reactions of colleagues, parents, education officials and others towards the nature and execution of the new strategies.
- d. The level and nature of support provided related to the development and adoption of the new strategies.

i.b How has the community organized and operated the local study center (*cercle d'étude communautaire*)?
- a. Similar arrangements for organizing group study for primary school students with which the community has experience.
- b. Logistics associated with the operation of the community study center.
- c. The management of the CEC.
- d. The actual programs and activities occurring at the CEC.

ii.a What is the impact of the pedagogic strategy upon the organization, context and functioning (i.e., the teaching) in the classroom?
- a. The nature and degree of interactions occurring in (and outside) the classroom, and the overall management of a language lesson and the classroom.
- b. The atmosphere (or ambiance) of the classroom.
- c. The relevance of the strategies for French language learning in the context of grades one and two, as well as for other languages, other disciplines, subsequent grades and other learning contexts.
- d. The attitudes of teachers, administrators and parents towards the impact of the pedagogic strategies on teaching.

ii.b What is the impact of the Community Study Centers on the management and functioning (teaching) of the classroom?
- a. Strategies adopted for the classroom by which to take advantage of the operation of the CEC.
- b. Overall effects and impacts upon the teacher and the teaching process.

iii.a What is the impact of the pedagogic strategies, individually and collectively, upon the learning process in the classroom?
- a. The behavior of the students in the classroom and in their studies.
- b. The use and level of demonstrable comprehension by the students of French (and of the local language).

iii.b What is the impact of the Community Study Centers on the learning process and the learning of individual students in the classroom and more broadly at school?
- a. The behavior of the students in the classroom and in their studies.
- b. The use and level of demonstrable comprehension by the students of French (and of the local language).

The goal of the research portion of the Phase II planning and design workshop was, basically, to work with the various partners[6] to devise a regional research initiative around the three major questions -- organization/execution, impact on teaching and impact on learning -- presented above. The pre-workshop exercise of evoking a series of specific questions for each *grande question* -- organization/execution?, impact on teaching?, impact on learning? -- helped develop greater clarity for the IEQ/Mali researchers regarding the substantive objectives of the research component of the workshop. The researchers established the following strategic objectives for days six, seven and eight:

i. Implicate fully the group of partners in the monitoring, evaluation and research components of IEQ/Mali Phase II.

ii. Help the partners to develop further technical and managerial competencies in the areas of monitoring, evaluation and research.

iii. Identify and assign the specific tasks associated with the monitoring, evaluation and research components of IEQ/Mali Phase II.

iv. Prepare an implementation plan for the IEQ/Mali monitoring, evaluation and research effort.

v. Develop preliminary observation, interview and questionnaire instruments by which to assess the implementation and impact of the Phase II interventions.

[5] -- The participants designated for this phase of the training/planning workshop (days six to eight) were the school directors, the pedagogic advisors, the school inspectors (not present for Ségou), specific technical agents from the DRE (regional directorate for schooling) and a few MEB colleagues. Liberated from this exercise were the teachers, the parents and the community development technicians (TDC).

The operation of the research portion of the workshop resembled closely that of the design/planning part, presented during days one to five. Debates over specific questions were organized over a three-day period, occurring both in small group (three) and plenary formats. Each day's discussions were conceived to yield a specific outcome that would constitute an element or commitment related directly to the eventual implementation by the participants and the IEQ/Mali researchers of the Phase II interventions. The only significant difference between the operation of days six to eight and days one to five, besides the content, was the list of participants; the teachers, parents and community development technicians (TDC) were excused at the completion of the intervention design and planning portion, after day five. Their involvement in the research activity would be limited to that of subject.

The substantive organization of the discussions revolved around the following themes and tasks (see Appendices C and D):

i. The objectives of the IEQ/Mali Phase II research program.

ii. The identification of specific questions for the monitoring and evaluation of implementation of the IEQ/Mali Phase II interventions.

iii. The development of instruments -- classroom observation guides, interview guides, and questionnaires -- for the monitoring and evaluation of IEQ/Mali Phase II.

iv. The execution of classroom observation and interview protocols within a qualitative research framework.

v. The analysis of qualitative data.

The intention of the research training program was to produce by the end of the workshop actual completed drafts of research instruments. The IEQ/Mali researchers would combine these with the drafts prepared at the subsequent three regional workshops to produce the final Phase II monitoring and evaluation research guides. The experience of the Ségou workshop demonstrated this plan to be overly ambitious. The sessions dedicated to the identification of specific questions and the design of research instruments yielded only partial results. The outcome was nonetheless valuable. The participants gained valuable knowledge and experience related to the design of monitoring and evaluation tools while generating worthwhile questions for use by the IEQ/Mali researchers in developing the final instruments. Consequently, the format was retained for the upcoming workshops in Kayes, Mopti and Sikasso.

The coverage of the different topics in the workshop format also included more explicit training elements. In particular, brief exposes were prepared on Action-Research and on Qualitative Research Instruments, accompanied by documentation prepared by Muskin especially for the workshop. (See Appendix M.)

d. *Besides identifying and outlining the specific elements of the training/planning program, the actual workshops needed to be organized.* This required that Muskin and the IEQ/Mali researchers collaborate on five basic tasks, presented in greater detail in Appendix N. First, it was necessary to acquire authorization to conduct the workshops. This was attained without apparent difficulty from the Director of IPN, Dr. Ky, who signed a letter (drafted jointly by Sékou Diarra and Muskin) addressed to the regional education directors explaining the purpose and organization of the workshop and soliciting their cooperation and participation. (See Appendix G.) However, the Minister intervened to question the desirability and relevance of the IEQ/Mali workshops. As described above, he wished to assure that the Phase II interventions were consistent with the goals and strategies of the *Nouvel Enseignement Fondamental* (*NEF*). The IEQ/Mali researchers -- with Donato, Muskin and I'Mbirwa -- had already approached the Ministry officials responsible for the establishment of this new initiative, and both groups were satisfied that the NEF and IEQ/Mali projects were fully compatible. This was true even though the crux of the NEF program involved complete instruction in the maternal language of the students in grades one and two. IEQ/Mali's goal was to improve the learning of French in these, and subsequent, grades. The Minister and his Cabinet Director were sufficiently convinced of this compatibility to permit the Ségou workshop to occur. It was uncertain in the minds of the IEQ/Mali researchers, however, if the subsequent regional workshops would be allowed to occur. The ministerial head of the NEF initiative, Dr. Abou Diarra (Adjunct Director of IPN) seemed supportive of the IEQ/Mali Phase II efforts, seeing them as useful intermediate steps to achievement of the NEF goal of functional bi-lingualism in the Malian primary classroom.[7]

Second, the IEQ/Mali researchers had to contact the regional education directors to follow up the letter sent by Dr. Ky. This step, as well as the sending of the letter, should really have occurred a month earlier. In the case of Ségou, the Project was giving the regional director less than ten days to mobilize over fifty people and ready a workshop location for an eight-day period. (This was accomplished without a hitch by the director, his staff and the inspectors, to their enormous credit.) The IEQ/Mali researchers were paired and assigned responsibility for each of the four regions, involving the initial contacts, all the preparations, the actual execution of the workshop and any region-specific follow-up. (The specific assignments appear on page one of Appendices C and D.) Due to the accelerated preparation schedule required for the Ségou workshop, the designated research pair (Coulibaly and Diarra) and Muskin met directly with the regional director and the four school inspectors for the region to assure that the director understood the purpose and organization of the workshop and what was required of him and the school inspectors.[8] According to an e-mail that Diarra sent to Muskin upon his return to Florida, the other research pairs were also able to take advantage of other business in the capital for the

[6] -- A more complete explanation of this reasoning is presented by Donato in his trip report from August 1994.

[7] -- This meeting had originally been scheduled for Ségou. Upon arriving to the DRE, the regional director informed Coulibaly, Diarra and Muskin that the session he had promised them for the following morning would have to be cancelled as the director and the inspectors had all been summoned at the last moment to Bamako for meetings at the Ministry. Consequently, they agreed to a Saturday morning meeting at ISFRA, which did occur.

regional directors and school inspectors to conduct briefing and planning meetings related to the workshops.

After the Ségou workshop experience, Muskin and the IEQ/Mali researchers determined that the nature and content of this pre-workshop contact should be more thorough. Specifically, in addition to the letter from Dr. Ky, the regional director and school inspectors should receive the *Guide Facilitateur*, in which all the activities of the workshop are presented in detail. Additionally, at least one day, and ideally two, should be programmed immediately prior to the start of the workshop at which the IEQ/Mali research pair can review the program in depth with the inspectors. This is especially critical as the inspectors will be expected to assume more deliberate facilitator functions for the workshop. With a relatively innovative philosophy, approach and content, it cannot be expected that the inspectors embrace and execute the program without a considerable pre-briefing. The Ségou workshop experience demonstrated even further the importance of such a preparation in order to prevent the inspectorss from being a detrimental factor in the process.

It was also decided that pre-workshop contact be made with the teachers and school directors. Their participation, a few of the Ségou participants suggested, would have been enhanced considerably if they had been alerted previously about the purpose of the workshop as well as about some of the activities for which their active involvement would be required. The IEQ/Mali researchers agreed to prepare a letter presenting the workshop to the school directors and teachers to which they would attach a copy of the program.

Third, consistent with the participatory approach adopted by IEQ/Mali, the researchers placed equal importance upon implicating fully their Bamako-based colleagues in other technical units of the MEB. This was deemed necessary to assure proper expertise in those areas where the background, experience and training of the IEQ/Mali was inadequate or inappropriate for the purposes of the workshop and the overall Phase II initiative. Specifically, technical support was required in the all the areas of pedagogy covered by the Project. This was sought from four divisions within the MEB: Center for Professional Training (CFP), the National Directorate for Functional Literacy and Applied Linguistics (DNAFLA), the language section (*Section Lettres*) of the IPN, and the Research and Pedagogic Innovations Division at IPN. At the regional level, the technical involvement of the research and training experts employed at the DRE was also arranged, as was the participation of the various pedagogic advisors. At Ségou, at the behest of the ministry, teachers from the *Méthodologie Convergente* schools also attended.

There was an additional strategic reason for expanding technical involvement in the Phase II activities beyond that of the IEQ/Mali researchers. The execution of the Phase II interventions over the long-run would depend entirely upon the support and maintenance of the Ministry's permanent units. As a lame duck operation, IEQ/Mali's longevity resides entirely upon the ability and interest of these other technicians to foster and promote the Project's initiatives. By involving these colleagues in the design phase, they should develop a sense of ownership that will heighten

their commitment to the Project's success. Similarly, their level of understanding should be greater, raising the ability of each individual to participate actively in reaching that success.

This outcome would be pursued deliberately by treating their participation also as a training opportunity. At the same time that technical advisors are helping the IEQ/Mali researchers to devise strategic definitions of small group pedagogy or to outline research protocols for assessing learner behavior in the classroom, the researchers are providing training in approaches and techniques associated with the overall monitoring and evaluation task. The specific areas covered are basically the themes constituting the workshop agenda for days six to eight: qualitative research, action-research, the design and execution of monitoring and evaluation instruments, data analysis and dissemination, and information-based decision-making.

Additionally, the explicit endorsement of this group of colleagues (along with the school inspectors and the regional director) is not only critical to the Project's long-term well-being but also to its short-term acceptance and adoption by teachers in the classroom. It was eminently obvious at Ségou that no teacher would adopt any of the strategies without the total approval of his or her hierarchical supervisors. With all parties present, the likelihood of defining a formula for the interventions that was acceptable to all was nearly greatly heightened. It also provided an opportunity for the teachers to observe and participate actively in this sanctioning process by their superiors. Now, it is a question of remaining observant in order to monitor and measure the dividends from this process. (These two paragraphs reflect briefly much of the motivation behind what is called the action-research approach; see Appendix M.)

Fourth, the IEQ/Mali researchers needed to engage their regional partners in the more mundane logistical organization of the workshops. In particular, this involved asking the regional directors to handle the invitations to the workshops, to arrange for lodging and meeting spaces, to facilitate any document reproduction requirements and to handle per diem payments to the participants, among other matters.

Finally, a complete budget had to be prepared for the workshops. An initial effort to do this had been completed by two of the researchers prior to Muskin's arrival. Although this had already been mailed to IIR, neither Muskin nor the IEQ/IIR staff were aware of its existence. Provided with this draft budget, and with the further operational details concerning the workshops that had emerged from the first days' meetings, Muskin was able to prepare a more detailed and accurate estimate of the workshops' eventual costs. After reviewing the figures with the newly formed IEQ/Mali *ad hoc* budget committee, the budget (see Appendix O) was sent to IIR for approval and for transferal of the required funds for the Ségou workshop.

5. **Execution of the first, pilot regional workshop.** An initial workshop was scheduled in Ségou for 22 to 29 August, timed to coincide with Muskin's mission. In fact, the workshop's start was delayed by two days, due to two matters: (i) the late submission by

IEQ/Mali of the budget to IIR[9]; and (ii) the Minister's hesitation whether to authorize the workshop at all, related to his concern that the IEQ/Mali program is in conflict with the new NEF initiative. A flurry of meetings with the Minister, the Cabinet Director and Abou Diarra provided at least a momentary stay: the Cabinet Director signed the *ordre de mission* for the IEQ/Mali researchers to travel to Ségou.

It had also been hoped that Donato would be able to participate. Unfortunately, due to scheduling constraints, this did not happen. Instead, he worked closely with the researchers and their MEB technical colleagues in Bamako immediately prior to the workshop to assure their understanding and comfort with the pedagogical portion of the design-planning-training activity. (See Donato's trip report for August 1994.) Additionally, I'Mbirwa's involvement (which had not been anticipated originally) was limited as a result of demands on his time in Bamako.

The Ségou workshop had been scheduled to serve as a pilot effort, enabling the IEQ/Mali researchers to test both the design of the workshop program and their abilities to execute the design. Both the researchers and Muskin considered this important particularly because many of the strategies they had incorporated into the workshop plan, as well as several of the topics covered, were relatively new in this setting and with the targetted group of educators. Most notably, these strategies included (i) the employment of a participatory training approach for a combined design and planning exercise, (ii) the programming of an action-research strategy, especially of a qualitative nature, (iii) maternal language based pedagogic strategies, and (iv) the community study center intervention. The involvement of the full group of IEQ/Mali researchers would yield benefits in both the implementation and the assessment of the pilot effort. In the actual implementation, the full complement of experience and expertise of the researchers, with the consultant, would be available to execute the various parts of the program and to rectify "on the spot" any shortcomings in the original design. The collective assessment of the researchers and consultant would permit timely adjustments in the workshop program -- its content, the clarity of instructions, the duration and timing of activities, their organization, and other aspects. It would also reveal the need for changes in the comportment and strategies employed by the researchers in their facilitation and organization functions.

The tangible outcomes of this group reflective process were a revised Workshop Facilitation Guide (Appendix D) and a list of actions to be adopted or considered for the following three workshops, collected and reported by Muskin in a memorandum to the group immediately prior to his departure (Appendix P). The researchers concluded that the Ségou participants benefited from the employment of the full gamut of resources available through IEQ/Mali. In turn, the participants at the Kayes, Mopti and Sikasso workshops should profit

[9] -- IIR is to be commended for its remarkable swiftness in arranging a wire transfer to the ISFRA account for the full amount requested for the workshop. Equally, the IEQ/Mali team is to be praised for its persistence and resourcefulness in tracking the transfer and in getting the bank to furnish a partial advance on the awaited transfer, permitting the workshop to commence on the new start date.

from an improved program and an increased ability of the individual researchers to execute the program.

As indicated in the introduction to the present mission report, the Ségou workshop was a great success, particularly considering the haste with which the program was organized.[10] The overall coverage of the topics for both the five-day interventions session and the three-day research session was thorough, creative and cohesive. For the most part, the involvement of the 60-plus participants was energetic, interested and sincere. The participation of some teachers from the two experimental *Méthodologie Convergente* schools provided a special opportunity in Ségou. These teachers brought to the Ségou discussions significant experience in using local tales and legends and the maternal language (Bambara) in the classroom. The involvement of these teachers was also useful in demonstrating and exploring further how the IEQ/Mali Phase II program is a natural intermediate step in the establishment and consolidation of the new NEF initiative.

There is no need to review the organization of the Ségou workshop as this is covered amply in the general description of the intervention and research programs in task number 4, above (pp. 8 - 19). The implementation involved quite an arduous schedule. Sessions during the first five days began at 8:00 a.m. and ran typically to around 5:30 p.m., with a fifteen- to thirty-minute break at mid-morning and a two-hour pause for lunch around noon. The participants of the three-day research session adopted a *journée continue* schedule, taking just thirty minutes around noon to stretch and *grignoter* (nibble) and finishing the day's program by 3:00. This option had been offered to the larger group during the five-day session, but was rejected (some of the researchers believing that the influence of the inspectors was strong in the group's making this "surprising" choice.) Each day's program was then succeeded by a de-briefing period of about an hour at which the IEQ/Mali researchers assessed the day's efforts and outcomes and, based on this experience, reviewed and amended the following day's program. Several of the de-briefing sessions were also attended by the colleagues from the MEB and the school inspectors, whose energy and dedication to the workshop's success surely warrant grateful mention and praise. The evenings generally found Muskin transcribing on his laptop the official "product" of the day's plenary session to be reproduced and distributed the following day. (See Appendix K.)

A very cursory review of the formal evaluations, as well as informal discussions with different participants from the two sessions revealed an overall satisfaction with the organization and the content of the workshop. This was especially true of the reduced group participating in the three-day research session. They have been clamoring for research-related skills and information from the IPN research division (DRIP) for several years, and they were voracious in their attention and participation during the different modules.

---

[9] – The two IEQ/Mali researchers responsible for the Ségou program will be preparing the official report for IPN and IIR. The intention here is just to summarize some of the more routine points pertaining to the workshop's execution.

As regards the interventions session, the teachers and school directors were quite interested in the ideas raised and felt these were relevant to their teaching tasks and context. However, they had very practical concerns such as what materials exist to support their adoption of the strategies, how exactly they can execute these ideas in their classrooms and whether their hierarchical superiors -- the pedagogic advisors and, especially, the school inspectors -- will in fact authorize, encourage and reward them for adopting and adapting the different strategies and related techniques in their teaching. This worry showed itself to be especially germane as pertains to the idea of "judicious" uses of the maternal language in the teaching of French. The debate revolved mainly around the need to identify precisely what exactly constitutes an appropriate use of the local tongue in the classroom to promote French language-learning. Unfortunately, there resulted very few practical guidelines for how a teacher could distinguish this from inappropriate uses.

The vigorous interventions of some of the inspectors in defense of the crucial importance of a total immersion (*un bain linguistique)* in the classroom to assure suitable acquisition of French by students visibly affected (negatively) many of the teachers' apparent resolve concerning this strategy. There is a double irony about this stance by the inspectors. For one, their firm allegiance to the need to immerse young children in French as of the initial grades in order to maximize language learning is contradicted both by international research and by the specific case of Mali. (Donato presents this argument in both his recent and past mission reports.) Second, this stance faces imminent obsolescence due to the Minister's new NEF initiative. On the other hand, the inspectors can consider that they have history on their side. Maternal language efforts introduced in Mali in the past, as well as elsewhere in West Africa, have almost always been rejected in the end. Typically, this has been due either to the different views of a subsequent regime or minister or to strong parental opposition.

Muskin and the IEQ/Mali researchers discussed two steps to try to alleviate the anxiety on the part of the teachers and potential negative pressure from the inspectors related to the execution of the Phase II interventions. First, Muskin proposed to the IEQ/Mali researchers a draft of a letter that they might revise and send to the teachers outlining specifically how it is hoped that the teachers will apply what they did and learned at the workshop in their teaching. (See Appendix Q.) Basically, this message would be that the teacher should feel free to apply the various strategies in a form and rhythm that they find suits their classroom context and their individual style and experience. The Project researchers will be interested primarily in how they apply the strategies and the particular techniques they choose to employ or develop themselves. This is unlike the more typical scenario of trainers or researchers visiting trained teachers to confirm whether or not and, if yes, how well the new techniques are being employed.

The letter might also indicate to the teachers what they should expect from the researchers and the various supervisors in the way of support and follow-up. This should include the

distribution of documentation related directly to the strategies and an IEQ/Mali Newsletter.[11] They should also anticipate direct contact in the form of classroom visits by the researchers and their regional partners and a regional mid-course assessment workshop. More informal contact with the IEQ/Mali researchers (mostly written) and (of a more direct nature) with the inspectors, the pedagogic advisors and the regional level trainers and researchers is also planned. Finally, the monitoring and evaluation plan (Appendix K, Day #8) should be presented and included in attachment. This program of monitoring and evaluation is also accounted for in the proposed IEQ/Mali Phase II budget (Appendix O).

This explicit encouragement and support should be seen as critical to the participating teachers' willingness and ability to implement the Phase II interventions. Without this, it should be expected that they will not implement any of the strategies, uncertain about what exactly is expected of them and unwilling to try something new for which there is a greater chance of sanction than of reward.

Similar on-going encouragement and support will also be required to motivate the regional research partners. This should be a simpler task for a few reasons. To start, the three-day research session was much more direct in presenting the specific related techniques associated with Phase II. The level of understanding and interest concerning the topic of research also seemed greater for the smaller group. Finally, the final module of the session involved a discussion of the specific research tasks to be conducted during Phase II and the preparation of an action plan for the execution of these tasks. This plan constitutes the product of Day #8 of the workshop, presented in Appendix K.

The second step to promote the actual implementation of the IEQ/Mali Phase II strategies as developed for Ségou is to provide to the teachers and school directors a clear endorsement of the interventions from the school inspectors. The enormous influence of these individuals over what happens in the classroom was eminently obvious during the workshop. This was especially discernible after the inspectors left for Bamako. The level of participation by all involved (especially the teachers and school directors) and their willingness to express contradictory ideas increased exponentially. The IEQ/Mali researchers will seek, and hopefully receive, from the inspectors and from the proper authorities of the *Direction Nationale de l'Enseignement Fondamental* (DNEF) a letter endorsing the specific IEQ/Mali Phase II initiatives. More precisely, such a letter will ideally encourage the teachers not just to participate actively in the Project but even more so to feel free to be creative in their application of the strategies. If the school inspectors do not join the IEQ/Mali researchers in actively supporting and encouraging the

[10] – The major written product that the IEQ/Mali researchers expect to produce based on the outcomes of the four workshops is a series of five monographs, one for each strategy. The notes from the different break-out and plenary sessions will be gathered for each strategy from each site. A different researcher will be responsible to review these and to prepare a summary guide that will present the major elements of the collective debates. The monograph should also offer a series of techniques and key elements for each strategy, drawn both from the workshop discussions and from outside technical resources.

teachers, it is virtually certain the level of execution by the teachers will be very low. If they do agree to endorse the adoption of the intervention strategies, this will constitute a *de facto* approval of the Phase II research agenda.

The daily de-briefing sessions of the IEQ/Mali researchers and the marathon (four-hour) review at the end of day #8 yielded several other critical comments and critiques related to the execution of the Ségou workshop. Summarized here, these are presented in greater detail in the Muskin memorandum to the IEQ/Mali research group referred to above (see Appendix P):

a. Although the committee approach to the design of the workshop yielded a quality program, the accelerated timetable precluded adequate opportunity to present the different products to the full group. The result was an uneven familiarity with the details of the various activities by the IEQ/Mali researchers. More specifically, this resulted in some inconsistency and confusion in the execution of specific actions by the researchers in fulfilling their facilitation roles.

b. Logistical preparations for many of the activities were inadequate, particularly as regarded arranging the simulations modules. A solution might be to prepare a separate document that lists all the things that must be arranged or ready beforehand for the whole workshop.

c. The interventions portion of the workshop seemed to focus on the objectives, the advantages and the obstacles associated with the different strategies, to the detriment of strategic discussions concerning techniques that the teachers might actually use to implement the interventions. There must be more explicit discussion concerning actual techniques that the teachers can employ.

d. The inspectors and the region-based researchers and trainers were insufficiently implicated in the facilitation of the workshop. It will be especially important to assure that these partners are fully prepared and involved in the following three workshops, where there will only be two IEQ/Mali researchers instead of eight. A full day, or more, immediately prior to the workshop is recommended, to assure that the regional partners feel completely at ease with the philosophy, approach and content of the workshop. They should also receive a copy of the facilitation guide well before the workshop.

e. Several of the activities and questions could be reformulated to clarify the task both for the facilitators and for the participants, and to orient the debate more directly towards strategic options that the teacher might select in the classroom.

f. The strategy of combining smaller break-out groups with plenary discussions seemed to be received better when the plenary included an opportunity for the separate groups to present the highlights of their efforts. The strategy that had been favored in the original design excluded this accounting (*compte-rendu*) technique. Rather, the plenary

had been organized to build on the break-out discussions, capturing the outcomes of these small group reflections in an implicit manner, not explicitly. The *compte-rendu* method should be incorporated.

g. It is crucial not to forget to collect the reports from all of the small group discussions.

h. For each of the remaining workshops, one of IEQ/Mali researchers will need to prepare the end-of-day summary in a form for distribution to all participants the following day. This function was performed by Muskin at Ségou, using a laptop computer. (See Appendix K.)

i. The two facilitators must function as a true team, while one presides over a session, the other must keep alert to matters such as time, logistics, group dynamics, the suitability of the activity, and so on. Constant communication, done discreetly, is essential.

j. In a participatory training framework, the facilitators must be truly dedicated and resourceful in their efforts to solicit rather than provide answers from the workshop participants. Equally important, and even more challenging, is getting the school inspectors and regional directorate colleagues to approach the workshop as researchers, asking questions and learning, rather than as trainers and monitors, presenting answers and instructing.

k. The exposé, or guided dialogue, format seemed to work quite will, especially in the plenary context.

l. It is important to avoid improvisation in the program. Unless critical, changes should await the preparation of a subsequent activity.

m. Similarly, disagreements among the facilitators should wait to be resolved in private.

n. The school-level participants -- teachers and school directors -- should be informed in advance about the purpose and content of the workshop. They might even be asked to come prepared to address specific questions, such as what are ways that local tales and legends might be used to teach French.

o. Every effort possible must be taken to assure that only teachers who will be teaching grades one and two in the designated IEQ/Mali Phase II pilot schools participate in the workshops. Additionally, these should only be teachers who will accept to remain at the same school for a full year, and ideally for two.

p. A technical glossary of terms related to the interventions and the research program should be prepared, both for use by the participants and to assure congruity in usage among the facilitators.

q. A document on small group pedagogical techniques workshop should be prepared for presentation as an exposé/dialogue and for distribution to participants during the. Another should be prepared on the *Méthodologie Convergente*.

Muskin reviewed all these points with the full group of IEQ/Mali researchers immediately prior to his departure for the airport. It is important to note that these comments do *not* constitute a reproach of the researchers' execution of the workshop. Nor should it be seen as an indictment of the workshop design. The Ségou workshop was planned specifically to reveal difficulties in the design. In this regard as well, it was a resounding success. As for the more substantive objectives of the workshop, it bears repeating from above (textually, not ethereally) that the considerable attention and effort of the full cadre of IEQ/Mali researchers served amply to contravene any ill effects.

Muskin left his Malian colleagues to react to and implement the different comments as they see fit. They also agreed to provide to Muskin copies of any associated documents or plans they produce, as well as a report of any other related progress.

6. Provide weekly briefing (E-mail) to Rick Donato and IEQ/DC. Muskin maintained regular -- at times, daily -- contact by e-mail with Rick Donato, Jane Schubert and the other colleagues at IIR. Nothing spectacular; basically just keeping them apprised of the different developments at IPN and ISFRA regarding the accord and the Coordinator position and the progress of the IEQ/Mali group in preparing the September workshops.

Special gratitude is extended to Mr. Mamadou Diamoutani, computers network administrator for ORSTOM (*Institut Français de Recherche Scientifique pour le Développement en Cooperation*), for providing to Muskin easy access to the computers at ORSTOM for conducting his electronic correspondence. His active support of Muskin was critical and deserves recognition, as does his on-going assistance to Sékou Diarra in his management of the regular IEQ/Mali electronic correspondence with IIR and the IEQ/Mali consultants. Thanks also to Patrick Baudot, whom Muskin never met, for allowing the Project to use his electronic mailbox.

7. Planning and organization of Phase II research initiatives. This task has been organized in three stages, the first two of which are described above in the discussions of tasks four and five: the organization of the regional Phase II design and planning workshops; and the execution of an initial (pilot) workshop in Ségou. Briefly, Muskin worked with the IEQ/Mali researchers to prepare a participatory training program by which the researchers would collaborate with their regional and local level partners to identify a series of research questions designed to address three "*grandes questions*:" (1) How has the teacher adapted and adopted the strategy in the classroom?; (2) What has the impact of the intervention been on the teachers

performance (teaching)? and (3) What has the impact of the intervention been on the students' performance (learning)? The workshop was also organized to situate these questions within specific research instruments and to generate a program for the overall IEQ/Mali Phase II research (monitoring and evaluation) effort (see Appendices C and L). As part of the preliminary preparation task, Muskin worked with four of the researchers to prepare a tentative list of research questions. The main purpose of this list was to help the IEQ/Mali researchers to assure thoroughness and relevance in the related discussions conducted at the workshops. They should have a clear idea of what they were looking for as output from the workshop participants and sessions before beginning.

The Ségou workshop fell somewhat short of what had been hoped for as regarded the preparation of usable research instruments. This represents more a failure in the creation of expectations than in the planning and execution of the related research modules. Nonetheless, due to this outcome, the third stage, preparing final research instruments, becomes more involved. It was originally planned that this step would be mostly one of reflective compilation. The IEQ/Mali researchers would take the instruments prepared at the four regional workshops and combine them into a single set for administration at all 40 pilot schools. The fact that the workshop did not yield completed draft instruments only changes the plan by deepening the degree of the researchers' role in turning the workshop products into a final research package. It is expected that this formula will allow the researchers to assure quality and comprehensiveness of the instruments while still not compromising the sense of ownership and understanding among the regional and local partners. It may also be seen to heighten the need to collaborate -- by e-mail -- with the IEQ technical advisors in reviewing the draft instruments prepared by the IEQ/Mali researchers and in advising the researchers in the piloting of the instruments and the final research protocol.

8. Prepare drafts of journal articles on the Phase I and Phase I Seminar processes. This task was one of the victims of the over-ambitious scope of work for Muskin's mission. He did succeed in having one couple hours session with Diarra and Tounkara -- his literary collaborators -- in which they prepared the start of an outline for an article on the Phase I seminar process (see Appendix R). More precisely, the article would look at the efforts of IEQ/Mali to organize a participatory process for the design, planning, implementation and evaluation of a set of specific interventions within the framework of a primary education reform activity. The session was very fruitful, auguring well for the upcoming joint completion of the outline and drafting of an article. The continuing pressures of other obligations, both related directly to IEQ/Mali and associated with other responsibilities of the three partners pose a less auspicious portent for producing an article.

The three agreed that Muskin would complete the draft outline for subsequent submission to Tounkara and Diarra by e-mail. They would then comment and propose a distribution of assignments for fleshing out a text from the outline. A timetable for this is pending.

Other IEQ/Mali researchers indicated an interest in joining Muskin to prepare future articles related to the Project. No plans were made. The full group did discuss, though, options for finding someone to publish the final Phase I research report. Dembele was going to look more seriously at this possibility, planning to contact directly colleagues in Geneva and IIEP in Paris. Muskin offered to review the document, of which a final draft was imminent at the time of his departure, to help prepare it for presentation to potential publishers. All agreed as well that other products planned by the group also are likely candidates for publication and broader dissemination. Most immediate would be the Phase II planning and design workshop report and some form of the individual monographs that will compile and analyze the discussions from the four regional workshops on each of the individual strategies. The need to seek approval from IIR in taking all of these steps was also stated.

9. Facilitate negotiations for a new cooperative agreement for Phase II. The execution of this task resembled that of the effort to hire and set up an IEQ/Mali coordinator, task 1. Muskin convened an *ad hoc* committee of two (Dougnon and Coulibaly) to prepare a draft agreement for the Phase II activities. (See Appendix S.) This was submitted to ISFRA, IPN and IIR for review and comment. Then, when I'Mbirwa arrived, he took over this task. By the end of Muskin's mission, the agreement was in limbo. ISFRA had provided comments to IIR, and to the best of Muskin's knowledge, IIR had yet to provide any formal feedback. The largest obstacle, though, was posed by MEB, where the issue was tabled until a role for IEQ/Mali within the new NEF initiative could be determined. Further information on the current status of the agreement is found in I'Mbirwa's mission report.

Muskin was involved in the resolution of two preliminary issues prior to I'Mbirwa's arrival. First, a bottom line needed to be calculated for the anticipated Phase II budget. The IEQ/Mali researchers had prepared a detailed costing for the upcoming design and planning workshops. Muskin used this to elaborate a comprehensive Phase II budget, which he finalized in consultation with Dougnon and Coulibaly. (See Appendix O.) This document was also submitted to the three institutions for review and comment; now with the same status as the proposed agreement.

The second matter was that of formalizing the relationship between the two host institutions: IPN and ISFRA. At the end of his last mission, Muskin had concluded with the IEQ/Mali researchers and the respective directors from ISFRA and IPN that it would be preferable to have one, joint agreement for the Phase II activities. IIR had signed two separate agreements with IPN and ISFRA for the organization and implementation of Phase I. One of the greatest successes of the IEQ/Mali Phase I program, as acknowledged by the ISFRA, IPN and the USAID/Mali Mission, has been the successful collaboration between the two bureaucratically unrelated institutions. The establishment of a single agreement would thus have symbolic as well as practical significance. At one of the subsequent IEQ/Mali meetings at IIR with Frank Method, it was decided that the most efficient and "developmentally" sound configuration would be a single agreement between IIR and IPN, with ISFRA in a subcontractor's role with IPN. This would keep IIR out of trying to manage Mali's inter-institutional affairs. Naturally, IPN responded favorably to the new proposed arrangement. ISFRA, after some reflection, not

surprisingly balked at the idea, presenting several arguments. These can be summarized in the sentiment that this arrangement would leave ISFRA at risk of being eliminated as a partner. Although the relationship between the two institutions as regards IEQ/Mali is presently exemplary, too many changes could jeopardize this, and only a three-way agreement could serve as a safeguard. In the end, this argument convinced Dr. Ky (Director of IPN) of the wisdom of maintaining the two institutions as equal partners. In the end, it seemed that this solution coincided more strongly with the original desire of IIR not to become involved in Mali's internal ministry-level management than the sub-contractor scenario. (This matter was originally presented to IIR in Muskin's e-mail correspondence to Jane Schubert of 24 July 1994.) This is the formula that has been presented to the three institutions in the present draft accord.

Relation of Muskin's July-August Mission to IEQ's Broader Agenda and Priorities

Goal #1 Understand how and why each country's classroom-based interventions influence pupil performance.

The present mission contributed to the achievement of Goal #1 in two major, complementary ways. The consultant worked with the IEQ/Mali team to prepare and launch the processes (i) for defining and designing the Phase II interventions and (ii) for monitoring and evaluating their adoption and impacts on language learning in the classroom. The design of the Phase II planning and design workshop was a natural and necessary next step after the Phase I concluding seminar, held in Bamako at the end of April 1994. At the Phase I seminar, educators, education administrators and technicians, and parents joined to identify a series of interventions that they collectively felt would improve language learning in grades one and two. (As a reminder, these were: (i) pedagogic strategies; (ii) community study centers; (iii) school feeding (*cantine*)programs; school transport; and student health diagnosis and mitigation techniques.) The debates and final recommendations of the seminar were based on a combination of research, classroom-based experience, and a rich collection of personal and professional observation and opinion. The IEQ/Mali researchers chose to organize a series of four regional workshops, picking up on the collaborative process of the April seminar, to bring strategic definition to the interventions.[12] The list of interventions that emerged from this three-day program had to be fleshed out into a set of techniques: what must the teacher do and what must the school supervisor confirm that the teacher is doing well?

The national and expatriate researchers share the belief that the participatory process employed in the design of the Phase II interventions and program will enhance both processes, as has been explained in the earlier sections on the design of the workshop program (pp. 8 - 19) and the implementation of the Ségou workshop (pp. 19 - 25). Overall, the level of understanding of

[12] – Unlike IEQ/Guatemala, the Mali Project was not chosen by the Government and USAID to assess an already existing education initiative. Part of the initiative is to identify, develop and introduce a set of classroom-based innovations in order to promote quality education in a manner consistent with Ministry priorities.

the associated learning phenomena will grow due to the direct and synergistic attention from partners covering a broad gamut of technical disciplines and educational roles. From a more practical perspective, the simple math of the matter will permit greater coverage than could be managed by IEQ/Mali researchers alone. This is seen to be equally true in the design of the intervention strategies as in their monitoring and evaluation.

To summarize, then, the present mission comprised a crucial step toward understanding the impact of the Project on language (and overall quality) learning and teaching in Mali by setting the stage for the research component of IEQ in Mali. It has led to the definition in strategic terms of the actual interventions by which language-learning quality is being determined and that will constitute the subject of the research activity. It established a foundation of questions and strategies that will constitute the content of the research program. It set the parameters by which the IEQ/Mali researchers will be able to elaborate a final Phase II research program. It resulted in the training and active involvement of a broad range of critical partners from the education community in the IEQ/Mali research program. And it led to the creation of a calendar, the establishment of information links, and the assignment of roles for the execution of the IEQ/Mali Phase II research program.

Goal #2 Demonstrate a process whereby classroom research on improving educational quality is integrated in the educational system.

The approach employed for the planning and execution of IEQ/Mali Phase II clearly engenders a process for promoting the value (and related skills) of conducting research on the quality of education within the broader education system. Since the Phase I concluding seminar, participation has been a fundamental aspect of virtually all aspects of the IEQ/Mali Project. The justifications for this have been presented in substantial detail in different sections of this report as well as in previous reports prepared by Muskin. Specifically, the process of integration was promoted by the present mission (as well as in past missions and continuously by the IEQ/Mali researchers in their independent efforts) by engaging all or selected groups of the associated partners in:

- the determination of the actual interventions to be piloted;
- the selection of pilot schools and participants at the supervisory and research levels;
- the planning, organization and execution of the regional workshops;
- the definition of the techniques and strategies associated with the specific interventions;
- the establishment of a strategy for the adaptation and adoption of the various strategies by the teachers in their classrooms, and for introduction, for the study centers, to the local communities; and
- the articulation of a protocol and strategy for monitoring and evaluating the implementation and impacts of the strategies.

Some of these steps were developed fully during Muskin's mission; others were left to the IEQ/Mali researchers to execute after his departure, either alone or with their regional and ministry-level partners. To be sure, the degree of participation in the overall process, as in the specific steps, is not total. For example, the setting of the major goals and objectives, the choice of the target sector and the determination of the criteria for selecting the pilot schools were did not include any of the regional partners, limited instead to the level of consultation or negotiation within the central ministry and between the ministry and IIR. The application of this approach for the education sector, and for Mali in general, is a process with which the various partners must become familiar, for which they must develop new skills, and to which they must attribute increasing importance. The nature of this Project, by all accounts, certainly diverges from custom in Mali. This is likely the case for most similar projects elsewhere in the sub-region. And the trend within the Project already is to increase the role of the affiliated partners, as both the IEQ/Mali researchers and the others involved gain more experience in this approach.

The central concept is that by combining training with direct participation in all stages of the research program, all levels of actors within the education system will observe the importance of combining research with planning, executing and monitoring action. They will also be better equipped to participate in the process themselves, and in some instances -- where the training is more intense and the responsibilities more directly related --, to take initiative in this regard. Of course, the theory has yet to be confirmed in practice, but the different field-level partners have expressed their commitment to the practice without equivocation. And the IEQ/Mali researchers (together with their expatriate colleagues) have already established and put into operation procedures for observing and documenting this process.

Goal #3 **Create opportunities for dialogue and partnerships among researchers and educators who are seeking to improve educational quality at local, regional, national, and international levels.**

The IEQ/Mali Phase II planning and design workshop was a completely collaborative, participatory process, similar to the Phase I Concluding Seminar. People associated with the selected pilot schools in the following positions were designated to attend the series of workshops:

- Regional education director;
- Representatives from the research and training division of the regional education directorate (DRE);
- School inspectors;
- Pedagogic advisors;
- Community development technicians;
- School directors;
- Teachers for grades one and two;

- Representatives of the school parents' association (APE); and
- Technical advisors from the *Section Lettres*, the training unit and the national literacy division of the Ministry of Basic Education.

The beginning of an outline for the Phase II program was prepared at Ségou. At the core of the program is an information and exchange network that features both horizontal and vertical links. Horizontally, communication will be encouraged among participants with like roles. For example, teachers will be talking to teachers within a particular school as well as to teachers from other from other schools. The pedagogic advisors similarly agreed in Ségou to program discussions related directly to the IEQ/Mali experience in their respective schools during their routine professional reunions. Vertically, both informal and formal contact among the different hierarchical partners will be an important part of the network. The three-day research session was designed particularly to develop the formal aspect of this communication: support, monitoring and evaluation of the teachers in the classroom by the different hierarchical and technical levels within the national education system. Both vectors will be served by the two- or three-day colloquium presently planned for December or January, reuniting all the workshop attendees to share their experiences -- success and problems (which idea the Ségou workshop participants unanimously endorsed). Similarly, the IEQ/Mali researchers have committed to produce a quarterly (or possibly bi-monthly) *Bulletin PAQE*[13], in which teachers, supervisors, technicians and others will be able to present their myriad experiences and thoughts related to the IEQ/Mali interventions and pilot experience.

The creation and facilitation of dialogue is very much at the crux of this Project.

The present mission promoted the international aspect of this dialogue in two related ways. First, there was an experience that merits reporting internationally, with the stage clearly set for more to come. Second, the associated researchers, Malian and expatriate, began discussing manners and potential fora for presenting the IEQ/Mali experience outside the country. Two initial efforts in this vein were discussed seriously, with efforts actually begun. Two of the IEQ/Mali researchers (Dembele and Tounkara) were finalizing the IEQ/Mali Phase I report. The full group of researchers agreed that this represents a product of likely interest to IIEP (International Institute for Education Planning), or a similar European agency, for their publication. This should be reviewed first by the IIR consultants (Muskin and Donato) and the IEQ directors. Muskin, Tounkara and Diarra are also collaborating on an article presenting the outcomes and lessons of the Phase I concluding seminar. They are still communicating to finalize an outline. (See Appendix R for an incomplete version of this.) More articles are also envisioned.

[13] -- *PAQE* is the acronym for *Projet d'Amélioration de la Qualité de l'Education*, the French appelation for IEQ/Mali.

Goal #4 **Maintain an on-going history of the Project to document the rationales for choices made, opportunities and constraints encountered, and lessons learned.**

As usual, the present trip report constitutes a major effort in this regard, particularly with the abundant appendices in which are presented the products of the eight-week mission. In addition, Muskin and the IEQ/Mali researchers identified other specific products related to the present mission and to the balance of the Phase II program that they will prepare. Most notably, these include (i) articles on the workshop and the overall IEQ/Mali Phase II experiences, (ii) technical monographs that will consolidate the discussion notes and analyses of the results of the different modules as covered in the four regional workshops, (iii) the *Bulletin PAQE*, (iv) the various monitoring and evaluation reports of the IEQ/Mali researchers and their regional partners[14], and (v) a final Phase II research report, including the Phase II concluding seminar document.

Next Steps: Short- and Medium-Term Prospectus

The following steps are proposed for the follow-up and continued support of Phase II, to be executed, as indicated, by the IEQ/Mali researchers, IIR and/or the associated technical assistants:

1. *The IEQ/Mali researchers must conduct the remaining three regional workshops.* At the time of Muskin's departure, the start of the school year was anticipated for mid-October. For the Phase II initiatives to be introduced in the regions of Kayes, Mopti and Sikasso, therefore, the eight-day workshop must be organized by this time. The main obstacle to this perceived by the IEQ/Mali researchers was the pending opinion of the Minister concerning the Project's status *vis-à-vis* the new NEF initiative. Muskin strongly encouraged them to push to conduct the workshops even with this uncertainty, since Phase II will be drastically affected if they do not occur by the start of the school year. The argument can be made at the MEB cabinet level that the workshops will have a generic benefit, even if IEQ/Mali does not continue.

2. *Some agreement must be found with the Minister of Basic Education for the continuation of the IEQ/Mali Project.* The NEF initiative threatens similarly the entire IEQ/Mali initiative. At face value, the goal of improving French language-learning in grades one and two seems to be in manifest contradiction with the NEF approach of

[14] -- The IEQ/Mali researchers perceive a two-tiered research interest as regards the inclusion of the regional education personnel as research partners. On the one level, the data and analyses provided by these partners will contribute to the overall review of the Phase II experience by the IEQ/Mali researchers. On the second level, the role played by these partners -- both its nature and its quality -- will constitute the topic of an independent research endeavor by the IEQ/Mali researchers, in which Muskin will also be involved. This relates directly to the dialogue, decision-making, process agenda of IEQ Goal #3.

using the students' local language as the medium of instruction in these two grades, with no French at all used in grade one. However, the fundamental purpose of IEQ/Mali is not to improve the learning of French, but rather the learning of language, and even more so, the quality of learning in general. The focus on French was a direct response to the most pressing learning problem in the Malian classroom that existed at the time of the Project's initiation, at the time of the Phase I seminar -- where the interventions were identified -- and, in fact at present and for the intermediate future for the vast majority of Mali's schools. The argument has been made to the Minister that IEQ/Mali's major concerns are about focusing the education process on learning and the child. All of the strategies developed at the workshops, except the "strategic use of the local language" are immediately relevant to maternal language-learning. Even the strategic use techniques will be useful in grade two, when French will be introduced as a subject. Additionally, the participatory process and the research/information systems elements of the Project engender benefits to the fundamental education system -- for teaching/learning and administration/management -- that extend well beyond the language-learning level.

The IPN officials and researchers associated with the NEF initiative seem fully convinced of the relevance and importance of the IEQ/Mali program and are already involved in stating the case at the cabinet level. Similarly, the USAID/Mali Mission also backs the initiative fully. They should both be our guides in preparing and presenting further reasons to preserve IEQ in Mali. Jane Schubert's upcoming visit to Bamako should provide a good opportunity to make this case again, with the full weight and support of the Project in evidence. However, the bottom line as regards the future of IEQ/Mali seems to rest with the ability of the IEQ/Mali researchers to muster the needed support and endorsement. Muskin made this message clear to them in his final de-briefing session.

3. *Upon agreement of the Minister of Basic Education, swift steps should be taken to (i) approve and sign the joint IPN/ISFRA Phase II agreement with IIR, (ii) finalize and authorize a Phase II budget, and (iii) recruit and hire an IEQ/Mali Coordinator.* Muskin wishes to participate in the selection process for the Coordinator position.

4. *Muskin, Diarra and Tounkara must prepare an article on the Phase I concluding seminar.* Muskin is presently finishing an outline to send his two collaborators, which he expects to send before the end of October, with a copy to IIR and to UPitt for comment.

5. *Muskin must collaborate with other members of the IEQ/Mali research group (along with Diarra and Tounkara, as well as Donato) to identify and begin other articles related to the IEQ/Mali experience.* This too has begun, although still very preliminary.

6. *The final IEQ/Mali Phase I Research Report must be finalized and distributed.* Muskin and Donato should review this before it is reproduced and distributed widely. Plans for

its presentation to IIEP or other international education institutions for eventual publication should also be pursued.

7. *Monographs must be prepared relating to each of the five strategies constituting the intervention session of the workshop, combining the discussions and results of the small group and plenary discussions occurring in all four of the regions.* The IEQ/Mali researchers have already identified which of them will be responsible for each topic. Donato and Muskin should also have a role in supporting this process, which can be done from the States.

8. *Immediate follow-up by the IEQ/Mali researchers of each of the workshops must occur; including direct communication of a substantive nature with the school inspectors, the National Directorate of Fundamental Education (*DNEF*), and the teachers and school directors.* The principal purpose of the contact with the inspectors and central DNEF officials is to receive formal authorization for the teachers and school directors to adopt and adapt the techniques and strategies elaborated at the four regional workshops. An official letter to the teachers and school directors who participated in the workshops will transmit this official sanctioning of the IEQ/Mali Phase II program as well as accomplish three other things: (i) offer thanks and congratulations for the participants' contributions to the workshops, (ii) specify the expectations that the Project holds of them as regards the adoption and adaptation of the various techniques and their reporting to IEQ/Mali, and (iii) indicate what they can and should expect in the way of support and monitoring from IEQ/Mali and the Project's different partners. (A sample letter appears in Appendix Q.)

9. *Preparation of the IEQ/Mali Phase II research instruments.* The IEQ/Mali researchers will need to undertake a concerted effort upon the completion of the final workshop to prepare a single set of research instruments for use in all the regions by all the regional partners. Muskin and the group agreed on a basic process by which they would combine the results of the different regional research sessions with the work they did in collaboration with Muskin during the recent mission (*ad hoc* committee #1, Appendix L) to prepare a set of draft instruments. These would be sent to the regional research partners for their review -- and perhaps trial piloting --, with comments and suggestions sent back to the IEQ/Mali group for incorporation into a final set of guides and questionnaires. These can then be sent to Muskin and Donato for a final review. Associated with this task will be the elaboration of a final research protocol, which will be particularly important as in it will be detailed the role of the regional research partners.

10. *Soon after the workshops (when the final selection of pilot schools will be determined) the IEQ/Mali researchers must compile and prepare the relevant data which will comprise the baseline for the Phase II research agenda.* The data exists and the researchers know what is included and have access to it. A final selection of exactly

what data should be used -- that is, what in addition to the language testing data -- is still pending. Some method for including the regional research partners in this aspect of the research is also desirable.

These constitute the larger actions to be undertaken or considered over the next several months. Many, more particular actions are incorporated into each of these, requiring further reflection and joint discussion by IIR and the IEQ/Mali researchers and consultants.

List of Appendices

Appendix A List of IEQ/Mali researchers

Appendix B Joint Muskin-IEQ/Mali researchers work plan, July-August 1994

Appendix C IEQ/Mali Phase II Planning and Design Workshop Facilitator's Guide: Ségou version -- *Programme des Ateliers de Conception et de Planification de la Phase II du Projet d'Amélioration de la Qualité de l'Education tenu à Niono (pour Ségou) du 22 au 30 Août 1994 et à Kayes, Mopti et Sikasso du ## au ## Septembre 1994: GUIDE DU FACILITATEUR*

Appendix D IEQ/Mali Phase II Planning and Design Workshop Facilitator's Guide: revised version for use in Kayes, Mopti and Sikasso -- *Programme des Ateliers de Conception et de Planification de la Phase II du Projet d'Amélioration de la Qualité de l'Education tenu à Niono (pour Ségou) du 22 au 30 Août 1994 et à Kayes, Mopti et Sikasso du ## au ## Septembre 1994: GUIDE DU FACILITATEUR*

Appendix E Revised terms of reference for proposed IEQ/Mali coordinator -- *Termes de Référence: Coordonnateur du Projet d'Amélioration de la Qualité de l'Education*

Appendix F Proposed recruitment procedures for the IEQ/Mali Coordinator, presented to IIR and IPN -- *Procédures Proposées Pour le Recrutement d'un Coordinateur du PAQE*

Appendix G Letter from IPN Director to regional education director requesting participation and cooperation in the IEQ/Mali Regional Workshops: version for Ségou and version for Kayes, Mopti and Sikasso

Appendix H List of schools proposed for selecting IEQ/Mali Phase II pilot schools (ten), by region

Appendix I IEQ/Mali preliminary versions of Phase II budget and action plan

Appendix J Planning guide and outline for IEQ/Mali Phase II Planning and Design Workshops -- *PAQE Commission #5: Planification des Ateliers de Septembre*

Appendix K Summary notes of the major conclusions of the Ségou IEQ/Mali Phase II Planning and Design Workshop, presented by module and day -- *L'Atelier de Ségou sur la Conception et Planification de la Phase II du Projet d'Amélioration de la Qualité de l'Education*

Appendix L Outline of preliminary research protocol and plan for IEQ/Mali Phase II -- *PAQE Commission #1: Programme de Suivi/Evaluation et de Recherche*

Appendix M Notes distibuted to workshop participants on action-research and on qualitative research instruments -- *"Les instruments de recherche éducative"* & *"La Recherche-Action"*

Appendix N Action Plan for IEQ/Mali Phase II -- *Plan d'Action Pour la Phase II du Projet d'Amélioration de la Qualité de l'Education, Mali*

Appendix O Proposed comprehensive budget for IEQ/Mali Phase II -- *Budget de la Phase II, Projet d'Amélioration de la Qualité de l'Education au Mali*

Appendix P Summary comments of Muskin on the execution of the Ségou workshop and concerning preparations for the upcoming regional workshops -- *Commentaires Généraux sur l'Atelier de Ségou, de Joshua Muskin, le 31 août 1994*

Appendix Q Draft of proposed follow-up letter from IEQ/Mali researchers to the teachers and school directors participating in the Phase II Workshops

Appendix R Outline (Incomplete) for an article on the IEQ/Mali Phase I participatory process, to be written by Diarra, Muskin and Tounkara -- *"A la recherche d'un consensus sur la qualité dans l'école primaire au Mali"*

Appendix S Draft Agreement for IEQ/Mali Phase II between IIR and IPN/ISFRA -- *Draft: Accord Entre l'IIR et l'IPN et l'ISFRA*

Attachment 7*i*

Trip Report #31
(South Africa, 16 August-2 September 1994)

Improving Educational Quality Project

South Africa Trip Report

16 August 1994 - 2 September 1994

Prepared for:
Office of Education
Bureau for Research and Development
United States Agency for International Development
Washington, DC

Project undertaken by:
Institute for International Research
in collaboration with
Juárez and Associates, Inc.
and
The University of Pittsburgh

Prepared by:

J. Myron Atkin

Contract #DPE-5836-Q-00-1043-00
Trip Report #31

October 1994

624

Table of Contents

Tab

I. Itinerary 1

II. Evaluation of Handspring/PSP Materials 2

III. Report on Handspring/PSP and MCPT Materials 3

IV. General Comments Based on Meetings and Classroom Visits 4

I. SUMMARY OF TASKS
[Part 1 of a report in 4 parts]

Meetings and Classroom Visits in South Africa
16 August 1994 - 2 September 1994

J. Myron Atkin
School of Education
Stanford University

16 August, Durban: Orientation meeting with IEQ staff
Handspring/PSP Reference Group meeting

17 August, Durban: Meeting with IEQ staff
Seminar at University of Durban Westville
(Topic: Comparative Study of Innovations in Science, Mathematics, and Technology Education in OECD Countries)

18 August, Johannesburg: Orientation meeting with MCPT officials

19 August, Soweto: MCPT classroom visits, discussions w/Dlamini

22 August, Soweto: MCPT classroom visits, discussions w/Dlamini

23 August, Soweto: MCPT classroom visits, discussions w/Dlamini
Debriefing with Thuli Dlamini and MCPT staff

24 August, Cape Town: Handspring/PSP orientation and report planning

25 August, Cape Town: Handspring/PSP classroom visits (Mitchell's Plain)
Action research seminar, Uluntu Center, Guguletu

26 August, Cape Town: Handspring/PSP classroom visits (Belville South). Discussions with Perold.

29 August, Port Eliz.: Handspring/PSP classroom visits (Kwaford Primary, Myezo Primary, Inkqubela Primary, Enqileni Primary)

30 August, Durban: Draft writing. Debriefing and evaluation discussion with IEQ staff.

31 August, Durban: Writing and evaluation seminar with IEQ staff

1 September, Pretoria: Meeting with USAID staff (Cheri Rassas, Sarah Labaree, Pumla Madiba)

Johannesburg: Action Research Seminar

2 September, Johannesburg: Handspring/PSP debriefing (Perold, Jones, Raubenheimer, Bahr, Jansen, Ntshingila-Khosa)

626

II. EVALUATION OF Handspring/PSP MATERIALS
[Part 2 of a report in 4 parts]

J. Myron Atkin
School of Education
Stanford University

My perspective on the Handspring/PSP materials is limited by the fact that I have no baseline in South African education to which to relate my observations. Specifically, I do not have the personal experience for making judgments about whether or not the classes I saw represent a marked departure from common practice. I do understand, however, that primary-level science education in South Africa, where it has existed at all, has been tightly bounded by the official curriculum. Furthermore, teacher talk has been dominant, with the children expected to memorize key definitions and to recite those definitions back to the teacher, preferably in the identical words of the text (when one is available). Sometimes there have been no books or duplicating facilities, so the teacher writes major concepts on the chalkboard, and the children copy the teacher's words into their own notebooks. There are often no science materials available, like test tubes and balances, that would enable the children to do experiments on their own. It is even rare for the teacher to have equipment for demonstrating key ideas for the class.

Against this background, the science classes I saw represent a major shift in teaching style. In every classroom to which I was taken, there were materials for the children to use, and they were used carefully and skillfully. In about half the classes I observed, the teachers and children carried out some sort of summary at the end of the lesson to underscore the major ideas that the lesson was intended to convey. Interest in the topic (acids and bases, electricity, forces) seemed high on the part of both students and teachers.

One of my most-striking impressions was the self-confidence of virtually all the teachers, and, in many cases, the poise of the students. In every instance, the teachers and children seemed relaxed in the presence of outside observers, and both spoke freely, for the most part, in interviews with strangers afterward about their impression of the Spider's Place materials. (In those few cases where the children did not seem forthcoming about their reactions to the comics, I had the impression that their difficulty was with the English language, not a shortage of impressions and opinions.)

Teachers like what they are doing with Spider's Place; they feel the work is important; both children and teachers care about the quality of their performance. It is clear that the teachers derive enormous satisfaction from their involvement with the new materials, and so do the children. A few teachers proffered unsolicited comments to the effect that their teaching styles have been permanently changed by their participation in the

Handspring/PSP Project. (I interpreted this last comment as indicating that the teachers saw the value of the students interacting directly with real materials, and that they were committed to trying to continue to base their teaching on the use of concrete objects in the future.)

Given these significant strides in the teaching approaches of those whose classes I observed -- and given, especially, the relatively short period of time that the teachers have been using Spider's Place materials -- knowledgeable South African readers of this document will have to place the critical comments that follow in appropriate context. While they are intended, of course, in a constructive spirit, and they are informed by contemporary developments in primary-level science in many countries, they are relatively insensitive to the overall history of and prospects for improvement of South African education.

The comments about the Handspring/PSP materials that follow are framed in three, broad categories: (a) the materials themselves and what they convey about an approach to science (and to life), (b) the science content, and (c) the support necessary for successful use of the materials in the classroom.

The Approach to Science

The comics seem to have two kinds of goals. One is to teach some important concepts about topics like acids and bases, combustion, electricity, and force. The other is to convey to children the idea that they are capable of coping constructively with the confusing world around them (and, furthermore, they can have fun doing so). At this stage in the development of the Spider's Place comics, it seems to this observer that teachers and children are attuned only to the first goal. To the extent that the second is appreciated at all, it seems very much in the background. In every lesson I saw, the main point was to teach the identified science concepts. In no class did the teacher and children explicitly draw lessons about their own self-efficacy.

There is irony here. For me, the most creative elements of the comics are the engaging stories they tell. The originality of Spider's Place lies not in the science content -- which is conventional -- but in the artfully contrived situations a group of children and teachers manage to get themselves into. Children identify with Spider and her friends. They are absorbed in the antics of Class T. They admire what the children in the comics do, and the teachers and school principal are recognizable. In more than one classroom, we were told that the children role-play, assuming the language and style of one of the colorful group of characters.

In view of the compelling and apparently realistic aspect of the stories, which the children unquestionably find engaging, it

seems puzzling that the narrative is used only incidentally in most of the classrooms: primarily to focus the children's attention on science facts and concepts. The comics are believed to motivate children (a point made by several teachers), but to motivate them to grasp a few science ideas, not to begin to act confidently and assertively on their own world.

This impression was strengthened by the fact that the teachers I observed using Spider's Place did not seem to listen carefully to the students' **ideas** during classroom exchanges. There was little meaningful discussion about the science. Teachers demonstrated respect for the children; clearly students are valued and respected as people. Yet the teachers I saw seemed so intent on conveying the science concepts highlighted in the comics that the children's own explanations and speculations were not seen as opportunities for discussion and exploration. (The reason could well be that the teachers, though confident about themselves, feel uncertain about their own science knowledge and, therefore, insecure in an open-ended discussion.)

The severely constrained goal of the science lessons was often accented by a routine style of teaching. In more than one classroom, the dominant mode of instruction was for the teacher to pose a question -- usually one demanding only simple recall -- then call on children who volunteered to respond. Incorrect or imprecise responses were passed over. When a child finally came up with the answer that corresponded to the teacher's wishes, there was quick affirmation -- which was often followed by the teacher leading all the children to repeat the correct response, in chorus.

One additional point: for many of the children and teachers, English is not the mother tongue. It could well be that the burden of non-native speakers of the language conducting a lesson in English deprived this monolingual observer of the opportunity of grasping the depth of thought possessed by either teacher or students.

The Science Content

I have already noted that the science content in the Spider's Place comics is conventional by international standards. The reason, I understand, is that a decision was made early in the project to use familiar science topics -- in effect, to follow the existing curriculum. It was thought that to introduce novel science content while promoting new ways of working with children would present too high a barrier for teachers to surmount. Furthermore, the teachers feel obligated to teach the official curriculum, so the comics might have been marginalized to an unacceptable degree if they did not support what the teachers understand as their professional obligation.

Suffice it to say for purposes of this report that major curriculum trends are in evidence in many countries that diverge sharply from the current South African primary science curriculum. One of the clearest developments internationally, in general terms, is a move toward more practical work for children. Specifically, new curricula are being introduced that place priority on content that engage children with the community. Environmental concerns, for example, have become the object of inquiry in many Austrian and Canadian communities. In Japan, the new lower primary curriculum centers on the environment, and in a fashion that has the children investigating environmental problems in their own neighborhoods. In one American secondary-school chemistry course, CHEMCOM, the science is introduced on a need-to-know basis in solving community problems.

It would certainly be in the spirit of the Spider's Place comics for this kind of community-based work to be undertaken in connection with the primary science program. But in those instances where we managed to glimpse such activity by children, it was taking place outside the Spider's Place classroom. In a school in Port Elizabeth, the children were busily arranging plants on the school grounds and generally beautifying the facility. I believe they were participating in making decisions about the work in which they were engaged. It was not apparent, however, that the science potential of such activity is understood. Indeed, the Standard 4 class we saw studying electricity was one of the few groups indoors at the time. Surely the reason was that we visitors were there to observe the use of the comics, and the staff was accommodating us. Still, the point may be worth noting: there is a wealth of science all around the school and home that could be capitalized upon in enriching the curriculum. While such an approach comports well with Spider's Place, that potential for use of the comics is as yet unrealized.

Support for Teachers

With respect to the support teachers need to use the materials well, it seems to me that the teaching approaches embedded in the comics are so novel (as they would be anywhere in the world) that considerable assistance is needed by any classroom teacher who plans to use them in any way that approximates the style intended. To deliver the comics to a group of teachers, with no further assistance, would accent their marginality. It is difficult to envision any combination of video and print material that could do an adequate job of building teacher skill and confidence in view of the magnitude of change that, for me, is conveyed by the Spider's Place comics. This point raises further questions about utilizing the comics on a larger scale in South Africa and evaluating them. This issue is addressed directly in Part III of this Report, which deals with the Handspring/PSP and MCPT evaluations.

III. REPORT ON Handspring/PSP AND MCPT EVALUATIONS
[Part 3 of a report in 4 parts]

J. Myron Atkin
School of Education
Stanford University

IEQ responsibilities in the Handspring/PSP and MCPT evaluations center on the use of the materials that are the central feature of each program: the Spider's Place comics, the MCPT booklets, and the accompanying videos. Other elements of the initiatives (the use of facilitators and implementors, for one significant example, and the saliency of the math and science that have been identified in the projects, for another) are not explicitly incorporated in the IEQ assignment. The major exception is that the extent and character of the support needed by teachers to adequately implement the innovation is being examined in the case of Handspring/PSP.

This limitation in the scope of IEQ effort means that anyone faced with the responsibility of making major decisions about the broader use of these materials will need additional information, or at least should be sensitized to possibly important factors that bear on policy with respect to the two initiatives. Partly for this reason, I have extended my comments in all three narrative sections of the report to highlight what I see as problematic issues in the realms not specifically included in the charge to IEQ and the other evaluators.

(A word about the various Handspring/PSP responsibilities as I understand them: Handspring Trust is primarily interested in the wide-scale adoption of certain science materials. The Spider's Place comics were designed on Handspring's behalf by the Story Teller Group, and the booklets are accompanied when delivered to schools by videos prepared by Handspring directly. The Primary Science Program (PSP) is the agency through which the materials are "implemented," using PSP staff who already have working relationships with schools in different regions. Thus PSP provides Handspring with an established and highly regarded dissemination network. IEQ provides support to the evaluation by participation in the activities of the Reference Group that guides the overall evaluation and by collecting a significant amount of classroom data directly. This overall evaluation effort is coordinated by Helene Perold & Associates.)

For the Handspring/PSP evaluation, the focus of the evaluation is on three specific questions:

Do teachers use and value the materials?
How are the materials used in different contexts?
What support do the teachers need to use the materials effectively?

The IEQ contribution to the Handspring/PSP evaluation will

shed light in considerable detail on each of these matters. (At the risk of eliminating some of the suspense, and at the additional cost of omitting subtle and important qualifiers and particulars: (a) there is no question that the teachers who have been observed and interviewed value the materials, but for different reasons, (b) that they use them mostly, though not always, as a supplement, (c) that context is central, with some teachers more venturesome and confident than others, and (d) that the nature of the support teachers receive, and they need a great deal, makes a big difference.

However, both projects, Handspring/PSP and MCPT, embrace a view of educational change that extends farther than the effective use of instructional materials alone. Specifically, both the Handspring/PSP and the MCPT embody a philosophy of teacher professional development that can characterized, briefly, as participatory and collaborative. In both efforts, it is understood that there is a close relationship between professional development and curriculum design, and that teachers are unlikely to use new materials as the developers intended if they do not embrace and internalize the underlying philosophy.

One challenge in both evaluations is that the evaluators seem to face competing demands and expectations. On the one hand, there is the wish for an indication of how well the experimental materials work in actual classrooms, preparatory to laying plans for extending their use elsewhere in the country. What can be said about the effectiveness of the material for children? How comfortable are teachers with the experimental booklets? What strategies are necessary if the materials are to be used on a large scale in South African schools?

On the other hand, there are project-design questions around issues of developing an integrated initiative that relates books, teachers, and children in an overall enterprise that is effective and coherent. It is unclear to this observer the extent to which the published booklets from the projects (Fair Shares, Shape, Parts and Pieces, Joining and Separating Numbers and the Spider's Place comics) should be considered as essentially completed and the extent to which they are best viewed as works in progress and part of a much larger effort.

The labels "formative" and "summative" are sometimes employed to characterize this tension in the purposes of the evaluation. If the projects are to a significant degree in the developmental stage, an evaluation is required that informs the revision process. If, on the other hand, the products of Handspring/PSP and MCPT are essentially completed works, the focus shifts to some sort of concise judgment about the conditions under which they are likely to work (or not work) elsewhere. At present, the evaluators seem to be working simultaneously under both assumptions; in fact, priorities with

respect to formative and summative issues seem still to be under negotiation.

If this impression is accurate, it would not be an unusual event in the field of program evaluation. Frequently, evaluation objectives change, and should change, as the evaluation takes shape, particularly if the program being studied is itself in flux, as is the case for both of these projects. And summative and formative pressures are not always incompatible. An evaluation can serve both aims, at least partially. It is important, however, that all those involved -- commissioners of the evaluation, the evaluators, and, ultimately, users of the evaluation -- have as close to the same picture of the goals, procedures, and outcomes as possible.

It must be emphasized that the evaluations for each of the projects has been soundly, carefully, and comprehensively planned. The key evaluation questions have been formulated and agreed upon in both cases. Interview guides and survey instruments have been designed and tested. For the Handspring/PSP evaluation, which is more extensive than that for MCPT, a very-useful Research Manual that serves to harmonize the work of several evaluators has been prepared, distributed, and discussed. A systematic program of classroom visits (some of which I participated in) has been inaugurated for both projects. Furthermore, a regularized plan for debriefing both Handspring/PSP and MCPT staffs has begun, so that evaluation issues and problems are discussed as they arise. In this fashion, the evaluators and the program designers/implementors are fully apprised of developments and can help shape them. Among other benefits, the regular meetings serve an important formative function: as the initiative continues to evolve, decisions can be made in the light of the preliminary evaluation findings. Frequent meetings also serve as checks on project realities for the evaluation teams. It seems to me that each of the evaluation efforts will be of considerable benefit to the respective project staffs as a result of the working relationships that have been established.

Some of the results of the MCPT evaluation were foreshadowed in a meeting on 23 August. In a more-preliminary fashion (because the evaluation is at an earlier stage), Handspring/PSP data were discussed comprehensively at a meeting on 2 September.

Thuli Dlamini and Jonathan Jansen are preparing the comprehensive evaluation report on MCPT, of course. At the August debriefing, points were made about mathematical notations in the MCPT material, and about language teaching through the mathematics curriculum. The final report also will discuss the use of equipment and the very-positive teacher-attitudes in evidence.

For me, one of the most striking impressions carried away from the Soweto classroom observations is the fact that almost all the MCPT teachers I saw were exceptionally articulate about their educational philosophies, compared with teachers I have talked with in other countries. Among other points, they affirmed the importance of listening to the children's **ideas**, and seemed to be doing so. In the words, of a Dobsonville teacher, "I listen to the children more [than before I was introduced to MCPT]. Before I kept asking the same question until I got the right answer." Or, from a Senyamo teacher, "I used to give children **my** methods. Now they come up with their own solutions and explanations." Particularly impressive was the large number of teachers (about half of those with whom I spoke) who believe they could now develop their own mathematics material.

Some of the MCPT facilitators seemed to have an articulate and insightful perspective on the support structures that teachers need to teach math in the MCPT mode. The MCPT publication on action research is particularly useful, in my opinion. If MCPT is to move to a larger-scale within South Africa, the realities of educational change embedded in that document will help to develop effective strategies because it deals perceptively with the support structures necessary to sustain MCPT after the facilitators are gone.

As MCPT gains increasing recognition, it will be important that the rationale for choosing certain math topics (and not others) be clear. For example, apparently important topics, like estimation, seem to receive a minimum amount of attention. I recommended at the August debriefing that a review committee of mathematicians and math educators be convened (or re-convened) to provide advice about both saliency and accuracy of the content. Are the topics significant? Should materials be developed on patterns, or probability and statistics, or any of a number of other topics that are sometimes included in contemporary math programs for primary grades?

MCPT might want to become a bit more aggressive in beginning to build a broader curriculum around mathematics, a curriculum that may have math at the center but that might include language teaching, science, community studies, etc. MCPT's general philosophy of staying close to the thinking of children is one that would be beneficial in all subjects, and right now the South African curriculum seems undesirably fragmented.

Also, it seems important before many more months have passed to start a program for developing student assessment instruments that comport with the MCPT approach. Otherwise, MCPT is likely to be evaluated on the basis of criteria and expectations developed for other styles of math teaching.

As for the overall evaluation strategy in MCPT, it would be

informative to test the materials with teachers who have not had facilitation (but who would receive print materials and, perhaps, videos). Regarding micro-evaluation techniques, the evaluation teams for both projects might consider conducting some of the teacher interviewing in small groups. Individual teachers are often hesitant to voice criticism of programs they find valuable, even when told that their suggestions for improvement might make the materials easier for other to use, or more effective. In small groups, given appropriate impetus, teachers frequently are more forthcoming and helpful.

Regarding future implementation of the two projects and increasing the scale of effort for the purpose of reaching more children in more South African schools, prudence suggests that expansion be cautious and slow. Both of these initiatives represent considerably more than the creation of new tools with which a teacher can more effectively reach well-understood, existing goals. In each project, books and other materials have been devised that are intended to be used in a radically different approach to the education of young people. Even in the limited number of observations in which I was personally engaged, it was clear that the booklets, in the hands of teachers not fully conversant with and accepting of the underlying philosophy of the project, would merely be incorporated into a traditional curriculum and mode of teaching.

It would be an error to view such an outcome as benign, to assume that the introduction of some MCPT or some Handspring/PSP material is better than none. Spider's Place and the MCPT materials would become associated with traditional education and strengthen the impression that educational progress demands only cosmetic changes. Provide new books, and education improves. Such a view is too simple. If the two projects are to be scaled up, the effort to do so must be informed from the outset by the fact that the changes demanded of the educational system are more than procedural or technical. They incorporate a view of education, of schools, of society, and of children that embodies a philosophy of active engagement.

In the case of MCPT, that engagement is primarily intellectual. Children cope with real mathematical ideas, and, in the process, they speculate, and they deliberate, and they refine lines of mathematical argument. In the case of Handspring/PSP, the engagement is intellectual, social, and emotional. Children do things to the world and to each other that reflect a view of childhood that schools do not ordinarily promote. In both initiatives, there are inevitable reverberations about the way a society wants its children to behave. The classroom becomes a base for exploring, questioning, and, potentially, improving the community. It cannot be assumed that such a change in the world view of teachers will be produced by the distribution of materials alone.

A deliberate and cautious strategy for expanding these programs calls also for a non-conventional approach to evaluation. It will not be sufficient to look for rapid changes in student achievement, at least according to the most commonly used methods of making such assessments. In fact, it would be counter-productive to the kinds of reforms that are sought in these projects to do so. These projects are most fairly judged by the nature of **actions** that children take in actual predicaments they face. They are judged by student performance in tasks that call not only for accurate knowledge (an area we know something about measuring), but also by gauging how well students develop a defensible line of argument for a course of action (an area we know but little how to assess).

The kind of education reflected and promoted in these projects is often one in which the objective is not to arrive at a single, correct answer, but to devise or choose from several possibilities, many of which can be justified. There is no one best way to subdivide a rectangle into four equal parts, for example, or to reduce damage from acid rain. In the former case, the goal might be to see how many methods the children can devise and justify. In the latter case, a particular course of action depends on knowledge of acid rain, what might have produced it, and its effects. But it also depends on existing law, community attitudes and values, resources that are available, and who wields influence.

The field of educational evaluation has begun to address some of the problems associated with making judgements about programs that reflect such goals. Evolving approaches rely less on standard measures of student achievement and more on assessment of their performance in concrete situations. As the IEQ effort admirably illustrates, such evaluation incorporates analyses of the processes by which teachers and children work, not solely the facts they learn. Case study is used extensively in the evaluation of such programs because values, opinion, and questions of worth loom large in understanding how these curriculum programs actually work. Consequently, there is lots of interviewing and observing in such evaluation to be sure that meanings are understood adequately enough for purposes of accurate characterization and that the interests of many who have a stake in the outcome are represented. Such evaluation tends to be context-sensitive -- again, like the IEQ effort -- recognizing that it is often difficult to generalize about such programs; the programs often pivot around local circumstance, including teacher, student, and community interest. The educational payoff is in how the community of teachers committed to the new program takes shape, the quality of the projects on which children work, and how teachers create settings in which children can demonstrate creativity and rigorous work.

Evaluation can be, and often has been, an impediment to

reform. When measures are used that do not maximize the distinctive quality of a new program, when it is assessed using criteria associated with more-traditional approaches, the impetus for reform can be blunted. It is far from clear that standard evaluation techniques are up to the challenges of assessing programs as distinctive and different from their predecessors as Handspring/PSP and MCPT. Even if some evaluators think they are, it is far from certain that relatively unfamiliar assessment techniques like those being employed by IEQ -- which inevitably rely more on narrative and even anecdote -- will be found sufficiently believable and trustworthy by those who must make policy judgments about the scale and nature of major innovations.

Nevertheless, that move toward using evaluation to illuminate local and particularized conditions is the only defensible one educationally in the case of programs that aim for deep change. To do otherwise is to lose the richness, and even the essential novelty, of the innovation in a quest for generalized descriptions and judgments. The major lessons to be learned from initiatives like Handspring/PSP and MCPT lie primarily in understanding how specific people, with their own goals, who use project materials in distinctive circumstances and even in idiosyncratic ways, begin to make, or not make, a difference in the lives of children. The evaluators engaged in the two projects know that, and they are beginning to demonstrate the benefits of evaluations sensitive to context and differences. If such evaluations are to gain in credibility and influence in South Africa, it will fall to groups like IEQ and the others involved in the evaluations to lead the way.

IV. GENERAL COMMENTS BASED ON MEETINGS AND CLASSROOM VISITS
[Part 4 of a report in 4 parts]

J. Myron Atkin
School of Education
Stanford University

My strongest impression of South African education based on three weeks of classroom visits, several Handspring/PSP and MCPT meetings, and the action-research seminars is that there exists a strong cadre of teachers, curriculum developers, facilitators, and evaluators who provide the basis for building an educational program that is forward looking and responsive to the developing needs of the country. The people I observed and with whom I talked are committed to the well-being of the children, they have sound ideas about directions in which they might move, and they have the energy and insight to make a difference.

That is not to minimize the barriers. They are severe. Classes often number more than 50 students. Some of the teachers seem poorly grounded in science and math. Resources are limited, with many classes without books. Some of the school buildings are dilapidated, with broken classroom ceilings and unrepaired window panes. Many of the children seem to have little educational support at home. Nevertheless, the optimism -- and ability -- of many of the teachers and all of the math and science project-personnel I met is unmistakable and impressive.

The second-strongest impression is of a school system that seems, at present, frozen into an overly formal, uninteresting, and out-of-date curriculum, at least with respect to science. The text and the teaching tend to emphasize formal definitions, with recitation the prevailing mode of instruction. Most of the teachers' questions call for simple recall. Children are expected to provide answers by repeating material from the text (when a book is available), or by parroting the words of the teacher. Many of the questions call for definitions, often recited in a sing-song fashion. Few of the classes I saw make demands on the children for hypothesis formulation or testing, analysis, defense of an argument, or design of some procedure.

In the MCPT project, considerable effort has gone into reversing this state of affairs. Through an extensive system of "facilitation," teachers have been introduced to the benefits of listening to children. They have been presented with a picture of math that is antithetical to prevailing teaching styles, with children and teachers expected to be speculative, intellectually venturesome, concrete, and original. The teachers and children I observed like the approach. But the effort needed to alter conventional teaching to move in this direction is intensive, and change of this sort does not happen quickly. Teachers must be given scope to try the new approaches, the opportunity to ask questions, the chance to discuss some of the challenges with peers -- and they must receive some help in their own classrooms

from time to time.

With respect to the Spider's Place comics, my visits came at an early stage in implementation of the project. However, at the time I observed classes, the project initiators and implementors had not seemed to have anticipated the large amount of work with teachers that will be necessary for the fundamental change in the teaching of science that is envisioned. In fact I inferred that, when Spider's Place was conceived, it may have been hoped that the materials themselves would carry the essential messages of the comics, and that the basic implementation task with respect to teachers was to be sure the books and related equipment were readily available. There is a video, and there have been workshops, but it seems to have been assumed that it was sufficient to introduce the teachers to the goals of Spider's Place and the comics themselves, and that the teachers have the skills subsequent to familiarization to carry on with the program in a fashion that its creators intended.

Judging from the final Reference Group meeting I attended on 2 September, this view of implementation in Handspring/PSP, to whatever extent it may have existed, is no longer held. It seems to be understood that a major task lies ahead in working with teachers to convey the spirit of the comics as well as the content. That realization is important. Spider's Place, as much as any teaching approach I have seen, demands a change in the teacher's world view: a change from seeing children as people who are to acquire a pre-determined body of information to one of seeing them as people who have the ability and inclination to alter the world in which they find themselves. So deep a shift requires plenty of opportunity for teachers to examine their most fundamental beliefs, and in a supportive and experimental environment.

Cross-curricular Studies

Part of this change in world view entails thinking of Spider's Place not solely as a vehicle for teaching science in a way that puts children in charge, but as an opportunity to engage students in a range of activities that transcend the existing subject-matter boundaries in South African elementary schools. MCPT offers a suggestive model in this regard. Several of the MCPT teachers I saw were clearly using the MCPT materials to teach English to children for whom it is not the mother tongue, **and** they extended the time period allocated for mathematics to do so. In the elaborately and precisely divided day in South African primary-school classes, with definite times for math, science, and everything else, several of the teachers justified their decision to teach math content beyond the allotted time by pointing out exactly that fact, that they were using the extra time to teach English. It does not take much of a stretch to push this line of argument into community studies, the arts, and

other subjects, as well. But for this kind of change to take place, it would be necessary for teachers to explore opportunities they might have to exercise a degree of professional latitude that may or may not believe exists.

Indeed, such a movement toward more-comprehensive integration of the subjects of the curriculum is one of the clearest trends in science and mathematics education developments worldwide. In the ongoing study of innovations in these fields in OECD countries (for which I co-chair the International Steering Committee and for which I have major responsibility for preparing two of the eight American case studies that are part of the project), one of the most readily discernible trends is toward more practical work for students. Practical, in this usage, means addressing personal and social issues for the purpose of acting more wisely. Children are studying matters of local, environmental pollution, for example. Or designing an economical and healthful diet. Or figuring out how to come to grips with their sexuality.

These kinds of studies are not easily confined to the conventional disciplines that constitute the existing official curriculum in South Africa. They demand knowledge of the relevant science and mathematics, but they also require understanding of how decisions are made in the community, relevant local traditions and other precedents, and how students might exercise greater control over the pressures and opportunities that confront them. Not least, they call for examination of personal and social values, moral issues, and ethical questions.

Planning for Educational Change

What about basic strategies for educational improvement? South Africa is not alone in tending to lay plans for the improvement of schools by reacting to current problems. Children drop out. What can be done? Children are not prepared for work. What must be changed? Children do not have adequate language skills. How can they learn them? Educational reforms typically center on remediating the difficulties that the public sees as most pressing. Presumed deficiencies are identified and plans are developed to reduce them. In the case of science, if teachers need a better background in the subject matter, figure out a way to provide it. If they must learn to understand the science conceptions children bring to school to better plan teaching strategies, initiate programs that convey "constructivist" approaches to the teaching of science and math concepts.

However, a different starting point for laying the groundwork for educational improvement is available in every country. Reform need not be driven always by direct attempts to

remedy weaknesses (though any successful strategy to improve education will have that result). An alternative strategy is based on the fact that there is enormous existing variation in any educational system, and that some teachers seem to do relatively well in situations that appear impossibly daunting to others. What about concentrating on the identification of existing pockets of effective practice, and taking steps to understand, connect, and expand them? In short, what about a strategy that improves the educational system by building on strength instead of focussing on weakness?

There are several benefits to acknowledging relatively strong practice and building on it. For one, teachers see desired change as more realistic if they can see that it already has happened in some places. For another, those whose practice has been highlighted can begin to see themselves as leaders in the reform. For still another, identifying pockets of strength provides a nucleus around which groups of teachers can begin to cluster and support one another.

This last point is critical in sustaining educational reform. Innovators who stimulate change from outside the school -- many of the leaders of non-governmental organizations, for example -- usually are at their best in changing visions of the possible. By working closely and sensitively with a relatively small number of teachers, they help to modify expectations. Teachers elevate their goals and begin to see, for example, just how mathematics learning is enriched when lessons build on children's current understanding of important ideas. Teachers learn that science is more engaging for children when students conduct investigations in their own communities about matters that are of personal and neighborhood concern.

But innovators are not colleagues in the same sense that fellow teachers are. Most particularly, they usually do not have continuing responsibility for providing educational services to a classroom of actual students. They do not work within the confines of particular school or local educational authority. While they have many strengths and often make significant and necessary contributions to educational reform, they cannot be as sensitive to local circumstance, constraint, and opportunity as someone on the scene day after day. Effective and experienced teachers are masters and mistresses of what is possible in their own situations.

For educational change to take root broadly, for innovations to be sustained, there is no substitute for **groups** of teachers who share similar goals and who work in comparable settings getting together to share ideas, problems, frustrations, and successes. Communities -- people who share a critical core of goals and values -- provide the intellectual and emotional support necessary to sustain programs that depart from

conventional practice. The communities of teachers need not be large. They need not necessarily come from the same school. They do not always need substantial resources from the outside. They do need, however, time to meet on a fairly regular basis.

Spider's Place and MCPT, in promoting a particular view of the child, reflect a certain set of values. Those who hew to those values, as they begin to know one another, can constitute the beginning of a community. As ideas are exchanged and debated within such a group, a culture develops. It doesn't take a huge leap of the imagination to envision a Spider's Place or MCPT community steeped in a culture of mutually supportive experimentation, in which teachers create at least the informal structures they need to become the key figures in curriculum improvement.

Without the development of such teacher communities, the intelligent use of even the very best instructional materials is unlikely to be sustained. Leadership from the classroom that can be generated by such mutually supportive groups will greatly facilitate the sort of deep change in educational practice envisioned by MCPT and Handspring/PSP and help it progress beyond a relatively small number of classrooms. A few individual teachers may warm to new ideas and usually do, but their influence is minimal unless they connect with others who are similarly inclined in some sort of functioning network.

To effect broad change in education it may not be necessary to change the practice of all the teachers directly, or even a very high percentage of them. Current strategies for establishing a new science curriculum in the State of California, for example, are based on the assumption that only a critical 15 or 20 per cent of teachers must be reached in a fashion that helps them understand and implement a dramatically new program. Those who hold this view claim that about 20 per cent of the teachers in California continually and systematically search for new and more-effective ways of serving their students. Even without much guidance from the State Education Department, these teachers are alert to promising innovations and are regularly trying new approaches. For these teachers, participation in innovative ventures has become a part of their professional identity, and they need no special support, other than to have access to new ideas -- which they can get from professional periodicals, an inspirational speaker, or regular in-service teacher education programs.

The "target" group of teachers in this strategy for educational change is the **next** 15 or 20 per cent. Efforts are concentrated on them: to acquaint them with new programs, to provide them with the necessary materials, to give them support at the school level, and to put them in touch with others who share the same goals. With this additional group, a "tipping

point" is reached. If about 40 per cent of teachers are actively engaged in establishing a new program, their influence ripples out to almost all the others. Curriculum is revised officially. Testing patterns are changed. Teacher education is modified.

This approach makes deep change in education seem more achievable, more realistic. One can view MCPT and Handspring/PSP in this light. If the task is seen as primarily reaching a strategic core of teachers, not every one of them, the prospects for significant change may be less daunting.

(Important elements of educational change relate to universal access and cost-effectiveness. Much as I would like to reflect helpfully on these matters, however, I was not in a position to obtain the requisite information for informed comment. Nevertheless, implicit in my observations in other sections of these reports is the fact that determinations of cost-effectiveness are tricky and often misleading. They depend, in part, on what one chooses to evaluate. As I have indicated, standard measures of student achievement in math and science do not adequately gauge the kinds of outcomes that new curricula like Spider's Place and MCPT try to maximize. And one must not overlook the fact that there are troubling and difficult-to-quantify costs associated with pursuing out-dated curricula.)

The NGOs and the State System

It seems to this observer that it will be necessary in the years immediately ahead to integrate the work of the NGOs more closely with the legally constituted educational system. Under an apartheid education system, most of the impetus for constructive change had to come from outside the official organizational structure. Therefore, I assume, the large numbers of NGOs. And, clearly, many of them are having a positive effect. What about their role in a democratic government, however? Can they be as salient as they were during apartheid, operating as they do outside of the formally constituted educational authorities?

My knowledge of South African education is obviously limited, but it seems to me that the NGOs can play a specially constructive role, even a unique one, in improving education in a new South Africa. Governmental resources are strained in South Africa, as everywhere. It is proving difficult to generate the new programs that are necessary. Nevertheless, there is a commitment to change. Many of the teachers and school administrators I saw are capable and dedicated people. Furthermore, they sense that now is the time when constructive energies may bear fruit in terms of marked transformation for the better in ways in which children are served educationally. They do need help, however, both in framing a fresh vision of how children are best served and in translating that conception into

practices that function with real schools and teachers.

The NGOs, if they are generally like those I saw, constitute a ready-made and on-going laboratory for developing and testing innovations. (If not, perhaps more of them can move in this direction.) Not many countries have such an existing and proven structure for developing experimental programs. If this perception is accurate, the task, then, is gradually to recognize the NGOs as the research and development agencies they actually are, and to integrate these laboratories into the ongoing educational service.

In view of South African history, it would not be surprising if a level of mutual suspicion exists with respect to the NGOs and the local educational authorities (and also among the NGOs themselves). Even without the special history, there are usually tensions between those with responsibility for running a system and those whose main task is to change it. But, in more than one or two conversations, I detected a desire to collaborate more fully. One provincial education official voiced the view that **only** the local educational authority has the resources necessary to have a significant impact on a large number of children and teachers, and that she considered it her responsibility to work closely with those outside the official system in making the necessary improvements.

The time may be right to think seriously about integration of the NGOs with the responsibilities of the local authorities, at least conceptually. While formal and official integration would probably not be desirable because ongoing responsibility to provide a service would gradually drain resources for innovation, informal connections can be strengthened. Closer integration would probably mean that local authorities become more receptive to change than they often are and that innovators look more closely at pockets of strength in the existing system than they ordinarily do. But such dispositions seem to me present in South Africa, anyway, and the opportunity -- indeed the need -- to articulate a new vision for how the educational system goes about changing itself is obvious, even to a short-term visitor. At this juncture, then, South Africa faces an opportunity it never had before and never will have again to chart new educational directions. The terrain isn't clear; no map exists. Yet the need is great, the desire is strong, and people are capable and willing to collaborate.

Institute for International Research
1815 North Fort Myer Drive #600
Arlington, VA 22209 USA
Telephone: (703) 527-5546
Fax: (703) 527-4661

In collaboration with Juárez and Associates, Inc. and the University of Pittsburgh

Improving Educational Quality Project
19 September - 7 October 1994

Knowledge Building

1. Jane will distribute the French version of *The Quality Link* during her trip to Mali. The Spanish version will be completed and distributed in mid-October.

2. Abi and Aida have completed the final draft of their paper, entitled *Curriculum-Based Assessment: Linking Curriculum, Assessment and Learning in Developing Education Systems.* This paper describes Curriculum Based Assessment (CBA) and discusses how policy makers can use its findings; it is the first part of a three-part CBA series. The draft will be reformatted before distribution.

Country Status

1. Ghana. The plans for the Third Annual Conference on Improving Quality of Primary Education in Ghana are underway. The team has invited Ministry representatives and representatives from various donor organizations, including the ODA, World Bank, USAID, and UNICEF. Also, two grantees and one IEQ/South Africa researcher will to attend the Conference. A head teacher, circuit supervisor, teacher and parent from a parent-teacher association will chair a panel on how the interventions have benefitted children and on expectations for IEQ's future.

2. Guatemala. The fieldworkers finished the observations and administered parents' interviews, while the HCRT coded and entered data into the computer. Yetilu conducted a workshop for 23 teachers in the Coban region and began writing the report from the workshops and analyzing the end-of-day evaluations.

3. Mali. During her 11-15 October visit, Jane will meet with the Mission, the IEQ Research team, Directors of IPN and ISFRA, and Ministers Adama Samassékou (Basic Education) and Moustapha Dacko (Secondary and Higher Education and Scientific Research) to discuss the future of IEQ activities in Mali. In the meantime, the IEQ/Mali team has secured commitment from the Regional Education Directors of Mopti, Kayes, and Sikasso to hold Phase II teacher training workshops between 20 October-10 November.

4. South Africa. The South African study tour team that visited Washington, Kansas City, and Los Angeles in September returned to South Africa on 25

September. Roseline Ntshingila-Khosa and Thuli Dlamini, IEQ/South Africa researchers, turned in their trip reports. We are waiting for trip reports from the following grantees: Ursula Evans, *Grassroots*; Thoko Mkhwanazi, *ELRU*; Flerie Tesado,*BELC*; Maria Mohlahlell, *Ntataise Trust*; and Shane Mooneiya, *TREE*.

We have submitted J. Myron Atkin's South Africa Trip Report, 16 August-2 September, to the SABER Project Officer and COTR.

5. Uganda. The Uganda buy-in was signed on 30 September, and Ash departed for his initial visit on 7 October. The purpose of his trip is to: (1) establish a working relationship with host country counterparts at UNEB; (2) develop a workplan for the first 3-6 months of project implementation; (3) prepare a procurement plan for project support commodities and begin procurement; (4) assist UNEB to begin the process of recruiting the Research Leader and finalize arrangements for selecting and hiring applicants; (5) prepare a comprehensive plan for an IEQ launching conference; (6) agree on communication arrangements and protocols between UNEB, IIR, and USAID/Uganda; (7) agree with UNEB on staff time, office space and other in-kind contributions to IEQ; (8) review the proposed research agenda and refine and elaborate it where necessary; and (9) review proposed arrangements for soliciting, selecting and financing research projects and make recommendations.

Africa Bureau Buy-In

1. Diane spent the week of 23-30 September in Accra, Ghana working with the Mission and the Ministry of Education on the Donors for African Education (DAE) Working Group's Teacher Motivation and Incentive study, a collaborative effort that USAID has undertaken with UNICEF. Diane also went to a DAE Working Group on Female Participation from 2-3 October in Geneva. The event was organized to precede a meeting of the DAE Working Group Coordinators, scheduled for later that week, and a DAE-sponsored meeting of the African Ministers of Education.

2. Ash and Gretchen worked on the design of a computer-based, interactive program that will facilitate the exploration and analysis of African education data. They hired a computer consultant to help with this work.

3. The rest of the team spent the last 2 weeks working on the Analytic Agenda for next year.

Oct 12, 1994

646

Institute for International Research
1815 North Fort Myer Drive #600
Arlington, VA 22209 USA
Telephone: (703) 527-5546
Fax: (703) 527-4661

In collaboration with Juárez and Associates, Inc. and the University of Pittsburgh

Improving Educational Quality Project
5 - 16 September 1994

Knowledge Building

1. Jane, Ray, Don, Mark, Josh, Pat, Abi, and Aida held a conference call on 16 September 1994 to discuss the following: the progress made on each of the cross-country papers; report on discussions about IEQ's accomplishments and lessons (see p. 4); feedback to Don's draft of *Improving Educational Quality: A New Approach;* realistic deadlines for exchanging papers; and update on the summer of 1994 in Mali. We are preparing cross-country publications on these topics: the IEQ approach to translating research into practice and inquiry into the process; training and quality control in multi-method, multi-site research; and the IEQ partnerships--growth in collaboration and effort.

2. The third issue of *The Quality Link* will be distributed as soon as the IEQ mailing list has been updated. As with previous issues, this issue will be translated into French and Spanish.

Country Status

1. Ghana. Plans are underway for Jane and Aida to travel to Ghana in October. The purpose of the trip will be to: participate in the 25 October Third Annual Conference on Improving Quality of Primary Education in Ghana, hosted by CRIQPEG/UCC; collaborate with the CRIQPEG research team in developing the annual work plan; meet with MOE, GES, and others (donor agencies) in order to apprise them of IEQ activities; and discuss work plans with USAID/Ghana. Aida will also lead a 3-day professional development seminar for the CRIQPEG research team, circuit supervisors, and headteachers of project schools.

2. Guatemala. The team completed the post test application on 7 September. The team has also devoted much of its time to correcting tests and inputting test results and coded observations into the computer, while the fieldworkers continued their end of year observations. Yetilu conducted a workshop in Cuilapa for 55 teachers from Region IV. She also finished calculating the nutritional status of the children in the Epinfo program, based on their weight, height, and birth date.

3. Mali. While in DC, Don had an impromptu meeting with Simon, Jane, Dena, and Alimasi, in which they discussed recent developments in Mali, the reforms

taking place in the Ministry of Basic Education's language learning policy, and what these changes entail for IEQ activities. Jane is planning to visit Mali in early October in order to discuss with the Mali team the follow-up of IEQ core activities to date and with the Mission the possibilities of a potential buy-in.

USAID/Mali is meeting with the Minister of Basic Education regarding plans to redefine educational policy. In the meantime, the IEQ/Mali Research Team is putting in place the logistics for the next string of workshops to be held in Kayes, Mopti and Sikasso.

4. South Africa. IEQ is hosting a U.S. study tour for seven representatives from the grantees concerned with early childhood education and one from the Independent Examinations Board (IEB). Visitors arrived on 6 September and will remain in the U.S. for 3 weeks. During their first week in Washington, the participants visited with Barbara Kamara at the Mayor's Office of Early Childhood Education to discuss federal and local funding of early childhood centers and credentialing programs and childcare-givers. They met with Lorie Brush, Pelavin and Associates, and Martha Moorehouse, Head Start Bureau, to discuss historical and current Head Start issues, parental and community involvement, and federal funding. They also attended a presentation led by Gilbert Garcia, the Acting Director of Research and Evaluation for the Office of Bilingual Education and Minority Languages Affairs at the Department of Education.

The IEB representative met with Elois Scott, Office of Planning and Evaluation, and Larry Ogle, who is involved with National Assessment of Educational Programs. She also visited: Henry Spille, Director of Adult Learning and Education Credentials at the American Council for Education; Jeanne Griffith, Associate Commissioner for Data Development at the National Center for Education Statistics; Tom Fagan at USAID to discuss Goals 2000; Pelavin and Associates to talk about educational indicators; and Fran Stancavage, American Institutes for Research, to learn more about NAEP and MCATs.

During the following week, the participants attended the annual Center for Research on Evaluation, Standards, and Student Testing (CRESST) conference, "Getting Assessment Right," at the University of California at Los Angeles. The conference featured over 45 presenters who discussed the implications of their assessment research and local responses to federal legislation.

Following the conference, the study tour participants met with: Dr. Tom Weisner, who specializes in using the ethnographic approach to explore behavior of young children; Dr. Harold Levine, who has written extensively on using participant

observation methods; Dr. Cecilia Ayala, Director of the Division of Curriculum, Programs and Instructional Technologies for the L.A. County Office of Education, who has developed innovative strategies for implementing a multicultural curriculum and examining the impact of innovation; Dr. Carrollee Howes, who has worked in early childhood education and has carried out studies related to child care staffing patterns, training day care providers, recruitment and retention of trained staff, child care quality, and school readiness among school children; Dr. Eloise Appel, who has developed tests for assessing student performance, instruments for educational program evaluations, and Criterion Referenced achievement tests for students at the state level; and Dr. Katherine Hayes, Senior Associate at Juárez and Associates, who has conducted training in qualitative methods and evaluation at universities and local education agencies throughout the country and internationally. In addition to meeting with these professionals, the participants visited the Southwest Regional Laboratory and observed a Head Start center.

During their third and final week, the participants will complete work on their evaluation plans with the assistance of Dr. Pat Campbell, Dr. Norm Gold, and Jane. They will also visit the National Center for Improving Science Education, the Children's Defense Fund, and the National Association for the Education of Young Children.

5. Ethiopia. We submitted a concept paper, entitled *The Improving Educational Quality Project: Ideas for IEQ/Ethiopia,* which has been forwarded to USAID/Ethiopia. We hope to submit a proposal soon.

Africa Bureau Buy-In

1. Gretchen and Ash have been working on the database of African Education Statistics for the Donors to African Education. Gretchen is taking the updated data currently in spreadsheets (covering African countries from 1980-1990 on essential indicators of access, promotion, quality, unit costs, and financing) and converting it into a database format.

2. The SD/HRD (formerly ARTS) team has reached the final stages of the analytical agenda. A list of proposed activities has been finalized and will now be taken through a peer review process.

3. Diane has been preparing for a trip to Ghana where she will collaborate with UNICEF to train Ghanaian researchers in qualitative research methodology and assist them to complete their survey instruments for the DAE. At the completion of this trip, Diane will attend the DAE conference on girls' participation in Geneva.

4. Diane is working with Joe and Karen to prepare a visit to Guinea, in which the program design will be completed.

5. Diane and Ash met with David Gately of the Africa Bureau Information Center to discuss dissemination strategies for *Lessons Learned on the Integration of Health, Population, Environment, Democratization, and Privatization into Basic Education Curriculum in Africa* (Technical Paper No. 14), David Evans' *Education Policy Formation in Africa: A Comparative Study for Five Countries* (Technical Paper No. 12), and the *Report on the Kadoma Workshop*.

Administrative

1. Jane, Don, Paul, Ray, Ash, Simon, Dena, and Wes Snyder met in Waterford to reflect on IEQ accomplishments and to discuss future directions. Wes Snyder will prepare a publication that frames the IEQ approach to improving educational quality within a larger "development" context.

2. We are in final negotiations with Contracts on the second year of the South Africa buy-in.

3. We are also completing the Uganda buy-in negotiations; Ash will make his first trip to Uganda in October to work with the Mission and UNEB on start-up activities. The launching conference will take place in January.

Improving Educational Quality Project
8 August - 2 September 1994

Knowledge Building

1. Don Adams has completed a pre-draft of *Improving Educational Quality: A New Approach,* which describes the IEQ project within the context of relevant international research. This paper will be circulated among IEQ colleagues for feedback before Don proceeds with the next draft.

2. Gretchen and Ina have completed the third issue of *The Quality Link,* which should be printed no later than 8 September.

Country Status

1. Ghana. USAID has helped CRIQPEG to obtain all the books that are needed for the 14 schools involved in the study. On August 18th, the CRIQPEG team held a feedback seminar for head teachers, circuit supervisors, and teachers involved in the intensive schools. They invited the acting USAID project manager, Mitch Kirby, to participate. Informal channels report that he thought this was one of the best workshops in which he had participated! The team is now planning for October's third annual conference on Improving Quality of Primary Education in Ghana.

Three team leaders are leaving the project in order further their studies abroad. The Vice-Chancellor has approved the replacements nominated by the CRIQPEG team.

2. Guatemala. The fieldworkers conducted end of year observations in schools and began coding and inputting codes into Paradox. They also started post tests in reading, math, self-concept, and creativity in sample schools. Yetilu conducted workshops with supervisors from Region IV and Region II, explaining results from the first year evaluation.

3. Mali. Rick Donato, Josh Muskin and Alimasi Ntal-I'Mbirwa have just returned from Mali where they collaborated with the IEQ/Mali research team in the conception, organization and initiation of four workshops transitioning to Phase II. The first teacher training workshop--held in Ségou--gathered 71 first and second grade teachers, school principals, pedagogic advisors, inspectors, and regional directors. They focused their discussions on using specific language-learning pedagogical strategies: the pedagogy of folktales and legends, that of "small groups,"

the strategic use of maternal languages, the creation and use of didactic materials, and the introduction of community study centers.

Discussions on the new cooperative agreement and the Coordinator are temporarily on hold until USAID hears from the new Minister of Basic Education regarding his plans for redefining educational policy and can secure his support to donor projects.

4. South Africa. Jonathan and Thuli made several trips to SABER grantees as part of IEQ's goal to *"strengthen the SABER grantees' capacity to establish and maintain monitoring and evaluation systems for individual projects."* Thuli met with the ELTIC evaluation consultant to design the evaluation instrument for classroom observations. Jonathan met with the TOPS chairperson and National Director, who provided feedback on the IEQ/TOPS impact evaluation plan. He also met with representatives from Grassroots Educare Trust and ELRU to discuss their need to conduct an impact evaluation. He attended and evaluated a teacher orientation workshop where teachers volunteered to participate in the use and evaluation of new science materials. Following the workshop, Jonathan, Myron Atkin, and two *Primary Science Programme (PSP)* implementors observed teachers in four primary science classrooms. Jonathan met with Juliann Moodley of the Independent Examinations Board (IEB), who has been asked to develop an intensive training course in evaluation. The training will be practice-based with participants from across the NGO and formal education communities spending alternate periods of time in formal training and evaluation practice. An envisaged product is a handbook of evaluation which could be used by evaluation trainers across South Africa.

5. Uganda. We submitted the proposal for the Uganda buy-in to the Contracts Office on 17 August.

6. Ethiopia. Jane, Simon, and Paul met with Joe DeStefano to discuss IEQ's plans to prepare a concept paper for an IEQ buy-in. This paper would be submitted to the Mission prior to the implementation of the Basic Education System Overhaul (BESO).

Africa Bureau Buy-In

1. Joy finished the Equity study.

2. Gretchen worked with Joe DeStefano to prepare a presentation of the design of the new educational program in Ethiopia for his brown bag seminar. She also began working with the DAE on the production of an interactive database of African educational statistics.

652

3. Diane supported the participants of the January workshop on qualitative research in Swaziland by providing feedback to their individual research projects. She has begun background readings on *Reflective Practitioners* in preparation for her trip to Ghana to conduct a teacher motivations and incentives study.

4. As a follow up to his recent visit to Ghana, Ash worked with Seema Agarwal (UNICEF) to prepare a brown bag seminar on a community based basic education project in Ghana. The project complements IEQ's philosophy and approach in that it looks at the classroom, teacher, school, and community as a way of implementing national reform policy.

Administrative

1. The IEQ management team has planned a conference call for 16 September as a follow-up to the July meetings.

Institute for International Research
1815 North Fort Myer Drive #600
Arlington, VA 22209 USA
Telephone: (703) 527-5546
Fax: (703) 527-4661

In collaboration with Juárez and Associates, Inc. and the University of Pittsburgh

Improving Educational Quality Project
27 July - 5 August 1994

Knowledge-Building

1. Gretchen and Ina are editing documents for the third *Quality Link*. We hope to have this issue out by the end of August.

Country Status

1. Ghana. Jan Orlanski, the acting office director of Education and Human Resources Development Office at USAID/Ghana has agreed to supply the extra textbooks that are needed for CRIQPEG's Phase II Study.

Aida and Abi are working on the CBA documents.

2. Guatemala. The field workers finished collecting the mid-year observations in the schools. IEQ/Guatemala sent the quarterly report to the Minister of Education and to the USAID Mission. The fieldworkers began the end of the year school observations. The team is preparing the lists of the children who are going to be tested in the post tests and have identified the children who are no longer in the schools. They had a meeting with Oscar Mogollon, the Director of NEU, to talk about the findings of their observations and to plan for the upcoming regional workshop where they will share their findings with the NEU teachers.

3. Mali. Josh informs us from the field that, "IPN and ISFRA members are meeting regularly to plan the research program, select pilot schools, prepare the base-line data, recruit a coordinator, prepare the IIR-IPN/ISFRA agreement and plan the programs for the Phase II workshops.

The recruitment procedures for hiring a coordinator for IEQ/Mali have been approved by the IEQ Mali team, the Ministry and IEQ/D.C. IPN and ISFRA have sent a tripartite agreement to IIR for review. The Phase I Seminar Report is complete and the team is finishing the full Phase I report with the hopes of producing it for wider distribution. Josh and the team have been working on the expanded version of the basic tasks of the action plan for Phase II.

Alimasi and Rick will be joining Josh to assist in the upcoming Segou Workshop. The workshop is the first of four regional workshops that will be conducted to develop the interventions (these include pedagogic training, community study centers, school cantines research, student health monitoring and school transport) to prepare the teachers for their

application and to enlist the local education administrators and technicians in the related support, monitoring and research efforts.

In preparation for their trip to Mali, Rick and Alimasi met in Pittsburgh to design a workplan for the workshop.

4. South Africa. Rose, an IEQ staff member in South Africa, attended a materials development consultative workshop on *English Language Across the Curriculum* given by the Molteno Project, a new SABER grantee. Some of the issues the presenters and participants explored included the rapid transition from learning in mother tongue to learning in English.

The participants also watched a video on the Molteno Project where Standard 3, 4, and 5 students were playing puppets, money games and using other Molteno materials. As they played, they spoke proficient English.

Thuli , another IEQ staff member in South Africa, attended a seminar by Theodore Sizer. During the morning seminar, "Policies for School Based Reform," he discussed the school reform movements in the United States, and the principles behind the Coalition of Essential Schools. Some of the ideas he explored include:

- School reform works better than systems changes issued from the government;
- Changes are likely to occur where schools realize there are problems with learning and teaching;
- Schools which tend to be successful in these initiatives are those which are attentive to the culture of their communities;
- Successful schools are also characterized by democratic governance of schools, i.e. principal insubordination, and collective bargaining;
- Successful schools are those who make allies with parents, communities, business etc.;
- The idea of cluster schools is also very constructive. People must have time; and
- In teaming up with teachers in a school, incompetent teachers are exposed. During teacher discussions of pupils, the grading/assessment of pupils' work is displayed.

During the second hour of the seminar, the participants discussed how they could collaborate on school-based reform in South Africa. The following ideas were discussed: teachers from township schools should be invited to such meetings, school reform works better if it is kept small, and forums should happen more frequently so as to allow people to share information about what different NGOs, lecturers/teachers are doing.

Regino, Pat, Jane, Jonathan and Nadia are beginning to plan for the CRESST conference and Washington, D.C. study tour. Seven South African participants from NGOs and educational institutions will be visiting Washington, D.C., L.A., and Kansas City 5-25 September.

4. Uganda. We have finally received a S.O.W. for the Uganda buy-in. IIR is preparing a response for the contract's office. Simon Ju has returned from his brief visit to Uganda.

Dena Duerstek
8/9/94

65

Institute for International Research
1815 North Fort Myer Drive #600
Arlington, VA 22209 USA
Telephone: (703) 527-5546
Fax: (703) 527-4661

In collaboration with Juárez and Associates, Inc. and the University of Pittsburgh

Improving Educational Quality Project
4 - 22 July 1994

Knowledge-Building

1. Dena has sent a package of books and magazines to each of the IEQ countries *(Please see the attached list. Anyone interested in adding materials or suggesting others for purchasing may contact Dena).*

Country Status

1. Ghana. Beatrice will send the reports on the baseline data to IEQ/Washington to consolidate so that the research team can concentrate on the individual pupil observations. Rick Donato will stop by Ghana at the conclusion of his Mali trip in order to participate in the feedback session with the head teachers, teachers, and circuit supervisors and to help plan the October conference.

Aida is the country coordinator for Ghana. She will facilitate, oversee activities and be the primary contact person in Ghana.

2. Guatemala. Fieldworkers are finishing the data collection for the mid-year observations and are creating profiles of students. The team has been coding the observations and inputting the codes in Paradox. Statistics from regions Four and Two have been finished and converted into Quattro Pro. Yetilu developed parent and teacher interviews and is preparing the pre-test SPSS files. She also worked on the 3rd grade Math test and ran the reliability and item analysis to develop the final version of it.

Paul Longo will be in Guatemala from 18-23 July to assist the IEQ team in developing video records of children in classroom and related settings and in designing a teacher and parent questionnaire to collect data on children's usage of classroom interactional strategies in out-of-school settings.

3. Mali. Joshua Muskin will be in Mali from 14 July-31 August. He will assist in the planning of workshops preceding the Phase II pilot interventions which will be conducted by Rick Donato in mid-August. His terms of reference include the selections and hiring of a Mali-based coordinator for the Project and the facilitation of IEQ's negotiations with IPN and ISFRA regarding new cooperative agreements. Josh met with the IPN and ISFRA teams on 22 July. During this meeting both teams decided that it was a good idea to have a tri-partite agreement between IPN, ISFRA and IIR.

4. South Africa. Pat's Workshop on evaluation and monitoring was a success as reflected in the feedback from the participants and the products resulting from her visit. IEQ staff in Durban and Workshop participants commented on how they were challenged and will return to their organizations with information and skills to share with their colleagues. *(Please refer to the South Africa Trip Report for more details.)*

We received the South Africa Semi-Annual Report which Jonathan Jansen submitted to USAID/South Africa.

Thuli Dlamini, an IEQ staff member who is part of the evaluation staff, began the evaluations of two of the SABER Grantees. At the Maths Centre she interviewed teachers at different schools and is currently writing a report of the pilot study undertaken at the Centre. She was also invited to observe a contact tutorial course at English Language Teaching information Centre (ELTIC), an NGO working with alternative approaches to teacher education in the field of language for learning. The course is based on the following principles: no single language is intrinsically more effective than any other as a language for learning; schools should linguistically reflect the community they serve; schools should be cognizant of students' linguistic backgrounds; and multilingualism should be recognized as a right and a resource. After observing the course, Thuli talked with the teachers to find out what they thought of the course and what problems they encountered.

Africa Bureau Buy-In

1. On July 21, Diane and Gretchen presented the results of the study they conducted in two regions in Ethiopia, the northern region of Tigray and the Southern Ethiopian Peoples Region. They distributed a copy of "The Stories of their Lives," in-depth interviews with four teachers and one head teacher excerpted from the study, *Teacher Motivation and Incentives Study (Anyone interested in a DRAFT copy may contact Dena at IIR).* Karen Tietjen discussed the research questions and results of the study, *Demand for Primary Education,* which is to provide baseline information about household attitudes and behaviors towards primary schooling to answer what can be done by the Government, the community, the school and households so that children, particularly girls, are enrolled and persist in Primary school.

2. Diane is currently editing the Analytical Agenda and Section III of the Basic Education Report.

Administrative

1. On July 5-7, Abi, Aida, Alimasi, Dena, Don, Josh, Frank, Jane, Mark, Oso, Pat, and Rick attended an IEQ Design Meeting on the technical review and design in each IEQ country. They discussed intervention, data collection, data reduction analysis, products, conferences and trips. They struggled with and received feedback from issues relating to individual countries as well as those relating to all IEQ countries. Participants commented that as a result of the meeting they became more aware of and inspired by the activities occurring in the other IEQ countries. Two more outcomes included the first draft of a calendar outlining the activities which will take place in each country from July 1994 until the closure of the Project in October 1996, and Frank being debriefed on the activities in each of the countries.

657

2. Please remember to mark your calendars for the next meeting on 16 September during which time we will review the six concept papers that address cross-national issues. We look forward to talking with you then...and hopefully before.

- 658

Institute for International Research
1815 North Fort Myer Drive #600
Arlington, VA 22209 USA
Telephone: (703) 527-5546
Fax: (703) 527-4661

In collaboration with Juárez and Associates, Inc. and the University of Pittsburgh

Improving Educational Quality Project
13 - 30 June 1994

Country Status

1. Ghana. The HCRT has been going to schools weekly to monitor and supervise the implementation of the interventions. The team has been giving feedback to the head teachers and circuit supervisors and will follow this up with a feedback seminar in late July, which will address what aspects of the implementation work (or do not work) and what improvements can be made. A report written during the seminar will be used as a guide for February's follow-up training. A telephone conversation between Abi, Aida and Beatrice has been scheduled for 6 July.

2. Guatemala. The IEQ team is conducting the mid-year observation of individual children in NEU and traditional schools. Observations made at the beginning of the year have been coded, and the codes are being entered into a database. An English version of the Phase I report, which was completed in May, was submitted to the Project Director for distribution.

3. Mali. IEQ Mali has finished the seminar report which is being reviewed by Josh and Rick. The team is now reviewing the proposed Scope of Work for Josh's extended technical assistance this summer to help launch Phase II. IPN and ISFRA are currently working on the job description for the coordinator as well as the budget for Phase II. A coordination meeting between Chahine, Josh, Rick, Jane and Alimasi, the new IEQ Mali coordinator/liaison, has been scheduled for 5 July.

4. South Africa. Pat held a workshop on program evaluation and monitoring systems with 18 participants from 15 SABER grantees. Grantees acquired skills in: designing evaluations; collecting, analyzing and presenting evaluation data; and using computers to analyze and present data. Grantees received hands-on experience analyzing and presenting data using EXCEL. Participants have requested on-site visits as follow-up activities. During the site visits, the IEQ staff will help conduct the evaluation plans designed at the workshop. A follow-up workshop is planned for October. Pat, Roseline, and Thuli visited four educare SABER grantees in Cape Town and Trust for Early Education in Durban. In collaboration with the grantees, they developed the designs which will inform and guide the forthcoming impact assessment studies of educare grantees. More details are included in the trip report.

5. Uganda. Simon Ju will depart for Uganda at the beginning of August. He will spend four days assisting in planning the launching of the IEQ buy-in, slated for September. He will meet with USAID and the Uganda National Exams Board (UNEB) representatives to

discuss potential research topics under the IEQ buy-in and their relevancy to the IEQ objectives. He will also explore the institutional capacity of UNEB and its functional lingkage with the buy-in activities as well as data/information requirements for IEQ buy-in activities.

Africa Bureau Buy-In

1. Diane and Gretchen returned on 27 June from their three-week trip to Ethiopia, where they completed an assessment of the constraints to and opportunities for improving the performance of Ethiopia's primary school teachers and directors. They will be working on the country report in preparation for their presentation on the results/accomplishments of their trip to Ethiopia.

2. Ash will visit Ghana from July 2 to August 12 in order to develop the design for the community-based approach for primary school improvements in selected districts with Ministry and local participants on a team. He will also be part of a kick-off for a joint World Bank-USAID design for the next cycle of support for education involving establishing a Ghanaian team which will do the research leading to the design for PREP II and the World Bank Second Primary Education Project. The team will also include Beryl Levinger and will include using interventions using Active Learning Capacity Model. On August 13, Ash will visit Benin, where he will work with Francine Agueh and Michele Welmond to implement the fundamental quality level indicators used in the CLEF program.

Administrative

1. We requested approval from the COTR to hire Alimasi as the long-term Mali Liaison/Coordinator. Alimasi received his B.A. and M.Ed in Applied Education at Zaire's Institut Supérieur Pédagogigue and has an M.S. in Community Economic Development from New Hampshire College. Alimasi has classroom experience in TESOL and teaching Literature. While he was in Zaire, Alimasi evaluated the nation's language learning reform program and initiated a community-based after-school program in the town of Bukavu. He is currently a Senior Associate at A.L. Nellum and Associates, a human service management firm in Washington, D.C. He recently worked for Save the Children in Westport, Connecticut and is familiar with the players and the Malian working environment. He is also fluent in spoken and written French and is a qualified translator. We look forward to working with him on the IEQ Project.

2. Jane is working with Mary Fontaine at USCEFA to prepare for the 11-15 December conference in Baltimore. The conference will explore three major themes. The first one, *emerging understandings in education*, will examine new learning theories, information/communications technologies, motivational, cultural and contextual issues, and emerging economic imperatives. The second theme is *expanding the reform agenda* which will examine a lifelong learning approach for the future, integrated community education, new partnerships, and family involvement in education. The last theme, *approaches to systemic change*, will expolore research/policy connections, system change at different levels, feasiblility/entry point/sustainability, and major foundation approaches to system reform. More information on the conference will become available as the details become known.

660

3. 5-7 July has been set aside for the IEQ design meetings. Oso and Don are planning and organizing the three days (Contact Dena for information on hotel arrangements). Some of the issues discussed will include individual country research designs, possible cross-national studies, the research process and the cross-national policy/practice link.

4. Attached please find an updated list of numbers and addresses. In particular, note Abi's new address and telephone number, Sékou Diarra's new e-mail address, and the addition of Alimasi's number and address.

661

Institute for International Research
1815 North Fort Myer Drive #600
Arlington, VA 22209 USA
Telephone: (703) 527-5546
Fax: (703) 527-4661

In collaboration with Juárez and Associates, Inc. and the University of Pittsburgh

Improving Educational Quality Project
30 May - 10 June 1994

Country Status

1. Ghana. Due to the rains we have been unable to communicate with Ghana for the last two weeks. However, we have had the pleasure of visiting with the Vice Chancellor of the University of Cape Coast, Sam Adjepong. While he was in Washington, Sam met with a variety of people: Paul Spector, Jane, Frank Method and Adolph Wilburn, the desk officer of Ghana. He also met with Joan Ratteray, president of the Institute for Independent Education (IIE). Of particular interest to him at this meeting was a recent IIE publication of a summary of a self-study, Planning and Evaluating an Independent School, which addresses the issues of school administration, program content and instructional processes, and assessment and evaluation.

2. Mali. The IEQ Mali team has been working on plans for Phase II, including implementation of key interventions, further research and a budget. The seminar report will be ready for distribution soon. During the 7 June meeting, the team also discussed the appointment of an overall coordinator for the two research teams.

3. South Africa. Jonathan Jansen sent Jane a draft of the Semi-Annual he is submitting to USAID/South Africa.

Pat Campbell arrived in South Africa 7 June. She will be conducting a workshop on the Design, Monitoring and Implementation of Program Monitoring Systems. She will also meet with Educare Grantees, *Grassroots, Early Learning Resource Unit (ELRU), Border Early Learning Center (BELC) and TREE* on Designing the Impact Assessments (See the descriptions of the Grantees below).

What is Grassroots?
Community control and ownership of educare projects are the cornerstones of Grassroots' development philosophy. Their aims are to: 1) reach as many 0-8 year old children and their families as possible, with programmes designed to meet their needs; 2) reach as many parents and other members of adult communities as possible with programmes which will empower them to establish, implement and manage appropriate preschool educare programmes; 3) reach the policy makers, authorities, unions and sponsors with compelling evidence of the need to support the provision of early childhood educare; and 4) develop models and programme approaches based on their own local experience, for implementation elsewhere *(Excerpted from Grassroots Adult Education and Training Trust and Grassroots Educare Trust Publication).*

What is ELRU?
ELRU is a research and development agency working throughout Southern Africa in urban and rural areas. ELRU works in the following ways: 1) undertakes advocacy and disseminates early childhood material and information from Africa and other parts of the world; 2) develops programmes (for teacher trainers and

1062

community educators, pre-school workers of different backgrounds and parents and childminders); 3) creates accessible materials and undertakes research (such as guides for trainers and teachers, anti-bias and second language issues, basic health issues, surveys and policy options); 4) offers non-formal adult training to assist communities with learning opportunities for their young children and 5) assists other organizations to set up training programmes *(Excerpted from an ELRU brochure).*

What is BELC?
BELC provides training, assistance and a variety of resources for anyone involved in the education and care of young children. BELC encourages holistic development using the Educare Centre as a focal point for community involvement. This is achieved through training, support and networking with other agencies. They are involved in training para-professional educare teachers in non-formal in-service training courses; in addition, parents and community members are introduced to child care, committee and administrative skills. The emphasis at BELC is on using improvised equipment, natural materials and traditional games, stories, songs and activities *(Excerpted from The Work of the Border Early Learning Centre brochure).*

What is TREE?
TREE provides teacher training and support in the Natal/Kwazulu region. It is the largest provider of training and support to educare and works with over 700 educare centers throughout the region. TREE also works with teachers in the formal sector; it supports at least 2,000 educare workers through courses and workshops. Some of TREE's projects include making educational toys for educare and developing and producing a book called Teaching around a Theme, which has sold 3,250 copies and forms the basis of the "theme" workshops which are attended by 1,00 women every month.

Africa Bureau Buy-In

1. Diane and Gretchen left for Ethiopia on June 3 for three weeks to assess the constriants to and opportunities for improving the performance of Ethiopia's primary school teachers and directors. Ash completed his two part seminar on "Complexities" and is currently working on Section 3 of the Basic Education report, *Basic Education in Africa: USAID's Approach to Sustainable Reform in the 1990s.*

Administrative

1. Josh and Rick met with Jane and Paul to discuss plans for Phase II in Mali. They drew up a workplan and divided up the activities which would fall under the Core and Buy-In. They also discussed what products they will be working on this summer and a time-line for the next several years.

2. Doug completed a second budget projection, this one based on the actual workplans resulting from the May 25 management meeting. This projection, based on sub-line-item analysis will provide a clearer understanding of how specific undertakings (i.e. a conference in Washington, a consultant's trip) impact the overall IEQ budget. Jane, Peter, Ina and Doug met on Friday, June 10th to go over the results of this budget analysis and chart a budget strategy for the rest of the project.

3. Doug's last day at IIR will be Friday. He is leaving to work "in the field" in Africa. Call Doug for further information.

Dena Duerbeck
6/13/94

- 663

Institute for International Research
1815 North Fort Myer Drive #600
Arlington, VA 22209 USA
Telephone: (703) 527-5546
Fax: (703) 527-4661

In collaboration with Juárez and Associates, Inc. and the University of Pittsburgh

Improving Educational Quality Project
9 May - 27 May 1994

Knowledge Building

We have received the following documents and will send them to each of the IEQ countries:

- Miles, Matthew B. and A. Michael Huberman. "Qualitative Data Analysis: An Expanded Sourcebook." California: Sage Publications, 1994.
  This book addresses a critical need faced by researchers in all fields of the human sciences. It deals with the questions, "How can we draw valid meaning from qualitative data? What methods of analysis can we use that are practical, communicable, and non-self-deluding--in short, will get us knowledge we and others can rely on? (excerpted from the introduction).

- Wolcott, Harry F. *"Transforming Qualitative Data: Description, Analysis, and Interpretation."* California: Sage Publication, 1994.

- Sashkin, Marshall and John Agermeier. "School Change Models and Processes: A Review and Synthesis of Research and Practice." Washington D.C.: U.S. Department of Education, 1993.

Country Status

1. Ghana. Aida has returned from Ghana and reports that seven head teachers and seven circuit supervisors attended the May workshop in Ghana which focussed on interventions to be introduced into the intensive schools. A modest cluster of interventions has been introduced already. The plans are not to add or modify these interventions until after the February 1995 post-test. A formative feedback session should take place in August, during which the CRIQPEG team will ask teachers what worked, why, and what types of improvements and strategies are needed. Based on the results of the feedback session, the CRIQPEG team will plan a second round of training in February.

While the intervention is being implemented, the CRIQEG team will conduct weekly visits to schools to monitor and supervise the implementation of the intervention (in collaboration with headteachers and circuit supervisors). The CRIQPEG team will be able to answer questions, etc. and their visits will ensure the quality of the implementation. Discussions with Dr. Atta-Quayson revealed that IEQ's research findings match the results found in secondary school by Ghana's chief examiner: Ghanaian children are weak in English oral expression and listening comprehension.

The Ghana trip report is forthcoming.

2. Guatemala. The field workers continue the mid-year data collection in the schools that are in the sample. The team is continuing to code the beginning of the year observations and started entering the codes in a data base (This work includes 700 observations with two or three pages each!)

Yetilu has finished editing the draft of the first year report in which she included graphs. They will send the report to the director of the Neuva Escuela Unitaria so he can have a better understanding of the results.

3. Mali. Josh and Rick returned from Bamako after having spent a productive time with the IEQ Mali team planning for Phase II. The Mali trip report (forthcoming) included many useful thoughts and observations crucial to further planning. The seminar participants identified a need to account for the school child's physical condition as it affects learning. A second intervention proposed is teacher training: training teachers to incorporate the use of pair-work activities in class; how to use textbooks effectively; using local folk tales and legends as a core text for language learning; creating visuals and manipulatives for instruction out of locally-found and easily accessible materials; and understanding the role of maternal language in French language instruction.

The team is fleshing out a workplan and a budget for the coming months. While it is not yet clear whether the team will complete its fusion by moving into a single IEQ office, there is agreement on the need for an overall coordinator. The team produced a scope of work for this position.

Jane is discussing with Chahine Rassekh, BEEP PSC in Mali, the prospects of a USAID/Mali buy-in to Mali and the implications for the current project there.

4. South Africa. We have received requests from the IEQ office in Durban for materials for the SABER grantees. Jeanne Moulton sent them articles which addressed topics such as creativity, intelligence and assessment.

Jane will take the following publications to South Africa:

- The World Bank publication, *"Improving Primary Education in Developing Countries."* by Marlaine E. Lockheed, Adriaan M. Vespoor and associates;
- *"Handbook of Research on the Education of Young Children."* edited by Bernard Spodek; and
- *"Research Into Practice: Guidelines for Planning and Monitoring the Quality of Primary Education in Sub-Saharan Africa."* and *"Planning and Monitoring the Quality of Primary Education in Sub-Saharan Africa."* by Ward Heneveld.

Africa Bureau Buy-In

1. Joy has returned from Namibia and Malawi. In Malawi, she collected school-level data on the achievements of the ABEL project. She also collected data to help inform the current design of GABLE 2. For the components of GABLE which deal with equity, she

665

interviewed teachers, Ministry personnel, district supervisors, and others involved with the educational system to document the impact and process of implementing policy changes: the fee waiver for girls and the policy of allowing pregnant school-aged girls to return to school. In Namibia, Joy finished designing and writing the project for the amendment to the Basic Education Reform Program (BERP) with two people from REDSO and one member of the design team.

2. Diane and Gretchen are preparing for their trip to Ethiopia, where they will conduct a teacher motivation study in partnership with Ethiopian researchers. The study will inform the design of USAID's new basic education program for Ethiopia to be completed in July.

3. Ash is working on the final draft of the paper, "Basic Education in Africa: USAID's Approach to Sustainable Reform in the 1990s."

Administrative

1. Doug is working with ISFRA and IPN on finances, specifically the need to prepare monthly reports. He prepared budget projections for the IEQ Core for the period May 1994 - September 1996. He and Ina are working together to set up a spreadsheet to track South Africa's finances.

2. Dena, Don, Doug, Ina, Jane, Paul, Ray, and Rick attended a meeting on 25-26 May. The purpose of the meeting was to begin a midlife self-assessment and reflections by goal and by country. Doug distributed summaries of the budget analysis, and projections from now until the end of the project in 1996 based on original budget submissions from the University of Pittsburgh and Juárez and Associates for increases and the rate of expenditures during the past six months. Other topics they addressed included planning conferences and getting ready for the publication and dissemination of various products which are currently in draft form (Please find the minutes attached).

3. The Semi-Annual was completed and distributed. Thank you for all of your input!

Please note the following travel schedules for June and July.
(This includes IEQ as well as non-IEQ activities)

Pat Campbell	6 - 26 June	South Africa
Ray Chesterfield	*Dates and approvals not confirmed at this time*	
Aida Pasigna	26 May - 20 June	Swaziland
Jane Schubert	12 - 28 June	South Africa
	11 -22 July	

Dena Dvorick
June 3, 1994

666

Institute for International Research
1815 North Fort Myer Drive #600
Arlington, VA 22209 USA
Telephone: (703) 527-5546
Fax: (703) 527-4661

In collaboration with Juárez and Associates, Inc. and the University of Pittsburgh

Improving Educational Quality Project
22 April - 6 May 1994

Country Status

1. Ghana. Aida will be in Ghana from 6-22 May. Abi will be there from 12-27 May. The purpose of these trips is to assist in the preparation of a preliminary report on findings from the baseline data collected from 14 participating schools, collaborate with the CRIQPEG team in preparations for the staff development seminars on selected interventions to be introduced into the intensive involvement schools, and to assist in conducting the staff development seminars for the CRIQPEG research teams to enable them to conduct their own seminars for the teachers, head teachers and circuit supervisors of the intensive schools. They will each meet to with USAID/Ghana to brief the HRDO on the outcome of the visit.

2. Guatemala. The team is collecting data in the schools and observing in the classrooms. In addition, they are analyzing the data in region IV and integrating qualitative and quantitative data they have collected. The team has finished the Phase I report which we will submit to USAID next week.

3. Mali. Mali held its first seminar on Educational Quality in Bamako (April 26-29). Teachers, headmasters, inspectors, regional directors and parents of students attended the conference. For three days attendees met in small groups to discuss themes related to the teaching and learning of language in the Malian context. The opening and closing sessions were broadcast on Malian television. Initial reports indicate that the seminar was successful in the sharing of ideas and mobilization of support for improving educational quality in the Mali. While attendance at the closing session was somewhat reduced due to student attacks on cars with diplomatic and other non-Malian "foreign" registration, Joshua Muskin and Rick Donato reported by phone that a momentum was building within the joint IEQ Mali team for launching Phase Two.

4. South Africa.
Pat Campbell will be in South Africa 6-26 June. She will review the documentation on grantee information and monitoring systems collected during the Feb/March site visits and collaborate with the local IEQ staff to conduct a training program for the monitoring of education programs as well as other workshops. She will work with RSA staff to plan future training and technical assistance based on the findings of the consultancy

and design. Pat will also meet with Educare Directors and Staff, visit Educare schools and draft a design for IEQ impact assessment of Educare.

Jane Schubert will be in South Africa 14-27 March to plan and clarify July-September activities and operational procedures among IIR/Durban, IIR/Washington and USAID/South Africa and plan Phase II of the project. She will also participate in the program monitoring workshop for SABER grantees and discussions on design of Educare impact assessments.

Jonathan Jansen shared on casting his first vote in his native country (Read the attached reflections).

Africa Bureau Buy-In

1. The report on the Workshop on Basic Education Programs in Kadoma, Zimbabwe has been finalized and is now being prepared for publication.

2. Joy is in Malawi, continuing her research for the Equity Study.

3. Ash is exploring the fields of Chaos and Complexity theory and its implications in the social sciences and education sector reform. He held a brainstorming session with Joe DeStefano, Sinikka DeHanas, Kevin O'Keefe, Frank, Jane, Gretchen, Diane and Dena. An engaging book which addresses this principle is Complexity: The Emerging Science at the Edge of Order and Chaos. M. Mitchell Waldrop. Simon and Schuster, 1992.

4. Lillu Tesfa is the new administrative assistant for the Africa Bureau Buy-In. She is replacing Juani Bentin, whose final day at IIR is May 10.

   Lillu is from Ethiopia but has lived in the States for nearly 14 years. Her interests range from reading and writing to learning foreign languages (She speaks French and Amharic). She will be beginning a combined M.A./Ph.D. program in African-American Literature and Culture at Howard University in D.C. in the fall. Her long-term goals include being an African American Literature professor and becoming more involved in the process of improving the educational system (primarily in Ethiopia, but eventually, in the rest of Africa).

Administrative

1. IEQ will join USCEFA as a co-sponsor of the forthcoming conference, "Systemic Reform of Education" A Global Perspective," on December 11-15 in Baltimore. IEQ will be represented on a conference planning committee that has drafted ideas for the substance and format of the meetings, but whose agenda has not be set. USCEFA is

interested in a mixed format -- some plenary sessions, lots of break-out, small-group sessions, and themes that feed into systemic change. We are invited to suggest speakers, formats, etc. etc. Jane will be meeting with Mary Fontaine on 27 May to present an IEQ "agenda" for the conference. Let's hear your ideas.

2. The semi-annual report (October 1993-March 1994) will be submitted 15 May.

3. We will hold a meeting to discuss technical progress in the three core countries on 5-7 July in Washington (Abi, Aida, Oso, Don, Pat, Frank, Josh and Rick).

4. Doug has been working on budget projections for the IEQ Core through the end of Project Year 4. This includes analysis of current and past spending trends as well as estimating expenses for anticipated project activities. He has also been setting up a financial-tracking system in order to produce monthly reports for the project director. Next on Doug's list is setting up a financial tracking system for the Buy-In countries.

Institute for International Research
1815 North Fort Myer Drive #600
Arlington, VA 22209 USA
Telephone: (703) 527-5546
Fax: (703) 527-4661

In collaboration with Juárez and Associates, Inc. and the University of Pittsburgh

Improving Educational Quality Project
4 April - 22 April 1994

Knowledge Building

We have received the following documents:

- ***Samoff, Joel et al. "Anti-Apartheid and Development: Education in South Africa." Prepared for Discussion at the Annual Meeting of the Comparative and International Education Society, San Diego, 21-24 March 1994.***
  In this paper, the Education Division of the Swedish International Development Authority (SIDA) seeks to evaluate its support to the education of South Africans. To facilitate the evaluation of Swedish assistance, the authors were asked to review SIDA's support to the education of South African's during 1991/92-1993/94, to monitor education and training policies, programs and activities, and to recommend guidelines for future Swedish involvement in South African education.

- ***Fetterman, David M. "Empowerment Evaluation." Presidential Address delivered at the American Evaluation Association annual meeting on November 5, 1993 in Dallas, Texas.***
  Empowerment evaluation is the use of evaluation concepts and techniques to foster self-determination. The focus is on helping people help themselves. This evaluation approach focuses on improvement, is collaborative, and requires both qualitative and qualitative methodologies. It is also highly flexible and can be applied to evaluation in any area, including health, education, business, agriculture, microcomputers, non-profits and foundations, government, and technology. It is a multifaceted approach with many forms, including training, facilitation, advocacy, illumination, and liberation.

Country Status

Ghana.

We received mission clearance and COTR approval for Albert Komsoon and Hubert Quist to participate in the Malian Phase I Seminar.

670

Guatemala.

Yetilu and the IEQ Guatemala team continued preparing the report on the 1993 data collection for Region II. In addition, the team completed the data entry of the Region IV coded data and transferred the files into SPSS. Yetilu also wrote the quarterly report for the project which will be sent to the USAID/Guatemala office and the Guatemalan Ministry of Education. Ray and Yetilu presented a paper on the IEQ project at a national meeting of educational researchers in rural areas at Universidad Rafael Landivar on April 21. The fieldworkers have finished collecting the beginning of the year data, including teacher and student observations, in both the experimental and control schools.

Mali.

ISFRA and IPN worked diligently on preparations for the first national seminar on the quality of education, April 26 - 29. More than 50 persons from the Malian educational community as well as representatives from non-governmental organizations are expected to attend. Doug has been working on upgrading the telecommunications link with the research teams, and ISFRA is now "on-line" through the ORSTOM e-mail network. ORSTOM is accessible through Internet. This upgrade has involved the purchase of a modem and the installation of a dedicated phone line in the ISFRA offices. Sékou Diarra spent the first part of the reporting period working in the Washington office in the areas of technology, accounting and reporting procedures.

South Africa.

1. The IEQ team held a one day seminar on March 31 entitled, "Effective Schools, Effective Classrooms." It brought together education NGOs, university-based researchers, and education policy organizations to: 1) review the current status of the international literature on effective schools/education quality; 2) present the range of different research projects and initiatives on effective schools currently being undertaken in South Africa; 3) identify and assess the different conceptual and methodological approaches being used by different projects/researchers; 4) initiate and sustain an ongoing dialogue among those working on education quality/effective schools leading to the sharing of innovative research ideas, methods, findings and expertise; 5) and maximize the collective impact of different agencies/projects/researchers on the improvement of education quality in South African classrooms.

   The following conference papers will form part of an informal publication series produced and disseminated by the IEQ Project in Durban. You may also receive a copy of a publication by contacting Dena Duerbeck at IIR.

671

- ***"School Effectiveness in South Africa." by Nazir Carrim and Yael Shalem, Education Department, University of Witwatersrand.***
  The aim of this paper is to review debates on school effectiveness and to locate it in the particular historical context of South Africa. The review incorporates the perceptions of four schools on the issue of school effectiveness. The perceived experiences documented in the paper offer valuable insights into the micro, local level realities of schools which are consciously and continuously working towards improvements and will shed light on the problems of formulation and implementation of macro-educational policies.

- ***"Teaching in South Africa: Observed Pedagogical Practices and Teacher's Own Meanings." by Roseline Ntshingila-Khosa, IEQ Project Staff.***
  This paper reports descriptive data on student-teacher interaction observed in 22 classrooms in Soweto, South Africa. Teacher interviews were conducted to understand the teacher's own meanings of these interactions. Common patterns and between-teacher variation were observed across the classrooms. The most prevalent teacher activities were lecturing at and asking questions of students. Student actions involved responses to teachers' questions in chorus and simple answers. Interviews with teachers showed that teachers preferred students to participate in certain actions although their observed pedagogical practices did not consistently invite such participation. Implications for school reform in post-apartheid South Africa are discussed.

2. Jeanne Moulton is doing a literature search for the SABER grantees on the following subjects: 1) systematic evaluation; 2) How (what methods of) examinations have been assessed/evaluated in other countries; and 3) concepts of intelligence, ie. how the concept of intelligence is variously used particularly with reference to research on the education of children.

   We have sent a large package of materials to the SABER grantees. Anyone interested in the list of publications and articles or with suggestions for others may contact Dena at IIR.

3. Aurora Associates is arranging for Joanne Capper to visit South Africa in May. The purpose of her visit is to look at how testing can be used as a tool to improve teaching and learning. She will also be talking to education stakeholders about opportunities and report on her own experiences. SABER grantees will be invited to participate in a day long seminar which Joanne will conduct. The coordinator for this event is Dr. Peliwe Louana of the Independent Examinations Board.

672

Uganda.

1. Jane returned from her trip 15 April, 1994. She has prepared a summary document called, "Research on Primary Education Reform in Uganda: The IEQ Project in Uganda." The Project is proposed as collaboration between the Uganda National Examinations Board (UNEB) and IEQ Research Program designed to provide information about the primary education system to key institutional participants. As efforts to improve educational quality mature, the IEQ Research Program will shift towards investigating the impact of MOES' initiated reforms on the quality of primary education in Uganda. Specifically, the research program will: 1) solicit research proposals from Ugandan educators and researchers; 2) strengthen the methodological capacity of the Ugandan research community; 3) facilitate professional linkages between the Ugandan research community and the educational research and development community within and outside of Uganda; 4) create opportunities for dialogue and partnerships among Ugandan policy makers and practitioners and 5) develop a mechanism for disseminating and utilizing the research findings within the Ugandan educational system.

Africa Bureau Buy-In

1. Gretchen and Joy attended a presentation by Ward Heneveld of the World Bank on his recently published report: Planning and Monitoring the Quality of Primary Education in Sub-Saharan Africa.

2. Ash, Joe DeStefano, and Karen Tietjen did a State of the ARTS presentation for the Africa Bureau management on 14 April. They presented their work analyzing USAID's approach to sustainable reform in basic education.

3. Joy travelled to Malawi where she is completing a case study on equity issues.

4. Gretchen and Jeanne Moulton are finalizing the report on the Kadoma Workshop.

Dena