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Classroom Profiles as a Stimulus for Improved Policy and Practice

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Accounts of critical incidents were gathered from Circuit Supervisors, Head Teachers, and IEQ team members during an IEQ workshop at the University of Cape Coast, Ghana. The workshop participants were asked to describe an experience (such as a conversation, a task, or an event) in which they gained special insight or knowledge that made a difference in some aspect of their work. Below are examples of the types of responses to the question "What happened?"

> "It all happened at the post-observation conference during the intervention phase in the CRIQPEG research. I asked the classroom teachers to comment on the methods we discussed and to offer alternative procedures. One teacher taught a reading lesson in a way new to me. He asked the pupils to talk about events. Write them in simple sentences and asked the pupils to read individually and in groups. Pupils were able to read more fluently than they had done before." *Quote from CRIQPEG Team Leader who further states that his interactions with primary school teachers have revealed importance of working with and respecting all professional levels in the "teaching" profession.*
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> "During the intervention phase of the CRIQPEG exercise, pupils noticed a difference in the teachers' attitudes, method of teaching and use of materials. Lateness and absenteeism reduced. Pupils remarked: now teacher teaches well and we understand. This made a deep impression on me, as it appears, the answer to one great problem in the Primary Education system was in sight. Good teaching, using plenty of materials, a variety of methods, encouraging and reinforcing teacher attitude make children interested in school work. *Quote from CRIQPEG Team Member following data collection (e.g., pupil interviews) at one target school.*
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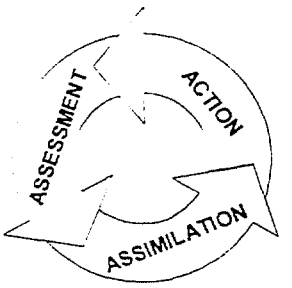
> "My teachers were complaining of their pupils easily forgetting what they were taught, especially when pupils returned from holidays. This made the teachers down-hearted and discouraged. I tried to keep the teachers not to be discouraged. I gave a demonstration on word recognition in P2 while the teachers observed. At the end of the demonstration, I invited criticisms from my teachers which were followed by discussions amongst myself and my teachers. I invited the teachers to give demonstration lessons using their own methods. We discussed in detail. *Quote from Head Teacher at one target school.*

What's Right with this Picture?

Lots. Teachers are talking with other teachers, head teachers and circuit supervisors about classroom conditions and pupil performance. They're sharing ideas about how to improve the teaching and learning in the classroom. They're reporting the results of trying new instructional methods and using new materials. They notice progress and it generates hope. The circuit supervisors and head teachers **learn what's possible.** As they increase in this knowledge, their confidence grows and they begin to see themselves as instructional leaders. A feeling of mutual respect between the classroom teachers and the supervisors contributes a new energy and spirit to professional responsibilities.

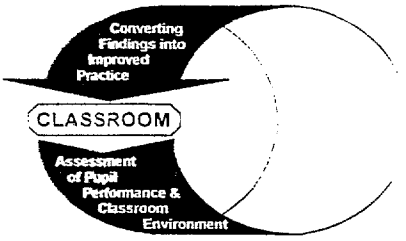
The IEQ Model



The experiences described above reflect a fundamental characteristic of the Improving Educational Quality (IEQ) Project. The Profile-Assimilate-Act cycle of improving classroom practices recognizes that teachers are potentially the most powerful influence on teaching and learning in the classroom. However, their actions are severely constrained by the bureaucracy, which makes them the least empowered within the system. Power is derived, in part, from information about schooling and the results of schooling, which are gathered and channeled to the top. The use of information about schooling may be converted to policies by those most distant and least informed about the teaching and learning in the classroom. Classroom teachers typically receive information in the form of directives, which provide no teacher options. Their behavior reflects their recognition of authority. Teachers hold a potential for power that is unrecognized and therefore unused, even though they have the responsibility for engaging pupils in the learning process, to develop literacy and numeracy. The reality and constraints of the educational environment seldom foster implementation of "top-down" policies. Power may therefore be used negatively by not doing anything.

IEQ strives to change this cycle by sharing information gathered from classroom-based research in ways that convert the findings to policy and improved classroom practice. Information is a tool used to improve teaching and learning: IEQ takes a broad view of research that it does not have a "life of its own." This paper describes the process currently being implemented in Ghana, through IEQ. The focus of this paper is on how findings become practical classroom strategies. The conversion of research findings to national policy will be addressed in another document. Information from pupil performance measures, classroom observations, and personal interviews (pupils, teachers, head teachers, circuit supervisors, parents, community leaders) is discussed in seminars and workshops. The discussions address the implications of the findings and the actions to which they lead. Such workshop agendas attempt to strengthen teachers' ability and ease in facilitating learning. Teachers learn the proficiency level of their classroom pupils in reading, writing, speaking and listening; they discuss optional strategies for improving this proficiency; they learn how to implement and share these strategies (methods and materials); they try them out and provide feedback to the trainers (circuit supervisors and head teachers). IEQ returns to the school/classroom to gather information about progress in implementing new strategies as reflected in teaching and learning. The model is dynamic!

IEQ Begins and Ends in the Classroom



What is IEQ?

The IEQ Project begins and ends in the classroom. We begin by carefully and systematically capturing the classroom environment and experiences. IEQ assesses pupils' abilities in selected content areas, observes teaching and learning in the classroom, interviews a range of stakeholders: IEQ "ends" (a cycle) by implementing improved classroom practices suggested by the research findings. In this model, the cycle is repeated so as to be aware of what is happening in the classroom and whether or not specific reforms (or innovations) are producing their desired effects. Research findings travel many paths through an educational system before they return to the classroom. It is IEQ's responsibility to guide the travel and to use the most appropriate "vehicle" for delivering the messages. IEQ strives to apply the following principles in collaborating with developing countries:

- IEQ forms partnerships with researchers in each country. IEQ's affiliation may be with an existing institution (e.g., a local university) or we open an office staffed by local researchers. This approach to our presence in a country, we believe, is a critical ingredient in sustainability.

- IEQ's guided inquiry illuminates teaching and learning in the classroom (and school), with an interest in individual pupils. It's folly to try to improve teaching and learning if information about the classroom experience is lacking in the dialogue. Dialogue within the system at all levels help to make sense of the information. A mixed methodological approach utilizes findings from assessment of pupil performance, classroom and pupil observations of language facility (e.g., in Ghana) or use of materials to facilitate learning, plus personal interviews with local and regional educators, parents and community leaders.

- IEQ connects the research to educational priorities in each country (the focus is chosen with host country colleagues). For example, functional literacy in English is national priority for primary school pupils in Ghana. The research questions will then address issues linked to oral and written proficiency.

- IEQ measures the value of its research by its relevance to policy and practice. Research is a TOOL for improvement. The findings appropriate to potential users must be shared in a form most helpful to the user.

Principles of IEQ

- **Form partnerships with researchers**
- **Focus research on school & classroom performance and experience**
- **Connect research to reform priorities in each country**
- **Measure the value of research by its utility**

How Does IEQ Work in Ghana?

The Researchers. IEQ's institutional partner in Ghana is the University of Cape Coast. This partnership resulted in the creation of the Centre for Research on

Improving Quality of Primary Education in Ghana (CRIQPEG), which represents several departments within the Faculty of Education. Seven teams of four researchers each, including a Team Leader and managed by a Research Coordinator (Dr. Beatrice Okyere), constitute CRIQPEG. All of the team members continue to fulfill their teaching responsibilities while they are members of CRIQPEG.

The Design. We began with the Government of Ghana USAID program entitled Primary Education Program (PREP) which was launched in July 1991. The major activities under PREP include: the development of criterion-referenced testing for primary school leavers (P6) in English and Math; a comprehensive in-service training program; and the distribution of instructional materials, specifically textbooks, to schools in Ghana.

IEQ consists of three phases. *Phase I* examined the availability, source and use of instructional materials in eighteen P1-P6 classrooms in six schools in the Central Region. More than 216 hours of classroom observation plus interviews with teachers, pupils, parents, and community leaders provided valuable insight into the instructional process, how teachers use their time, the characteristics of curriculum, teacher adherence to the timetable, and the availability and use of instructional materials. Of equal importance is that the CRIQPEG team gained familiarity with the context within which the data are interpreted!

IEQ: The Case in Ghana

- **PHASE I: examined availability, source & use of instructional materials in 6 schools in the Central Region**
- **PHASE II: focuses on the use of materials and oral and written language proficiency in classes P2-P5.**
- **PHASE III: examines the school & classroom changes that result from the feedback loop into the system**

Phase II focuses on the use of materials and oral and written language proficiency in classes P2-P5. This focus occurred for several reasons. The first was the necessity to focus the study to examine the use of texts and other instructional materials in developing proficiency in the English language. A prerequisite to understanding textbooks is understanding language, which is the core of classroom learning. The second was the overall disappointment with results of the Criterion-Reference Tests administered to a sample of P6 pupils, which revealed a very low level of literacy. Pupils' scores were about what one would expect if they guessed at the answers or if they simply responded randomly. Further, a recent Senior Secondary School examination results showed that 95% of the candidates could not qualify for the university entrance examination (CRIQPEG Phase II report, p. 3). What is happening with the textbooks in primary school classrooms? What factors affect oral, written and reading language learning? What experiences did pupils have that supported and facilitated the English language? What changes are necessary to enable teachers to use instructional materials effectively to promote English language competence? Phase II attempted to illuminate the conditions and activities related to oral and written proficiency in English in P2-P5. The sample of schools expanded to 14 (seven intensive schools which receive "feedback" in understanding and using the research and seven which received only textbooks). The Phase II reports are now being compiled.

Phase III began in October 1994 and carefully examines the school and classroom changes that result from the feedback loop into the system. In the IEQ model, CRIQPEG researchers return to the schools to conduct pupil and classroom observations, and interview teachers, pupils, parents, pupils, headteachers and circuit supervisors.

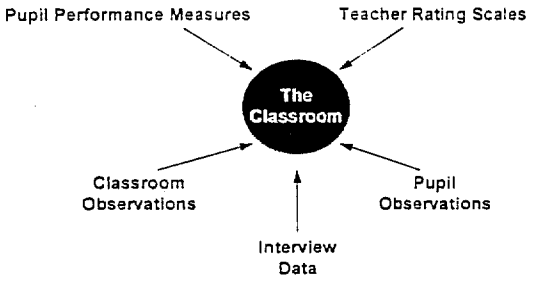
What Information Does CRIQPEG Collect?

Pupil Performance Measures. CRIQPEG is engaged in a pioneering and innovative assessment approach that is directly linked to instructional improvement. This approach, curriculum-based assessment (CBA), asks pupils to perform tasks that are drawn from the curriculum specified for a particular class level. In Ghana the instruments were developed from the English syllabus and the English textbooks used in Ghanaian primary schools. Pupils may be asked to read from their textbooks or to answer questions about the story. One distinguishing feature of the CBA is that "the specific tasks that pupils are asked to perform are selected, administered and scored using standardized procedures" (*The Quality Link* #2).

The CRIQPEG team, in collaboration with Dr. Abigail Harris (Fordham University) and Dr. Aida Pasigna (Institute for International Research), developed instruments to measure oral language, reading and writing proficiency. As described in *The Quality Link* (#3), 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 at least 70% accuracy). Pupil performance assessment may be used to create profiles of abilities in reading, writing, listening and speaking by individuals, classrooms, schools and regions.

Teacher Rating Scales. Teachers were asked to rate all the pupils prior to the random selection for the assessment. They chose high, medium and low performing pupils on tasks such as ability to answer questions in class, and ability to pronounce words correctly. CRIQPEG developed a rating scale composed of nine items on reading, writing and oral proficiency in English. The teacher ratings will be compared to pupil performance to learn how teachers' perceptions of their pupils' abilities match their performance.

Types of Information CRIQPEG Collects



Classroom Observations. This instrument examines the availability and use of instructional materials in each classroom, such as reading materials, resources employed to teach and apply oral English, and instructional strategies used to develop written English skills. This builds on the Phase I study to learn more about the availability and use of materials and to look carefully at the interventions.

Pupil Observations. In each of the 64 classrooms, four individual pupils (high and low performers, equal numbers of male and female pupils based on pupil performance data) were observed to examine the extent to which pupils have contact with and use textbooks. What language do they use? Observations in P3 and P4 were made in both English and non-English classes (e.g., cultural studies).

Interview Data. Semi-structured interview protocols gathered information from teachers and head teachers about strategies used to teach language and the reasons why particular strategies are chosen. Parents, circuit supervisors and executives of the PTA were also interviewed to learn about their views concerning the opportunities and facilities available for pupils to learn English. When examined with the observation data, a picture of the factors that affect pupils' oral and written language development becomes more clear and suggests concrete ways to improve teaching and learning.

The richness and potential value of diverse data from multiple sources about a particular educational issue is very exciting. The challenge is to provide the appropriate information to the appropriate people in an appropriate and usable form throughout the system. When equipped with such information, it is critically important to "process" the implications in discussions and debates among the range of stakeholders.

What Is the Information Telling Us?

Pupil Performance on the Curriculum-based Assessments.

As reported in *The Quality Link* (#3):

> 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 (p. 2).

A brief profile of the results described in the CRIQPEG Phase II report, pinpoints what pupils can and cannot do:

Oral Proficiency. P2-P5 pupils are able to answer a few basic identification questions in English (e.g., what is your name? how old are you?) and to comprehend simple oral instructions such as "sit down" "stand up" and "walk to the door" but are generally unable to respond correctly to oral directions requiring the use of vocabulary and pictures used in textbooks. They are unable to express themselves in English, often responding in the local language to questions asked in English.

Reading. Except for P2 where pupil performance was much lower, the pupils can recognize the letters of the alphabet and have a fairly good grasp of concepts about print. They cannot read more than one third of the words and selected passages lifted from the Pupil's Book in English for their grade level and are unable to answer comprehension questions about the passages.

Writing. Most of the pupils are able to copy letters (lower and uppercase) and to write their names without help. However, less than one-half of the pupils are able to write 15 or more English words.

Summary of Observation and Interview Data

What factors in the pupils' environment explain these data? When analyzing a series of questions regarding study habits, home environment, and level of comfort in performing written, oral and reading tasks, we see that pupils lack a support system that enforces their learning of English.

Oral Proficiency. The majority of pupils do not speak or use the English language because it is not spoken among their friends or family members. There is also an element of shyness, or fear of ridicule (not atypical of that age group) that inhibit pupils from narrating a story (for example) for fear of making mistakes. Pupils are also discouraged because they do not know how to pronounce many English words. Speaking English is not encouraged.

Reading. There are few, if any, libraries in their environment, as well as very few books accessible to the pupils. Textbooks are in short supply in all schools and fees for damaging or loosing textbooks are high. Furthermore, the travails of family life make it difficult for pupils to read at home. Often, at all grade levels, pupils' time after school is absorbed by having to work by selling family goods such as soda and kerosene, or by cooking for the family. In addition to such familial obligations, noise distraction is often cited as hindering attempts to focus on text. Encouragement from parents is minimal as many parents are illiterate and cannot assist their children in their work.

Writing. Writing, in many of the schools, at all observed levels, generally consists of dictation, composition, and sentence construction. While the teacher corrects the more technical mistakes, other aspects of written language such as creative writing, and rhymes ar in general, not used. The practice of writing is therefore relegated to a limited function and not necessarily applied to the broader realm of language comprehension.

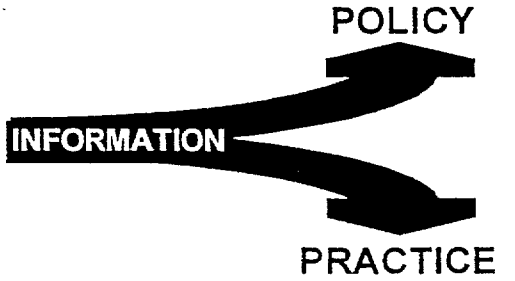
Across all grade levels, the effects of the environmental variables are clear. The lack of pupil support in learning the English language directly effects the pupils' interest and performance level in the language.

What Happens to the Findings?

IEQ strives to connect information gathered such as: what pupils can and cannot read and write; how well they comprehend a request; the extent of their exposure to written materials; the factors which influence language learning in P2-P5; the currently implemented instructional practices; and how materials are used to enhance learning to the office and/or individual within the educational system where it can be useful.

The agenda is guided by an attempt to hear and be responsive to concerns about opportunities for improvement and to engage people in discussions about what happens in the classroom. The CRIQPEG information describes what is currently happening in the classrooms. How do we engage people who have a direct influence on pupil experiences in the classroom and keep them engaged?

Translating the Findings



The information needs to flow. It can flow in a number of directions, but eventually it will result in two types of uses -- in policy or in practice. The following discussion of CRIQPEG focuses on how information is fed into the system at the regional and local level that leads to improvement in the classroom: the assimilation and action segments of the IEQ model. These segments work together because in assimilating

the findings through discussions of their practical implications, participants gain understanding about what's not working and how it can be improved. Illuminating the specific areas of weakness pinpoints opportunities for improvement. For example, if pupils are not exposed to print materials, how can they develop reading skills? So, how can pupils gain more exposure to print materials?

CRIQPEG's approach involves reflection and responsibility. Educators meet to learn about the findings from the research in which they have participated. They become engaged in the responsibility to act upon those findings with new and improved instructional practices by:

- participating in professional development seminars with circuit supervisors and head teachers that review and discuss research results
- working together to develop classroom procedures and strategies that can address the educational deficiencies (pupils can't read and speak in English)
- developing plans for imparting these ideas and procedures to the teachers in the intensive schools
- receiving training from circuit supervisors and head teachers (P2-P5 teachers in the intensive schools)
- implementing the strategies developed and practiced in the professional development seminars
- providing feedback to CRIQPEG in seminars specifically organized for discussing the trial and error of implementing changes
- receiving additional training as required.

What Happens Next?

We've learned that pupils in Ghana have limited exposure to print materials in English and limited opportunity to practice English. This paper describes how such information is shared with local and regional educators in ways that involve these individuals in developing instructional methods to improve the identified skill levels of the pupils. Teachers try out the new methods and provide feedback to the research team about what worked and didn't work. The researchers return to the schools and classrooms and repeat the cycle as described. The IEQ model does not follow a linear path. As each cycle is repeated, some elements of "the project" may change. The model reflects reality and welcomes ideas and experiences that learn from and build upon the tested interventions. Improving educational quality is a work in progress!