

PD-ABK-141
92401

**EDUCATIONAL POLICY, MANAGEMENT
AND TECHNOLOGY PROJECT**

PROJECT NUMBER 645-0230

**SEMI ANNUAL REPORT
1 MARCH 1993 - 31 AUGUST 1993**

EDUCATIONAL POLICY, MANAGEMENT AND TECHNOLOGY PROJECT

SEMI ANNUAL REPORT

1 MARCH 1993 - 31 AUGUST 1993

TABLE OF CONTENTS

| | | |
|---------------|-------------------------------------|---------|
| SECTION I : | EXECUTIVE SUMMARY | Page 1 |
| SECTION II : | INTRODUCTION | Page 4 |
| SECTION III : | END OF PROJECT STATUS INDICATORS | Page 9 |
| SECTION IV : | OUTPUTS | Page 16 |
| SECTION V : | INPUTS | Page 24 |
| | Long Term Technical Assistance | Page 25 |
| | Short-Term Technical Assistance | Page 26 |
| | Participant Training | Page 27 |
| | In-Country Training | Page 28 |
| | GOS Contribution | Page 31 |
| | IIR Expenditures | Page 32 |
| | IIR Contract Expenditures | Page 33 |
| | Peace Corps | Page 35 |

| | | |
|--------------|---|---------|
| SECTION VI : | PROGRESS ON ANNUAL WORK PLAN ACTIVITIES | Page 36 |
| | Continuous Assessment | Page 37 |
| | Head Teacher Training | Page 41 |
| | Management Information Systems | Page 45 |
| | Organizational Development | Page 49 |
| | Career Guidance | Page 52 |
| GLOSSARY: | | Page 54 |
| APPENDICES: | | Page 57 |
| | Appendix I : University of Massachusetts Sub-Contract Report | Page 58 |
| | Appendix II: Sample MIS Information Requests | Page 66 |

SECTION I
EXECUTIVE SUMMARY

The period covered by this report (1 March to 31 August, 1993) marks the end of the EPMT Project's third year of work in Swaziland. It also marks the end of Phase II of the project, a one-year interim period with partially reduced technical assistance. August saw the departure of Dr. Aida Pasiona, the resident Continuous Assessment Adviser. From the beginning of the project's Phase III on 1st September, EPMT will retain only one full-time resident technical adviser, Dr. Philip Christensen, supported by Mr. Cooper Dawson (Organizational Development Specialist) on a half-time basis and Dr. Pasiona (Continuous Assessment) on a consultancy basis. These changes represent another important step in the assumption by the Ministry of Education of primary responsibility for the innovations being supported by EPMT.

The other important development during this period was the mid-project evaluation, carried out under contract to Creative Associates. A two-person team worked in Swaziland from 3 June to 16 July. Their report, which contained 40 specific recommendations, found:

"In general, EPMT has made an excellent beginning on a difficult task. It is time now to consolidate gains, to shift from design to dissemination, and to invest remaining resources on the people who will have to carry on long after this project has ended.

In response to this evaluation, IIR began work with the Ministry of Education and USAID to revise the Year 5 work plan and the overall contract budget in order to implement as many recommendations as possible by shifting the primary focus of project activities from development to sustainable implementation.

Highlights of progress during this reporting period include:

- the holding of make-up continuous assessment training workshops for remaining Grade 1 class teachers, bringing the total number of trained Grade 1 teachers in the country to approximately 95%,
- completion of pilot testing of CA materials for Grades 2 and 3, further work on Grade 4 tests and commencement of work on Grade 5 materials,
- completion of two more two-month INSET/CA internships at the University of Massachusetts,

- completion of the second head teacher management training cycle with courses in Personnel Management, Organizational Management and Instructional Leadership for a group of 215 primary school heads,
- inauguration of a series of monthly workshops on "Understanding Information" by MIS personnel for MOE staff, and planning for a workshop on classroom observational research for teachers,
- commencement of work on a Swaziland-specific education system modeling and planning model (APEX), with support from the World Bank,
- further pre-service and in-service teacher training in Career Guidance.

SECTION II
PROJECT OVERVIEW

Educational Policy, Management and Technology (EPMT) Project is a collaborative effort between the United States of America, through the U.S. Agency for International Development, and the Government of Swaziland, through the Ministry of Education.

The Project is being implemented with assistance from the Institute for International Research under contract number 645-0230-C-00-0016-00.

Project Background¹

Impressive gains have resulted from investments in education by the Government of Swaziland (GOS) and donors. The school system's capacity has expanded to the point where virtually all Swazis receive some primary education. Since 1968, the percentage of all primary school teachers that meet Swaziland's standard qualifications has increased from about 69% to nearly 100%. According to the 1986 census, about 64% of the adult population is literate. These and other achievements signal that Swaziland has reached a milestone in its efforts to develop strong human resources base, i.e, a minimum level of physical and human infrastructure has been put in place.

In response, the GOS has determined that investments in quality and efficiency are needed to improve the human resource base and cope with expanding enrolments. Key concerns are the rates of repetition and dropout and the high and growing rate of unemployment among school leavers. While not abandoning its commitment to universal primary education, the GOS is concentrating on the need to produce school leavers who can assume productive roles in the formal and non-formal economic sectors. This new focus has been articulated in a comprehensive package of reforms to strengthen the education system's ability to boost students achievement.

The requirement of economic growth and the GOS's timely promulgation of and demonstrated commitment to sound educational policies combine to create an excellent opportunity for profitable development assistance investments. The Educational Policy, Management and Technology (EPMT) project capitalizes on this opportunity. Simply stated, EPMT provides the GOS with technical advice and training required for sustained implementation of reforms already adopted by the Ministry of Education (MOE).

¹ The first three parts of this section are taken from the Project Paper.

The reforms targeted by the EPMT for implementation are key to improving quality and efficiency in the primary education system, i.e., those that enable the system to better diagnose pupils' learning problems, determine how to treat these problems, and increase the relevance of education to the economy. The improvements in quality and efficiency effected by the EPMT will contribute to the establishment of an efficient and high quality human resources base for sustained development and economic growth.

Project Purpose

The Project's purpose is to improve the quality and efficiency of basic education. According to the Report of the National Manpower Survey 1986, about 31% of Swazi skilled workers have educational qualifications that are lower than what their employers deem adequate. High-level management, accounting, and engineering jobs are filled by expatriates. Studies also indicate that only 1/3 of school leavers each year are absorbed by Swaziland's formal sector. Basic education can help address these kinds of labour market inefficiencies and limitations by: (1) producing appropriately and well-trained school leavers needed to increase productivity and expand the country's economic base; and (2) producing quality inputs for higher levels of education and training.

Overall Strategy

EPMT's design strategy was to work with the MOE to identify and develop interventions key to raising pupil achievement. This strategy was the litmus test for determining project activities. Governing it were the principles of effectiveness, institutionalization, and sustainability in the planning and delivery of education.

A strategy focused on raising pupil achievement has two important design implications. First, there must be a clear linkage between any area targeted for improvement and the pupil. Second, this strategy means that project success is measured in terms of improvements, not absolute levels of achievement. Since factors outside of the school organization affect the absolute level of student achievement, e.g., pre-school background and demand for the child's labour, the better yardstick is changes in performance. Accordingly, each of the EPMT end of project status (EOPS) indicators is designed to measure change.

Based on EPMT's purpose, improvements in pupil achievement are to be effected by promoting quality and efficiency in the basic education system. Thus, the agent upon which the project acts is the system, but effectiveness of actions taken will be measured in terms of improvements in student achievement and changes in the system. This approach is a technical and practical necessity since the project cannot act on factors outside of the educational system which affect student performance (e.g., family problems); however, changes in students' achievement are meaningful to determine whether efforts to improve the system have had an impact on the intended beneficiary.

Those indicators used by EPMT that measure changes in the system have direct implications for pupil achievement, i.e., improved availability and quality of material inputs, increases in instructional time devoted to instruction, and improved planning and decision-making.

Project Components

The Continuous Assessment programme, the core project component, is an effort to establish a comprehensive system of testing and remediation in order to improve the quality of teaching and learning in Swaziland's primary schools. All testing will be criterion-referenced (e.g., objective-based) and will provide information that the teacher can use to diagnose learning difficulties and provide appropriate remediation in a timely manner.

Three kinds of tests are being developed: (a) unit tests, (b) end-of-term tests, and (c) end-of-year tests. For the most part, these tests will be administered and scored by the teacher and will be used to guide further instruction. One test per year will be transmitted to the Regional Education Officers (REOs) and the MOE so that higher authorities can diagnose the system's deficiencies, using the achievement test data along with other relevant information such as absenteeism, attrition rates, etc. Two types of remedial materials are being developed to enable the teacher to efficiently manage remediation/enrichment activities even in a large class: (a) programmed tutorials using posters or charts which are self-contained (i.e., specify what to teach and how to teach) and (b) workbooks and learning modules for peer-group learning or self-study.

The second component is training for head teachers. This component has been included because research and experience have made it clear that school principals and headmasters are probably the most important factor in school quality. It is they who are instrumental in carrying out policy, in assuring that regulations are followed, and, if they do their jobs well, in helping attain a high standard of teaching and learning. The training centre's on intensive

professional courses (rather than relatively superficial short workshops) covering four main topics: 1) management of the school's physical and other resources, 2) management of the school's human resources (personnel and human relations), 3) management of money (budgeting, accounting, etc.) and 4) instructional leadership (helping teachers do a better job).

The third component is the development of a Management Information System so that decision-makers in the Regional Education Offices and at MOE Headquarters can have information of practical utility (for example, the achievement data that will emerge from the Continuous Assessment Program) to guide their plans, decisions and actions. The Research and Planning Unit will take an active part in discussing the education system's needs with the operating units of the MOE, and the operating units will take an active role in seeking the kinds of data they need to make effective decisions.

The fourth component is an Organizational Development effort. Studies will be undertaken to identify needs for action in the education system. The findings of these studies will form the basis for seminars and training workshops for educational staff and for recommendations on the structure and organization of the system. Educational staff will also be trained to make use of the improved flow of information emanating from the Management Information System, and in particular to utilize the information flowing from continuous assessment to improve teaching and learning in classrooms.

The fifth component is the development of a Counselling and Guidance program for the primary schools to help parents, students and teachers make more realistic decisions about the future. Its purpose is to develop information that will inform and motivate students realistically about the world of work to which most of them will go from primary school. For example, if many do not go on to higher schooling and cannot be absorbed into jobs in the modern industrial and commercial economy, they will probably benefit most by going into agriculture, or they will need to find jobs elsewhere in the region. In any case, the schools should help to prepare them for the real futures that face them.

All five components are inter-linked with ultimate goal being to improve the effectiveness and efficiency of the system so that enhanced learning can take place in the classroom and students can be better prepared to enter the world of work. In addition, the project is intended to help MOE achieve some of its identified reform needs. These needs do not stand in isolation and the project activities, therefore, will be integrated into the overall effort of MOE to improve efficiency and effectiveness.

SECTION III

**PROGRESS TOWARDS
END-OF-PROJECT STATUS
INDICATORS**

Revised EPMT End of Project Status Indicators (EOPS)

1. The number of children who complete 7 years of primary school on time increases from 160/1000 to 200/1000.
2. Student achievement is improved in Grades 1 - 7 Maths and English.
3. Primary and secondary schools are better managed.
4. MOE is using empirically generated data to make policy and planning decisions.
5. Increased awareness among students of career choices and resources for identifying employment options.

These revised EOPS directly measure achievement of the project purpose. The first EOPS is a measure of efficiency, the second a measure of quality. The other three EOPS are intended to measure achievement of major project objectives that were identified as necessary to overcome binding constraints to the improvement of educational quality.

1. **The number of children who complete seven years of primary school on time increases from 160/1000 to 200/1000.**

Baseline data. The education system has experienced rapid growth over the past 20 years. There are now twice as many schools, three times as many students and almost four times the number of teachers. Students repeat often and many students leave the system before completing the primary and secondary cycles. Low efficiency ratios characterize the system. These ratios are measures derived from input divided by output. A value of 2.00, for instance, indicates that the educational system is investing (in money, staff, and facilities) twice what it would if the system were completely efficient, whereas a value of 1.00 would be ideal. In 1987, when the project was planned, the efficiency ratio at the primary level was 1.74 and the number of children graduating primary school on time was 160/1000.

Current situation. Derived from the latest published statistics (1990 flow rates applied to 1991 intake), the efficiency ratio in year two of the project was 1.67. The number of children graduating primary school on time increased to 178/1000 at that time.

Strategies for meeting the target. All EPMT project activities are aimed at meeting the target of 200/1000 students graduating primary school on time. Continuous assessment and head teacher management training are expected to have the most direct impact. In order to strengthen the contribution of these two components, organizational development efforts have been more sharply defined in the year four work plan.

In general terms, the aim of organizational development is to build a general management improvement effort leading to improved student achievement and greater efficiency in the use of system resources. The fundamental approach is to help MOE staff use information for practical improvements and thus to enable officials in the education system to improve their performance.

2. Student achievement is improved in Grades 1-7 Maths and English.

Baseline data. No baseline data are available from the Continuous Assessment (CA) Programme at this time. The end-of-cycle examinations conducted by the Swaziland National Examinations Council at the end of Grade 7 have indicated an overall "pass" rate of approximately 75 percent over the past two years. However, it is not clear what the "pass" rates are for Maths and English or whether there has been a conscious attempt to ensure congruency between the skills actually tested in these two areas and the instructional objectives prescribed for this grade.

Current situation. To establish the baseline data for the first grade, end-of-year (end-of-third-school-term) tests for Grade 1 English and Maths were administered to a stratified random sample of 60 Grade 1 classes at the end of the last school year (1992). The test results are being processed and analyzed by the MIS component. The same tests will be used for achievement testing among Grade One pupils all over the country at the end of the current school year (December, 1993)-e.g. after the first year of nationwide implementation of the CA Programme in this grade. The results of this end-of year testing will be compared with the baseline data to determine whether the CA programme has resulted in immediately improved learning among first grade students.

Strategies for meeting the target. The development and training activities carried out prior to the nationwide implementation of the CA programme in the first grade will be continued for the second through the seventh grades. Formative evaluation data from this first year of CA implementation will be used to feed forward to system improvements as implementation is gradually expanded to the higher grades. Given the revised pace of implementation agreed after the mid-project evaluation, one grade per year, the programme will be in place in the

first four primary grades in 1996. The Ministry will then take over the responsibility of expanding the programme to the remaining three primary grades.

3. Primary and secondary schools are better managed.

Baseline data During 1990-1991, a needs assessment study was carried out to determine management training needs in the system. This needs assessment included a curriculum review of previous management training programs for head teachers and data-collecting visits to 50 schools by teams of inspectors and INSET staff. A final report on the training needs assessment provides detailed information about the status of head teacher training as of that time and lists 36 major categories of needs. One critical area identified was better financial management. No previous training had been carried out in this area, and all head teachers visited reported difficulties with the handling and reporting of money. Other critical needs were identified in the areas of organizational management, personnel management, and instructional leadership.

Current Situation. A complete program, including a full set of training materials, for management training of head teachers has been developed and institutionalized within the In-Service Education and Training Unit of the Ministry of Education. The Ministry of Education has drafted standards for head teachers in Swaziland, and has agreed to make a certificate indicating successful completion of this Head Teachers Management Training Course a requirement for confirmation of any newly appointed head teacher. Four hundred head teachers have already been trained. Plans are underway to train the remaining 150 primary heads in Cycle Three (1993-1994) and all secondary school heads in Cycle Four (1994-95).

Consultants were employed to carry out formative evaluations to assess the impact of Head Teacher Management Training on actual school management for Cycle One training. Separate evaluations were carried out for each of the P.O.M.I. areas (e.g. Personnel Management, Organizational Management, Money Management and Instructional Leadership). Final reports, giving detailed information, are available for all except Organizational Management (which is now in the process of being compiled). These reports indicate definite positive effects and improvement of school management achieved as a result of the Head Teachers Management Training course.

Strategies to meet the target A system for make-up and qualifying through review materials and special testing is being developed. In addition, beginning February, 1993, monthly 'Open Days' for Cycle One head teachers who

completed their training are held at each of the Regional Teachers' centres as follow-up training and guidance to help school heads put their training into practice. Head teachers bring their actual record books, specific problems, etc. and receive group and individual assistance from INSET Regional Management Teams Leaders and other team members.

4. MOE is using empirically generated data to make policy and planning decisions.

Baseline data. The Research and Planning Unit was in a critical situation at the time the EPMT Project started in August, 1990. Management information was difficult to find. The scattered repositories of information (Central Statistics Office, Teaching Service Commission, Accounts Office, Examinations Council and Central Ministries, to name the principal sources) typically worked in isolation from each other. Senior MOE management were unable to retrieve information on a demand basis and were very skeptical about the reliability of these disparate sources. No central source of information or central monitoring system existed, making it difficult for the Ministry to manage information and establish monitoring systems. The annual school census which MOE traditionally conducted in competition with CSO had ceased to be operative. Records for 1988 had not been entered into a database and lay scattered in various offices.

Current Situation. A core MIS system has been developed and brought into operation. Senior personnel in the MOE and external users routinely seek information from it on different aspects of the educational system. Procedures for collection of data, data entry into the MIS databases and information dissemination have been established. With the help of EPMT-sponsored consultants, the TSC has computerized its personnel records and data entry personnel are updating them. Information from this TSC data base is now routinely incorporated into the MIS.

When the CSO conducts its annual survey of schools in April, it now encloses an MIS update survey, as well. This one-page form is used by schools to report information such as name changes, enrollment projections, school fees schedules and information on construction and visits by Ministry personnel. Data from the annual update reports from schools are entered into the master MIS data base using personnel trained by the MIS specialist. Information from this annual update is sent to REOs and used in the preparation of reports for both the MOE and external users. A list of information requests appears in Appendix II.

Teachers and head teachers were trained in the preparation of Scantron cards as an aid to electronically scoring the end-of-year exams in Maths and English for Grade One pupils. A trial run of the Scantron scoring process was conducted, encompassing all REOs. It was determined that, due to ongoing hardware and software problems, teacher dissatisfaction with the time required to transfer information to the Scantron cards and the system's inability to process the cards in a sufficiently timely manner, the Scantrons would not be used for national capture.

An MIS counterpart was hired and began work just prior to the close of the semi-annual reporting period.

Strategies for meeting the target. The strategies laid out in the last semi-annual report are extant.

The first priority will be the training of the MIS counterpart. This will primarily consist of on-the job training provided by the MIS Specialist, but the counterpart will be enrolled in local applications courses, as needed. The goal is to have the counterpart assume increasing responsibility for the MIS over the coming year. The second focus of training will be at the regional level. With the elimination of the Scantron scoring, that training will be dropped, but the training in the use of the School Profiles will continue. Finally, the monthly workshops on "Understanding Information" for MOE staff will continue.

Efforts will continue to make the MIS as accessible as possible. These will include continued meetings with regional personnel, particularly the REOs and Inspectors, on improving information flow to/from the MIS. A bi-monthly report will be prepared by the MIS personnel and distributed to MOE management, REOs, Inspectors, INSET, NCC and others, as appropriate. Each report will focus on one topic in order to demonstrate the quality, quantity and value of the data and information available through the MIS.

5. Increased awareness among students of career choices and resources for identifying options.

Baseline data. Before the implementation of the career guidance programme at the Grade 7 level, there was no career guidance for primary schools. Presumably, primary students were not aware of or only had a limited awareness of career choices. The only exceptions were the seventh grade students involved in the pilot test of guidance materials at four schools. In 1992 a baseline data survey was given to head teachers and educational leaders (LITS and DIES) in four regions, to assess their awareness of the needs for career

guidance, the availability and use of career resources, and their willingness to implement career guidance programmes in their schools. About 200 responses were collected.

Current situation. Substantial training and upgrading for ETGPS staff has been accomplished. Three guidance officer vacancies have now been filled, two for primary level and one for secondary level. Orientation to career guidance concepts was provided last year to all third-year Primary Teacher's Diploma students at Teacher Training Colleges, ensuring that they will be able to support guidance programmes in their schools. This activity will continue in the future.

A one-week intensive training and upgrading course for the ETGPS staff has been accomplished. This was done with Dr. Kandji-Murangi, a consultant from Botswana. Orientation to Career Guidance concepts was provided to all third-year Primary Teacher's Diploma students at Teacher Training Colleges. The National Curriculum Centre has promised that the new Grade 7 Social Studies Text Book, which includes a special unit of Career Guidance, will be introduced in all schools in 1995. An inservice training course has been held for Grade 7 Social Studies Teachers.

Secondary School students continue to benefit from enhanced services provided by ETGPS. Their awareness of career options is improving. ETGPS staff and Dr. Kanji-Murangi have conducted a workshop for all Career Guidance Teachers from secondary school.

Strategies for Meeting the Target. The most important strategy for meeting this objective at the primary level is to publish and disseminate the Grade 7 Social Studies textbook. Training of the teachers is an alternative strategy which will help the teachers catch up with the material as soon as it is infused in the schools.

SECTION IV

OUTPUTS

1. **Primary headmasters complete 120 hours of school management course.**

Progress prior to reporting period

A training needs assessment was carried out to identify priority areas for curriculum development of the management course. Instructional materials were written and printed for four subject areas: Personnel Management, Organizational Management, Money Management and Instructional Leadership. Instructional teams were selected and trained. One hundred ninety two head teachers (Cycle One) completed approximately 150 hours of training with courses in the four P.O.M.I. areas. All who passed were awarded certificates in June, 1992. Materials were drafted by the Management Training Team to remediate those who didn't pass or who missed some of the training (36 people).

In August, 1992, the primary responsibility for the continuation of the Head Teacher Management Training Programme was assumed by the INSET Unit. An additional 215 primary head teachers (Cycle Two) were selected and began their training with Money Management in August/September, 1992. Fourteen more trainers (inspectors, selected secondary head teachers, and INSET lecturers) were identified and trained in Money Management by a consultant for two weeks in February 1993, thus increasing the number of qualified trainers in this area. Review guides for each area were prepared, and revised trainer's guides and trainee's handbooks for these 215 head teachers were printed.

Progress during reporting period

Training of the 215 Cycle Two Head Teachers was completed by the Regional Management Training Teams, under the overall management of INSET. Training in Personnel Management took place in March, and that for Organizational Management and Instructional Leadership took place in May. Certificates for Cycle Two head teachers were presented in August. Additional trainer's guides and trainee's handbooks for these 200 head teachers were printed.

Training of trainers for the 14 additional trainers was completed in June. A consultant was employed to work with the INSET Management Team in carrying out this task. The trainers participated in three weeks of training in the areas of Personnel Management, Instructional Leadership and Organizational Management. In March, a successful educational trip to Zimbabwe was organized for the INSET and inspector trainers in the Regional Head Teachers Management Training Teams.

2. **Three Teacher Innovation Distribution Centres (TIDCs) established in Big Bend, Mankayane and Mbabane to meet increased demand for instructional support.**

Progress prior to reporting period

Project support to this output consisted essentially of procuring commodities to equip three new TIDCs. However, lack of progress in construction of the centres has constrained providing this support.

Progress during reporting period

GOS has withheld release of budgeted funds on the grounds that certain inadequancies pertain to the design of the structures. Given the long delay experienced to date, the Ministry of Education and USAID have agreed to reprogramme project funds originally earmarked for equipment purchase. Intensified training in the continuous assessment component of the project will be supported instead.

3. **Studies of specific issues of basic education in Swaziland**

Progress prior to reporting period

A preliminary report on the Decision Process Survey was presented to key MOE officials in a series of seminars held between November 1991 and April 1992. A study of "Factors Relating to Student Achievement in Swaziland" was completed in April, 1992. A new study of the primary school text book rental scheme was initiated, 60 schools were randomly selected for the study and questionnaires were distributed. The work is being undertaken by a researcher from the National Curriculum Centre.

Progress during reporting period

Data for the text book study was obtained from all selected schools and is currently being analyzed.

4. **New methods of policy analysis, formulation and implementation based on empirically generated information and research.**

Progress prior to reporting period

The School Mapping Study was carried out, and the data originally entered was verified and corrected. The results form the nucleus of a new MOE Management Information System. The system was expanded

with input from a variety of sources, notably the Central Statistics Office. A number of reports have already been prepared for MOE officials and used in policy and planning exercises. The first beneficiary was the capital budget development work. Subsequently the Principal Secretary commissioned reports on the costs of education to parents (school fees) and on teacher supply and demand. These were completed in 1992.

In late 1992, Project-sponsored consultants computerized the TSC personnel records, thereby linking up-to-date teacher data to the MIS.

Representatives of Research Triangle Institute (North Carolina, USA) and EduSource (South Africa), funded by AIDS's Project ABEL, demonstrated the APEX model for evaluating the relationships among various education system components. After discussion with the PS, it was agreed to adapt the model to Swaziland's particular needs. Additionally, in late 1992, a World Bank education finance simulation model was adapted for Swaziland's needs through the efforts of project staff, in collaboration with a World Bank representative.

In early 1993, at the request of the PS, forecasts of teacher requirements and costs were developed. A study of the school furniture situation was also commissioned and a report was completed in February, 1993.

Progress during reporting period

With funding support from the World Bank, the representative from RTI returned to begin work on a Swaziland-specific APEX model. Work will continue throughout the year.

A series of monthly workshops on "Understanding Information" was instituted by MIS personnel for MOE staff. Topics are selected by the staff; they have chosen to begin with graphing. The goal of the workshops is to increase the skills and understanding of those MOE personnel who use or provide information. Particular emphasis is placed on the use of data to convey accurate, appropriate and useful information.

Working with the Field Director of World University Service - Canada, MIS personnel have begun to develop a process for involving volunteers, in partnership with Swazi teachers, in classroom observational research. Plans were made to have a classroom ethnographer from ARTS run a seminar for these researchers in the early Autumn.

An MIS counterpart was hired by the MOE, helping to ensure the sustainability of the MIS.

MIS personnel provided technical assistance and management support for a study of the Book Rental Scheme being conducted by a member of NCC.

5. Tested English language instructional programme.

Interest in the use of radio to support Swaziland's education system continues to be demonstrated both within MOE (for example, in the career guidance radio programmes now being produced by ETGPS) and from outside agencies (such as the British Council and the Mbabane Rotary Club). Unfortunately, no action has been taken by the Ministry on implementing the recommendations in the report on the successful pilot test of Interactive Radio Instruction in English. Work towards this output, therefore, has been suspended.

6. Increased student time on learning.

Progress prior to reporting period

Achievement of this outcome depends on the interaction among various Project components. Better school management, improved student evaluation, the use of remedial instructional materials in English and Maths, improved decision-making and policy implementation, and a system for tracking student achievement are the principal EPMT-supported activities in this regard. Previous accomplishments include the on-going implementation of a national management training programme for head teachers, development of a continuous assessment system, establishment of a functioning Management Information System, several organizational development initiatives, and staff training in all components.

Progress during reporting period

Further accomplishments were noted in all areas. Details are given throughout this report and highlighted in the Executive Summary.

7. Programme of continuous assessment established in national exams to test skills.

Status prior to reporting period:

Materials development. The development, LVR (Learner Verification and Revision, using laboratory schools) and pilot testing of Grade 1 end-of-term tests in Maths and English were completed between July, 1991 and December, 1992. The development of general remedial strategies and techniques for both subject areas, applicable in both lower and upper primary grades, was also completed during this period. In addition, several sample posterized tests, remedial posters, worksheets, and other remedial materials for use in Grade 1 were developed for both subject areas.

The prototype tests for Maths and English in Grades 2 and 3 were developed, tried out in the two laboratory schools, and revised for pilot testing in 16 pilot schools. The third term tests for Grade 2 were pilot tested in November, 1992 and are being revised for implementation next school year. The third term tests for Grade 3 were tried out in the lab schools with beginning fourth graders in February, 1993.

Grade 4 prototype tests were developed. Work started on the grade 5 objectives and item specifications has started. The Grade 4 third term tests are scheduled for pilot testing in November.

Training. In order to prepare the teachers and head teachers for the first year of nationwide implementation, five-day regional training workshops were held in January for all the primary school head teachers and Grade 1 teachers in the country. These workshops were conducted by regional teams consisting of the inspectorate, the CA Unit, INSET, teacher leaders, subject panel members, and selected head teachers and pilot teachers. Approximately 85 percent of the teachers and head teachers attended the workshops.

A modularized Handbook on Continuous Assessment and Remediation, developed by the CA staff under the guidance of the CA Adviser, was used at these workshops. This Handbook consists of five programmed learning modules with their respective trainer's guides and makes use of peer group learning as the primary mode of training. The modularization of the training materials and the use of peer group learning were designed to: (a) minimize dependence on lectures, (b) maximize the trainee's

involvement in and responsibility for the learning process, (c) maximize the chances that all the teachers and head teachers receive the same quality training, and (d) maximize the efficiency of the training process, given the vast numbers of teachers to be trained, a relatively small corps of trainers, and the relatively short period available for training.

The Grade 1 teachers received training in the use of "item specifications" to guide them in writing their own lesson or unit tests in these two subject areas. To guide them in providing remediation in their classes, the teachers also received training on how to use the sample remedial materials (posters, worksheets, flashcards, etc.) and how to make their own remedial materials for their classes. They were also trained on how to use objective-specific progress reports and other CA forms.

Implementation. The nationwide implementation of the CA Programme--i.e., continuous assessment and remediation--was launched in the first grade at the beginning of the current school year. This is the first stage of the establishment of a national programme of examinations to test skills in Maths and English.

Progress during the reporting period

Materials development. The first and second term tests for both grades (2 & 3) were pilot tested in April and August, respectively. A one-day feedback seminar on the first term tests was conducted with the pilot teachers for Grade 2 & 3 on June 4th, during which revisions were suggested on the basis of pilot test data collected and analysed by the CA staff. Data analysis from UMass on the third term pilot test results sent to Dr. Ron Hambleton in May is still forthcoming. The third term Grade 3 tests were tried out in the 16 pilot schools in March.

The prototype tests for grade 4 have been written. Work on the grade 5 objectives and item specifications has been started. The third term tests for Grade 4 are scheduled for pilot testing in November. The first and second term tests will be tried out in the lab schools and revised before they are pilot tested in 1994.

The development of sample remedial materials for Grade 2 was started in July, based on feedback from the pilot schools. Similar materials will be developed for Grade 3 in October.

Training. Make-up training workshops were conducted by the regional training teams for the teachers and head teachers who missed the January workshops. These workshops used the same modules and training strategies as those that were used in January. These workshops brought the number of trained staff up to at least 95 percent of the total number of teachers and head teachers in the country.

8. **Guidance programmes for upper primary and junior secondary schools established.**

Progress prior to reporting period

The Project's strategy in this area has been to support MOE's efforts to infuse guidance at the upper primary level through the Grade 7 Social Studies curriculum, and to help MOE improve the already established junior secondary guidance programme through methods such as updating testing instruments and training ETGPS staff. In this regard, National Curriculum Centre staff have been trained in Career Guidance infusion. New guidance materials, developed jointly by ETGPS and NCC, have been pilot-tested, revised and used for training. Workshops for primary school head teachers and trainers have been conducted. Resource materials such as the Career File, Career Interest and Guidance Articles, have been developed and disseminated. ETGPS has conducted classes for students doing the third year of the Primary Teacher's Diploma course at Teacher Training Colleges. These sessions included presentation of the career guidance unit that will be included in the new Grade 7 Social Studies textbook. Guidance and Counselling training has been given to third-year Secondary Teacher's Diploma students. Two vacant posts for primary school guidance officers and one for a secondary guidance officer were filled.

Progress during reporting period

ETGPS continued to conduct classes for students doing the third year of the Primary Teacher's Diploma Course at Teacher Training Colleges. In-service training of Grade 7 Social Studies teachers was also conducted. These sessions included in the presentation of the career guidance unit that will be included in the new Grade 7 Social Studies textbook. These classes will continue so that new primary school teachers are well informed about guidance principles and strategies when they enter the system. Guidance and Counselling lessons continued for third year Secondary Teacher's Diploma students.

SECTION V
INPUTS

LONG-TERM TECHNICAL ASSISTANCE

1. Dr. Philip Christensen, Management Information Systems Adviser and Chief of Party.

Expended months of service : 24

Remaining months of service : 36

2. Dr. Aida Pasiona, Continuous Assessment Adviser

Expended months of service : 37

Remaining months of service : 0

3. Mr. Cooper Dawson, Organizational Development Adviser

Expended months of service : 18

Remaining months of service : 13

Comments

Dr. Aida Pasiona, Continuous Assessment Adviser, completed her contract. She left the country in mid-August. However, Dr. Pasiona will be coming to Swaziland as a consultant during the remaining life of project.

Mr. Cooper Dawson's full-time services ended on August 31st, 1993. However, the revised EPMT Project Contract includes an additional 13 months of his part-time technical assistance through August, 1996.

SHORT-TERM TECHNICAL ASSISTANCE

Mr. Mark Johnson

From April 1 - April 22, Mr. Johnson worked with the MIS Specialist and the CA Technical Adviser to complete the technical component of the Scantron scoring process for Grade 1 Maths and English testing. His tasks included debugging the hardware system, redesigning the forms, and reprogramming the Scantron interface. He also visited every REO and helped to install the Scantron software, testing it for reading accuracy. Mr. Johnson added new features to the software, enabling reporting functions required by the CA team. In addition, he modified the data entry programs used for storage of CA-generated data.

Dr. Itah Kandji-Murangi

Dr. Kandji Murangi was in Swaziland for two consultancies. This was for two weeks from April 25 to May 8. During the first week, an upgrading workshop for the ETGPS staff was conducted. It included special counselling skills such as counselling the unemployed, the alcoholic, retrenched, etc. The second week was a workshop for Guidance teachers of all secondary schools. Both workshops were successful.

Dr. Harold Bergsma

Dr. Harold Bergsma, former Technical Adviser of the EPMT Head Teacher Management Training Component, was employed as a consultant for the month of June, 1993. In conjunction with the INSET Management Team he conducted three weeks of Training of Trainers for 14 additional trainers in the areas of Personnel Management, Instructional Leadership and Organizational Management. He also conducted a 2-day course on a supervision model for primary and secondary level inspectors.

PARTICIPANT TRAINING

CONTINUOUS ASSESSMENT

1. Two-month internships in U.S. Two of the four CA-INSET staff members were sent to UMass for two months (early March to early May) on a short internship programme: Mrs. B. Nkomo and Mrs. D. Vilakati. The two interns completed the Grade 4 third term tests for English and Maths, respectively. They also visited a school system in Massachusetts that manages a continuous assessment programme.
2. M.A. Training in U.S.A. Miss Ellen Thwala (NCC/CA), who left in September, 1992, for the U.S.A. to pursue a Masters Degree programme on Educational Testing and Measurement at Ohio University, completed her programme in one year and returned to Swaziland on August 25, 1993. Miss Thwala was originally scheduled to finish her degree programme in July, 1994.

Mr. Newman Khumalo (NCC/CA) left on August 20th for the United States to pursue a Masters Degree programme in Educational Research and Evaluation with special emphasis on testing at the University of Massachusetts at Amherst. Mr Khumalo is one of the NCC/CA staff members who had returned from a six months internship programme at the same University. Mr. Khumalo is scheduled to return in July, 1995.

CAREER GUIDANCE

Mr. Vusi Manyatsi and Mrs. Lineo Vilakazi, both Career Guidance Officers, commenced their MA degree programmes at New Mexico State University and Ohio University, respectively, in August, 1992. They are expected to complete their training programme in July, 1994.

HEAD TEACHER MANAGEMENT TRAINING

Mr. Israel Simelane, Acting Deputy Director of INSET and Head Teacher Management Trainer, left Swaziland in August, 1992, to pursue a Masters Degree course in Educational Management and Development at New Mexico State university. Mr Simelane expects to complete his training in July, 1994.

IN-COUNTRY TRAINING

CONTINUOUS ASSESSMENT

The following major workshops for Continuous Assessment were conducted during this period.

| <u>Dates</u> | <u>Training Activities</u> | <u>Description</u> |
|--------------------|-----------------------------------|--|
| April 4 - 8, 1993 | Test development workshops | CA test development workshop for pilot school teachers |
| July 28 - 30, 1993 | Remedial material design workshop | Development of CA remedial materials |

In addition, another round of workshops was conducted in each region by the regional teams to train the Grade 1 teachers who had missed the workshops held in January. This was held during the second week of April, just before the first term tests for Grade 1 were scheduled for administration throughout the country.

A mini-workshop was also conducted by the CA Adviser for the CA professional staff on how to design remedial materials for Grade 2, based on feedback from the pilot schools. Drafts of sample remedial materials for the first term were produced by the Maths and English designers for selected objectives.

HEAD TEACHER MANAGEMENT TRAINING

The following modules for head teachers were conducted during this period:

| <u>Dates</u> | <u>Training Activity</u> | <u>Description</u> |
|--------------|--------------------------|---|
| March 4-5 | T.O.T. & Planning | Personnel Management |
| March 15-19 | Head Teacher Training | Personnel Management |
| April 1-2 | T.O.T & Planning | Organizational Management & Instructional Leadership |
| May 3-15 | Head Teacher Training | Organizational Management & Instructional Leadership |

Monthly Open Days were conducted for Cycle One Head Teachers at the TIDCs as a follow-up activity for the Management Training.

CAREER GUIDANCE

The following workshops for Guidance and Counselling were conducted during this period.

| <u>Dates</u> | <u>Training Activity</u> | <u>Description</u> |
|----------------------|---|--|
| April 5 - 7, 1993 | Inservice Training Workshop for Grade 7 Social Studies Teachers | Inservice Training of Grade 7 Social Studies Teachers (LITs) |
| April 26 - 30, 1993 | ETGPS staff development | Training of ETGPS staff in Guidance and Counselling |
| May 3 - 7, 1993 | Workshop for Guidance Teachers | Secondary school Guidance Teachers workshop |
| August 16 - 27, 1993 | TTC Workshop | Training of PTD 3 students at Teacher Training Colleges |

1. **Inservice Training of LITs.**

A one-day workshop was held in each region. These were open day workshops. There were about 40 Grade 7 Social Studies teachers in each region. They participated actively during the lessons, which related to the principles of guidance and the activities that will be contained in the Grade 7 Social Studies revised material to be infused in schools in 1995. The remaining Grade 7 teachers are still demanding their share of guidance and counselling. This will be arranged through workshops sponsored by other departments.

2. **ETGPS Staff Development Course.**

A staff development course was held for the ETGPS staff during the week of April 26 - 30. Dr. Kandji-Murangi was the consultant from Botswana. She had prepared material on topics as suggested by the department staff. The presentation was good and there was active participation by staff members and good attendance.

3. **Workshop for Guidance Teachers**

A workshop for Guidance Teachers of secondary/high schools was held during the week of May 3 - 7. More than 100 teachers attended and they stayed up to the last minute. The teachers were joined by two members of the Royal Swaziland Police Force throughout that week. These got interested after they had seen the ETGPS programme, which addresses several of their own concerns, such as drug/alcohol use, crime prevention, counselling skills, etc. Dr. Kandji also served as a useful resource in many of the topics, along with other speakers such as Mr. C.M. Mndzebele and Mrs Gugu Mamba.

4. **Teacher Training Colleges Workshops**

Each Teachers' College has had two sessions of guidance and counselling with their PTD 3 students. This is in preparation for the Grade 7 Social Studies material which will be infused into all classes in 1995. Students learn the principles of guidance and are helped to go through the activities contained in the Grade 7 Book. Students seem to enjoy the activities and participation.

G.O.S. CONTRIBUTIONS FOR THE PERIOD
1 MARCH 1993 - 31ST AUGUST, 1993

| | | |
|--|---|------------|
| Housing for 2 TAs | E | 31,898.00 |
| Housing for Swazi staff | E | 15,000.00 |
| Housing for 3 PCVs (sharing) | E | 4,500.00 |
| Provision of Offices | E | 23,880.00 |
| Office Utilities & space | E | 2,220.00 |
| Travel-Air travel/International | E | 37,200.00 |
| MOE-Transport costs for workshops | E | 66,560.00 |
| Fuel | E | 36,042.00 |
| Use of computers & other equipment | E | 24,490.00 |
| MOE telephone | E | 2,050.00 |
| Materials & Supplies (Printing CA test materials) | E | 137,978.00 |
| Use of facilities for meeting | E | 1,080.00 |
| Staff time general | E | 128,500.00 |
| P.C.V. Salaries | E | 341,090.00 |

| | | |
|--------------|----|------------|
| TOTAL | E | 864,368.00 |
| U.S. Dollars | \$ | 308,703.00 |
| | | ===== |

Total contribution 1 August 1990 - 31 August 1993

| | | |
|-----------------|---|--------------|
| Previous Period | E | 2,203,292.00 |
| This Period | E | 864,368.00 |
| | | ----- |
| TOTAL | E | 3,067,660.00 |
| U.S. Dollars | E | 1,095,593.00 |
| | | ===== |

Exchange rate used: \$ 1.00 = E 2.80

INSTITUTE FOR INTERNATIONAL RESEARCH
EXPENDITURES FOR PERIOD
MARCH 1, 1993 - AUGUST 31, 1993

| | | |
|-----|----------------------------------|---------------|
| 1. | Salaries | 122,832.74 |
| 2. | Benefits | 39,627.25 |
| 3. | Overheads | 23,663.96 |
| 4. | Consultant Fees | 14,289.69 |
| 5. | Travel, Transportation, Per Diem | 28,578.66 |
| 6. | Allowances | 21,433.25 |
| 7. | Other Direct Costs | 20,286.50 |
| 8. | Equipment & Supplies | 2,330.58 |
| 9. | Training | 221,025.31 |
| 10. | Sub Contracts | 55,237.06 |
| 11. | G & A | 54,702.75 |
| | | <hr/> |
| | | \$ 604,007.75 |
| | | ===== |

IIR CONTRACT EXPENDITURES
1 AUGUST 1990 - 31 AUGUST 1993

| <u>Category</u> | <u>Contract Budget</u> | <u>Expenditures to 31/08/93</u> |
|-----------------|----------------------------|-------------------------------------|
|-----------------|----------------------------|-------------------------------------|

TECHNICAL ASSISTANCE

Long Term

| | | |
|------------------------|-----------|------------|
| Salaries and Wages | 1,372,835 | 746,091.78 |
| Fringe Benefits | 430,259 | 230,927.97 |
| Overhead | 288,761 | 161,116.53 |
| N.M.S.U. Sub (Bergsma) | 183,416 | 193,332.45 |
| Travel | 315,794 | 248,759.26 |
| Allowances | 257,496 | 145,930.82 |
| Other Direct Costs | 269,642 | 125,173.01 |
| Matl, Supl, & Equip. | 129,017 | 109,672.46 |
| G & A | 352,922 | 212,412.56 |

| | | |
|-------|-----------|--------------|
| TOTAL | 3,600,142 | 2,163,417.44 |
|-------|-----------|--------------|

Short Term

| | | |
|--------------------|---------|--------------|
| Consultants | 148,810 | \$ 79,729.14 |
| N.M.S.A. Sub (Chu) | 101,083 | \$ 96,534.28 |
| U.Mass Sub | 223,072 | \$ 70,891.50 |
| Consultant Travel | 310,414 | \$ 48,609.01 |
| G & A | 85,416 | \$ 32,558.10 |

| | | |
|-------|---------|------------|
| TOTAL | 868,795 | 328,322.02 |
|-------|---------|------------|

| | | |
|----------------------|-----------|--------------|
| Total Technical Ass. | 4,468.937 | 2,491.739.97 |
|----------------------|-----------|--------------|

TRAINING

Long Term

| | | |
|---------------------|---------|--------------|
| In-Country Training | 953,138 | \$440,308.51 |
| G & A | 103,811 | \$ 48,220.76 |
| Masters Degree | 279,062 | \$110,921.75 |
| G & A | 30,263 | \$ 12,036.15 |

| | | |
|-------|-----------|------------|
| TOTAL | 1,366.274 | 611,487.17 |
|-------|-----------|------------|

SHORT TERM

| | | |
|----------------|------------------|-------------------|
| Umass Sub | 94,981 | \$ 81,485.55 |
| G & A | 10,396 | \$ 8,933.45 |
| Study Tours | 56,001 | \$ 7,596.81 |
| G & A | 6,071 | \$ 823.50 |
| TOTAL | <u>167,449</u> | <u>98,839.33</u> |
| TOTAL TRAINING | <u>1,553,723</u> | <u>458,455.44</u> |

COMMODITIES

| | | |
|-------------------|-------------------------|----------------------------|
| MITCHELL SUB | 638,224 | 202,864.70 |
| G & A | 70,136 | 22,943.14 |
| TOTAL COMMODITIES | <u>708,360</u> ===== | <u>225,807.84</u> ===== |

POLICY STUDIES

| | | |
|---------------|------------------------------|------------------------------|
| CONFERENCES | 44,053.00 | 10,680.85 |
| EXPER. ACTIV. | 000.00 | 000.00 |
| G & A | 4,736.00 | 1,118.00 |
| | <u>48,789.00</u> ===== | <u>11,799.65</u> ===== |
| TOTAL COSTS | 6,759,809.00 | 3,439,673.44 |
| AWARD FEE | 199,884.00 | 88,566.00 |
| \$ | <u>6,959.693.00</u> ===== | <u>3,528,239.44</u> ===== |

PEACE CORPS

One of the two Peace Corps volunteers assigned to the CA Unit in January 1993, Miss Sheila Deevy, completed her term in June. The CA Unit is now left with one PCV, Mr. Dan Smith, who has taken over Miss Deevy's responsibilities. He will continue to assist the CA Unit in: (a) materials production -- e.g., word processing, desktop publishing, and other computer applications required to produce the tests and remedial materials developed by the CA instructional designers, (b) database filing -- creating/updating database files for pilot test data, and training the typist/secretary to do the same, (c) tryout of CA materials -- lab school testing and pilot schools, (d) training -- assisting the professional staff as a facilitator during CA workshops and feedback seminars, and (e) other tasks as requested by the CA Coordinator and/or writing drafts of item specifications for Science.

PCV Sue Grolnic continued to act as the MIS Specialist, working with Messrs. Dawson and Christensen on the combined OD/MIS effort. She was responsible for the establishment and maintenance of the MIS, including development procedures for acquiring reliable, timely data, updating the MIS databases and information dissemination. She produced reports, and provided data and technical support to both Ministry of "external" clients. Ms. Grolnic developed and implemented training programs for REO staff, head teachers and teachers on Scantron scoring. She created a series of monthly workshops on "Understanding Information" for MOE personnel. Additionally, she provided tactical support to CA during the trial-run of the first nation-wide implementation of the CA grade one Maths and English testing.

SECTION VI

PROGRESS ON ANNUAL WORKPLAN ACTIVITIES

CONTINUOUS ASSESSMENT

Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul

| | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|
| 1. Complete Gr.1 pilot testing | | | | | | | | | | | | |
| 2. Print & distribute Gr. 1 mats for nationwide implementation | | | | | | | | | | | | |
| 3. Train CA staff to write PL mode & use PGL for training | | | | | | | | | | | | |
| 4. Write CA training modules | | | | | | | | | | | | |
| 5. Train regional trainers for Grade 1 | | | | | | | | | | | | |
| 6. Conduct tests for Gr.1 baseline data | | | | | | | | | | | | |
| 7. Regional trainers train HTs & Gr.1 teachers | | | | | | | | | | | | |
| 8. Conduct 1st Term tests and data analysis | | | | | | | | | | | | |
| 9. Develop Grade 2 & 3 pilot materials | | | | | | | | | | | | |
| 10. Train Gr.2 & 3 pilot teachers | | | | | | | | | | | | |
| 11. Pilot test Grade 2 & 3 materials | | | | | | | | | | | | |
| 12. Hold 1-day seminar for subject panels | | | | | | | | | | | | |
| 13. Hold test development workshops for developing workshops for Gr.4 & 5 | | | | | | | | | | | | |
| 14. Develop and LVR prototype Gr.4 & 5 mats. | | | | | | | | | | | | |
| 15. Send 2 6 months interns | | | | | | | | | | | | |
| 16. Send 1 MA trainee | | | | | | | | | | | | |
| 17. Select 2 2 month interns | | | | | | | | | | | | |
| 18. Assit in NCC-TTC/UNISWA collaboration | | | | | | | | | | | | |

CONTINUOUS ASSESSMENT

1. Complete Gr. 1 pilot testing
Accomplished.
2. Print and distribute Gr. 1 materials for nationwide implementation
Accomplished.
3. Train CA staff to write PL modules & use PGL for training
Accomplished.
4. Write CA training modules
Accomplished.
5. Train regional trainers for Grade 1
Accomplished.
6. Conduct tests for Gr. 1 baseline data
Accomplished.
7. Regional trainers train HTs and Gr. 1 teachers
Accomplished in January (original workshop schedule) and in April (make-up workshops for those who failed to attend in January).
8. Conduct Grade 1 first term tests and data analysis
Partially accomplished. The testing was completed successfully. However, the field test of the Scantron system proved it to be unsuitable for use with CA. As a result, the Scantron data analysis was dropped.
9. Develop Gr. 2 & 3 pilot materials
Accomplished.

10. Train Gr. 2 & 3 pilot teachers

Accomplished.

11. Pilot test Gr 2 & 3 materials

Partially accomplished. The third term tests for Grade 2 were pilot tested in November 1992 in the third grade classes. Those for Grade 3 were pilot tested in early February 1993 using beginning Grade 4 pupils. The materials for the first term have been tried out and a feedback seminar held with the pilot teachers to discuss revisions. The second term tests will be pilot tested in August or mid-September (depending on the availability of vehicles).

12. Hold one-day seminars for subject panels

Partially accomplished. Only the first seminar (on November 27, 1992) was held. The second, scheduled for some time in April, could not be held because priority was given to the make-up workshops held during that month for Grade 1 teachers who missed the January training workshops.

13. Hold test development workshops for Gr. 4 & 5

Accomplished. Workshops were held during the last two weeks of January by Dr. R. K. Hambleton.

14. Develop and LVR prototype Gr.4 & 5 materials

In process. The first drafts of the third term tests were completed by the two CA-INSET staff who were sent to UMass for two-month internships. The local CA staff have written the objectives and item specifications for the first and second term. These were sent to Dr. Ron Hambleton last May for review, and the designers concerned are awaiting his feedback.

15. Send two 6-month interns

Accomplished. Newman Khumalo and Michael Mhlongu were sent in September to the University of Massachusetts for their 6-month internships. They returned to Swaziland on February 20th.

16. Send one MA trainee

Accomplished. Ellen Thwala was sent to Ohio University last fall and is expected to return by the end of August, one year earlier than planned. This is because Miss Thwala registered for summer classes, in addition to taking the maximum (full) load each semester, in order not to miss the required courses when they were offered.

17. Select two 2-month interns

Accomplished. Busi Nkomo and Dumile Vilakati (CA/Inset staff) left on February 26th and returned at the end of April.

18. Assist in NCC-TTC/UNISWA collaboration

Accomplished. A half-day meeting was held with representatives of the TTCs and UNISWA on April 21st. The meeting was well attended. The 16 representatives expressed their desire to prepare their students for the CA programme. They requested that the CA staff conduct a training workshop for all the TTC and UNISWA faculty. This workshop was conducted for three days in August.

HEAD TEACHER MANAGEMENT TRAINING

| | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Train 200 head teachers | | | | | | | | | | | | |
| 1a. Prepare training teams | | | | | | | | | | | | |
| 1b. Evaluate 200 Head Teachers | | | | | | | | | | | | |
| 1c. Materials preparation | | | | | | | | | | | | |
| 1d. Management training staff seminars | | | | | | | | | | | | |
| 2. Train trainers, inspectors | | | | | | | | | | | | |
| 2a. Hire TOT Consultants | | | | | | | | | | | | |
| 2b. Train trainers, inspectors, POMI | | | | | | | | | | | | |
| 3. Enhance CA and Career Guidance supervision | | | | | | | | | | | | |
| 4. Publish training modules | | | | | | | | | | | | |
| 5. Provide incentive programme, trip | | | | | | | | | | | | |

HEAD TEACHER MANAGEMENT

Train 200 head teachers

Accomplished. The training plan, outlined for the whole Head Teachers Management Course for Cycle Two, was successfully followed and completed on time. The Head Teacher Management Training Team (consisting of two EPMT Management Trainers plus the INSET Regional Team Leaders and their logistical coordinators) worked together well, with the supervision of the Director, INSET, and mounted a very professional course. One hundred and ninety-two out of a total of 215 head teachers who took the course successfully completed all four components.

1a. Prepare training teams

Accomplished. Two-day sessions were held prior to the Personnel Management, Instructional Leadership and Organizational Management components to prepare the programmes, assign training tasks, and finalize plans for the training modules.

1b. Evaluate 200 head teachers

Accomplished. All the Cycle Two trainee head teachers took tests which were marked and graded by the Management Training Team. Individual scores were recorded. Plans to machine-score the tests by use of Scantron were abandoned due to technical problems with the machines.

1c. Materials preparation

In process. The tests prepared for machine-scoring were used for the first time, and improvements needed to be made. The review study guides are also in the process of revision.

1d. Management training staff seminars

Accomplished. The Head Teacher Management Training Team has continued to meet once a week to plan and coordinate activities. These meetings were chaired by the Management Team Coordinator, and monitored by the INSET Director.

2. Train trainers, inspectors

Accomplished. The Training of Trainers Programme was successfully completed for a group of 14 trainers (inspectors, selected secondary head teachers, and INSET officers) who did not receive, or missed parts of, the original Training of Trainers. The Money Management Training was carried out by a consultant, Mr. R. Martin in February, 1993. A second consultant Dr. H. Bergsma, in conjunction with the INSET Director and the Management Team, carried out the rest of the Training of Trainers in June.

2a. Hire TOT consultants

Accomplished. Dr. H. Bergsma was hired to consult for four weeks during June, 1993, to complete the Training of Trainers programme, and to implement a course for inspectors.

2b. Train trainers, inspectors P.O.M.I.

Accomplished. In addition to training the trainers, a 2-day course was mounted for all primary inspectors in clinical supervision and in a school supervision model.

3. Enhance CA and Career Guidance supervision.

In process. Two of these INSET lecturers assigned to work part-time with the CA Testing Unit were sent for short internships to the University of Massachusetts, where they wrote item specifications for Grade 2 Mathematics and Grade 2 English. CA has continued to be promoted, both through the Open Days held monthly at each Regional Teachers Centre (TIDC) for Local In-Service Education Teachers (LITS), and at the monthly Open Days held for head teachers (also at the Teachers Centres). The resources of the INSET Materials Production Unit have been used to produce Career Guidance Handbooks for primary schools.

4. Publish training modules

Accomplished. Printing of the revised trainers and trainees books for Instructional Leadership and for Organizational Management was accomplished in time for training Cycle Two head teachers. Printing of the revised trainers and trainees books for Money Management was

carried out in July in time to begin the training programme for Cycle Three in August.

5. Provide incentive programme, trip

Accomplished. A successful educational tour to Zimbabwe was arranged for inspectors and INSET staff who were trainers for Cycle One and Cycle Two. The trainers visited various institutions and schools, and learned about in-service and pre-service teacher training activities in Zimbabwe, and about the system for school supervision by inspectors. In addition, the head teacher trainers were paid for twenty days of training which they carried out during their leave time. Both these incentives were well-received, and effectively motivated the trainers.

MANAGEMENT INFORMATION SYSTEMS

1. Develop data base update procedures

Accomplished. Arrangements have been made with TSC to have their data base operators (who were trained by the MIS specialist) do the data entry for MIS. Procedures have been established.

2. Develop management of information flow procedures

In process. The procedures have been established, but there is a continuing need to work further with the REOs and other mid-level managers to make final plans for information flow.

3. Create generic report generator tools

Not yet accomplished. This process was put on hold during the last semi-annual reporting period due to lack of MIS counterpart. As the counterpart was hired at the very end of this reporting period, the task remains on hold.

4. Develop information flow process for REOs and Inspectors

In process. Meetings with REOs continue and meetings with Inspectors will be scheduled later in the year.

5. Train Regional Education Office staff

In process. When the Schools Profile updates are distributed to the REOs, the staff will receive additional training in its use.

6. Develop procedures for acquisition and management of new data sources

In process. This is an ongoing process. As new data sources are added, the procedures for data acquisition and management will be modified, as necessary.

7. Data entry - annual survey

Accomplished. See previous semi-annual report.

8. Produce "Swaziland Education in Pictures"

Replacement in process. In lieu of "Swaziland Education in Pictures", MIS will prepare a bi-monthly report. Each report will focus on one topic and will serve the same purpose as "Swaziland Education in Pictures" - presenting simply and clearly information about the educational system.

9. Provide input into the establishment and management of a TSC data base

Accomplished. See previous semi-annual report.

10. Support training of TSC data entry personnel

Accomplished. See previous semi-annual report.

11. Establish procedures for disseminating TSC data to MIS

Accomplished. See previous semi-annual report.

12. Develop tool/procedures for Scantron answer sheet design

Accomplished. See previous semi-annual report.

13. Train Regional Education Office staff in Scantron

Accomplished. At every REO, a team of staff members was trained in the use of the Scantron scoring device, the printer and the computer.

14. Monitor Scantron scoring of national tests

Accomplished. Every REO was monitored during their scoring of the tests.

15. Analyze results of national test

Dropped. Based on an evaluation of the Scantron scoring process, the decision was made to drop this procedure.

16. Generate research appropriate subjects

In process. In cooperation with WUSC, MIS is developing a process through which volunteers, paired with Swazi teachers, will do classroom observational research.

17. Manage research study

In process. MIS is currently managing a research study being done by a member of NCC. It is studying the Book Rental Scheme.

ORGANIZATIONAL DEVELOPMENT

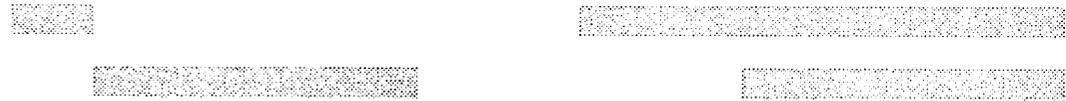
1992

1993

Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug

Improving Operations

1. Establish processes for sharing insights derived from various reports
2. Assist teacher supply planning



Use of Analysis and Research
Preparation of Policies & Procedures

3. Promulgate regulations for certification of heads of school
4. Review factors relating to student achievement
5. Strengthen processes for implementation of continuous assessment & remediation



Extend Organizational Development Efforts

6. Support preparation of 1993/94 budget
7. Coordinate planning for implementation of budgeted programmes and projects



Support Preparation and organization of national symposium

8. Plan national symposium
9. Conduct national symposium



ORGANIZATIONAL DEVELOPMENT

1. Establish processes for sharing insights derived from various reports
Accomplished.
2. Assist teacher supply planning
Accomplished. Work on forecasting teacher supply is awaiting further MOE action on formulation of future plans.
3. Promulgate regulations for certification of heads of schools
Not accomplished. Regulations have been drafted and discussed at appropriate levels in MOE. Further action is required by the MOE in conjunction with the Attorney General's Office, is pending.
4. Review factors relating to student achievement
Accomplished.
5. Support campaign to reach Grade 1 panels, gatekeepers and school personnel
Accomplished. Materials for the first series of parents meetings to be conducted by head teachers were produced and distributed to schools.
6. Support preparation of 1993/94 budget
Accomplished.
7. Coordinate planning for implementation of budgeted programmes and projects
Accomplished.
8. Plan national symposium
In process. Seven planning meetings have been conducted and documented. However, no further meetings have been held since most of the symposium planning team are presently engaged in preparations for

the national democratic elections. It is participated that planning sessions will begin towards the end of October.

9. Conduct national symposium

Not yet accomplished. The symposium has been postponed to early 1994 as all senior MOE officials are heavily involved in the organization of the national democratic elections and will not be available until after mid-October (at which time annual external examinations begin).

Aug Sept Oct Nov Dec Jan Feb Mar Apr May June July Aug

CAREER GUIDANCE

1. 3 week US study-tour - Acting Director ETGPS
2. Program support for study tour, strategic support for SA regional guidance workshop
3. Career infusion workshop for LITs
4. 2-week upgrading workshop for ETGPS staff

CAREER GUIDANCE

1. 3 week US study tour - Acting Director ETGPS

Accomplished. A 3-week tour was successfully carried out in March. It included visits to Ohio University and New Mexico State University, as well as attendance at the American Counsellors' Association symposium in Atlanta, Georgia.

2. Program support for study tour, strategic support for SA regional guidance workshop

Accomplished. Dr. Lily Chu arranged a relevant study tour for Mrs. Nsibande and supported her in the United States. Dr. Chu also consulted with Mrs. Nsibande to begin preparations for the regional guidance workshop.

3. Career infusion workshop for LITS

Accomplished. A one-day workshop was held in each region. Each workshop was attended by approximately 40 Grade 7 Social Studies teachers, who learned about guidance principles and the guidance unit included in the new Grade 7 Social Studies textbook which will be introduced in 1995.

4. 2-week upgrading workshop for ETGPS staff

Accomplished. A staff development workshop was held for ETGPS core staff during the week of April 26 - 30. It was led by Dr. Kandji-Murangi, a consultant from Botswana. The following week Dr. Kandji-Murangi led a workshop for more than 100 secondary school guidance teachers as well as two members of the Royal Swaziland Police Force.

GLOSSARY

GLOSSARY

| | |
|-------|--|
| CA | Continuous Assessment |
| CG | Career Guidance |
| CSO | Central Statistics Office |
| DIES | District In-Service Educators |
| DP | Decision Process Study |
| EOPS | End of Project Status Indicators |
| EPMT | Educational Policy, Management and Technology Project |
| ETGPS | Educational Testing Guidance and Psychological Services |
| GOS | Government of Swaziland |
| IIR | Institute for International Research |
| INSET | In-Service Educational Training Unit |
| LITS | Local In-Service Teachers |
| MIS | Management Information Systems |
| MOE | Ministry of Education |
| OD | Organizational Development |
| PCV | Peace Corps Volunteer |
| POMI | Personnel Management, Organizational Development, Money Management and Instructional Leadership |
| PS | Principal Secretary |
| PTD | Primary Teacher's Diploma |
| REO | Regional Educational Office/r |

| | |
|-------|--|
| RPU | Research and Planning Unit |
| STD | Secondary Teacher's Diploma |
| TA | Technical Adviser |
| TIDC | Teaching Innovation Distribution Centre |
| TOT | Training of Trainers |
| TSC | Teaching Service Commission |
| TTC | Teacher Training College |
| USAID | United States Agency for International Development |

APPENDICES

APPENDIX 1

**UNIVERSITY OF MASSACHUSETTS
SUB-CONTRACT REPORT**

Professor Ronald K. Hambleton

University of Massachusetts

Six-Month Progress Report (March 1 to September 23, 1993)

I am pleased to be submitting our six-month progress report though of course disappointed that this will be my last progress report on the project. As per your request two years or so ago. I have organized this and previous progress reports into two sections: Continuous Assessment and Internship Program. I have also organized the material in each section into two sub-sections: Description of Activities and Recommendations. A brief summary of our work is provided at the end of this report along with a list of the products we have submitted. Some of the work is in final form and other materials are in the form they were in when the project was terminated.

Continuous Assessment

Description of Activities

We completed a number of activities on the project since March 1 of this year:

1. We completed an analysis of the tests, and test manuals, and item response data available on the Grades 2 and 3, term 3 tests in the areas of English and Mathematics and prepared reports. Copies of these reports are attached to this progress report.
2. Working closely with the short-term interns, we were able to assist in the preparation of multiple drafts of the Grade 4, term 3 English and Mathematics item specifications, tests, and test manuals. This was one of our main activities in this time period. We met on a regular basis with the interns to edit and revise multiple drafts of the materials. The final versions (and diskettes) were returned to Swaziland with the interns in April.
3. In anticipation of the January 1994 workshops for Grades 5, 6 and 7 teachers, workshop materials from previous workshops were edited and improved, and new examples were prepared. This work was not completed, but even in its current form, it should be useful to those who will continue with training. A copy of the revived workshop handout is attached to this report.

4. Some time was spent in this period working on the Teacher's Handbook on Testing. After reorganizing the proposed content, we anticipated the production of five modules. However, with the termination of the project, only four were completed. I may try to finish up the last one on my own time in the next month or two and send it on. It is drafted and won't need much more work to be in good shape.
5. I spent time preparing a critique of several sets of Grade 4 item specifications: Grade 4 English and Mathematics, Terms 2 and 3. A memo is attached to this report along with editorial remarks on the item specifications themselves.

Recommendations

What follows is a short list of recommendations which follow from the work described above:

1. We seem to have established an effective plan for preparing and reviewing test at UMass and it would be desirable from the perspective of the project to continue that plan. There is a substantial difference in the quality of the tests produced at UMass with the interns, technical assistance, leadership, and good facilities, and the test produced in Swaziland. This was quite evident from our review of the Grades 2 and 3 tests recently. Based upon what I have seen, I have serious reservations about the ability of Swazi educators with limited available test development time in their schedules, technical leadership, technical assistance, and resources to produce the quality of tests that are needed in Swaziland at this time. Though a different decision has been made already, I want to be on record as recommending the continuation of test development and test review work at UMass since I am certain that such a recommendation is in the best interests of the project. It is a false saving of resources to discontinue our association with the project. Even if the decision is to focus attention on only the Grade 1 to 4 tests, our services would be valuable. I have seen little evidence that quality test revisions can be completed in Swaziland without technical assistance.
2. There remains a need to co-ordinate the production of the two handouts in the works by the continuous assessment staff and the UMass team. I continue to feel that the UMass work is being undervalued in this area. Our recommendation is that more attention be given to the four modules we have prepared and the related workshop materials. Some of the best

training to-date has been directly or indirectly based upon our instructional materials.

3. The production of Mathematics and English objectives should be improved. There is a real need to develop a proper scope and sequence in the English and Mathematics curricula. This is not my area of expertise but the problem is quite obvious that there has been little coordination across grades, and within grades there appear to be major gaps in the curricula. For example, in English, reading comprehension and study skills need to be emphasized more, and in mathematics, problem-solving is missing. In sum, I'm not at all impressed with the curriculum building work that has been done, and without this work being better, teaching, instruction, testing, and even teacher training suffer.
4. UMass served many functions but one of the most important was in the area of teacher training. In fact, I believe we were responsible for some of the best training that was given and motivating many persons to work hard on the project. I would recommend that USAID take a close look at the decision to remove UMass from a training role in the project since it was in this area that we were extremely successful. USAID may want to check with some of the Swazi educators such as Tim Nsingwane and Concilia Munro and others. Quite frankly, I don't think USAID could have been aware of our contributions, and our cost effective contributions to the project in relation to other components.
5. We continue to recommend that all item specifications, tests, teacher test instructions, and scoring keys, be carefully reviewed before they are used. At the Grade 2 level, item specifications were either not produced, or were produced poorly. Failure to write item specifications is a serious error and should be corrected. Failure to carefully edit material before it goes into the field is wasteful of everyone's time, and leads to criticism that is unnecessary.
6. The whole idea of producing fixed criterion-referenced tests to measure less than clearly written, meaningful, comprehensive objectives needs to be re-thought. First, meaningful and well written objectives are needed. Second, item banks are needed from which tests can be computer generated on an as needed basis. The current plan is inefficient and years behind current technology. I might add that I'm not at all impressed with the work done to date on the computer system. In the three years I have seen nothing useful, clever, or helpful and in view of the resources expended in this area, this whole area of computer

technology to support the testing and instructional system may need to be re-thought.

7. Our four modules should be required reading by CA staff and in-service staff. I am certain that a careful reading of these modules will enhance the quality of the test development work.
8. In reviewing the Grade 2, term 3 tests we noticed that many changes were made in the tests we had submitted for review and field-testing in Swaziland. Often we felt that the changes did not improve the questions and equally important, when changes were made, the manuals were not always revised correctly. However the merits of the changes to the tests were lost because of the failure to modify the test directions and scoring keys. We suspect too that the item specifications were not revised, or revised correctly either to correspond to test revisions. Considerable care was taken in producing the test at UMass with the aid of Swazi interns. Changes should only be made when there are good reasons to do so. And when changes are made, every effort must be made to revise the tests accordingly, as well as the test manuals, scoring keys and item specifications. Otherwise, chaos will result in the tests, manuals, use of the item specifications, etc. Someone should be put in charge to see the instructional system is internally consistent.

Internship Program

Description of Activities

The two Swaziland interns, Ms. Dumile Vilakazi and Ms. Busi Nkomo worked hard and effectively during their two months on the UMass campus in March and April of this year. They worked on the Grade 4, term 3 Mathematics and English item specifications, tests, test manuals, and score report forms.

Let me briefly sketch out our activities:

1. The logistic arrangements for the interns' visit was handled without major problems. With the short term interns, and so little money involved, we were pleased to see the interns paid directly by IIR and a sub-contract written for the remaining funds to UMass.
2. The interns arrived in early March, rested for several days at the University hotel, moved into graduate student housing, and remained there until they departed on April 30. Both housing and eating facilities

seemed adequate and certainly cost-effective. We were not aware of any problems that arose. On the contrary our impression was that these arrangements were excellent and we would happily recommend them again.

3. The interns worked hard on several activities: (a) production of item specification, tests, and test manuals for Grade 4, Term 3 English and Mathematics, and assisted in the design of report forms, (b) completed part of one graduate-level course (Principles of Testing), and (c) completed a reading program in educational testing practices. Time was not available for them to visit any local schools.

We will miss very much our work with the interns. The work was challenging and professionally rewarding, and also the interns worked effectively with our staff and students, and contributed to the positive atmosphere within our department. I will miss Tim, Concilia, Michael, Newman, Busi and the others.

Recommendation

1. The internship program initiated at UMass seems to be suitable and we would highly recommend such a program in the future with other related projects. Three components are essential to the success of the program: (1) good planning, (2) selection of hard-working and dedicated interns and (3) persons in the U.S. who are conscientious, knowledgeable, personable and willing to spend substantial amounts of time with the interns.

Summary

With this final progress report, I have submitted several documents:

1. Four Test Reviews: Grade 2, Term 3 English and Mathematics; Grade 3, Term 3 English and Mathematics.
2. Workshop Overheads for Instruction in Criterion-Referenced Test Development.
3. A critique of Grade 4, Term 1 and 2 English and Mathematics item specifications, and marked up copies of the materials with my remarks.

4. Revised Teacher's Handbook on Achievement Testing (Module 1 to 4). (To be mailed in two weeks).

We submitted the following documents previously:

1. Grade 1, English, Terms 1, 2 and 3, item specifications, tests, and test manuals.
2. Grade 1, Mathematics, Terms 1, 2 and 3, item specifications, test, and test manuals.
3. Grade 3, English, Terms 1, 2 and 3, item specifications, tests, and test manuals.
4. Grade 3, English, Terms 1, 2 and 3, item specifications, tests, and test manuals.
5. Grade 4, English, Term 3, item specifications, tests, and test manual.
6. Grade 4, Mathematics, Term 3, item specifications, tests, and test manual.
7. Proposed reporting forms (submitted with the Grade 3 testing material).
8. Draft of a manuscript entitled, "Designing and Using Tests to Improve Instruction in Swaziland" written by Malaka, Mhlungu, and Khumalo and intended for use by classroom teachers.
9. Reviews of Swaz-produced Grade 2 item specifications and tests.
10. Objective and performance item specification: draft, critiques, and rewrites. (31 page report)

I have enjoyed my three years on the project immensely. I have met and worked with many hard-working and committed people at IIR and educators in Swaziland. I believe strongly in the goals of the project and feel, that with good leadership and co-operation among USAID, IIR and Swazi educators the project can be successful. I think it is ironic that the strongest technical unit within the project, and the unit that is both cost-effective in relation to many other units of the project is the one being dropped. I note with surprise that the new focus will be teacher training. Who better to co-ordinate the teacher training than the group that had done this work so well in the past and was contracted to do this

work for the duration of the project ? I can only assume that the persons making the final decision at USAID were not fully aware of the role that we played or the quality of the work that we did. But c'est la vie. I wish all of those who remain with the project the best of success and perhaps some of us will work together on other projects in the future.

APPENDIX II

SAMPLE MIS INFORMATION REQUESTS

SAMPLE MIS INFORMATION REQUESTS
during reporting period

Request

Person/Institution

List of secondary/high schools

American Cultural Centre

Randomly selected schools

NCC/UNICEF

Enrolments by grade

CA/INSET

Enrolments, current through 2000

PS/MOE

Teachers, current through 2000

PS/MOE