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**EDUCATIONAL POLICY, MANAGEMENT
AND TECHNOLOGY PROJECT**

PROJECT NUMBER 645-0230

**SEMI-ANNUAL REPORT
1 AUGUST 1991 - 31 JANUARY 1992**

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FOR
INTERNATIONAL
RESEARCH

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SECTION 1
INTRODUCTION

The 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, which is the key component of the project, 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 (i.e., 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 (possibly at the end of Term 1) will be transmitted to the 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 will be 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 teachers. This component has been included because research and experience have made it clear that principals and headmasters are probably the most important factor in school quality. It is they who are most 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 centers 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 most 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 must, therefore, be integrated into the overall effort of MOE to improve efficiency and effectiveness.

Major Developments during the Reporting Period

The Project suffered several unexpected staffing developments during these six months. Most serious was the sudden illness of the Chief of Party, Roy Thompson, which forced his absence from duties from the end of October. Acting in his place was Philip Christensen. Dr. Christensen had arrived in August to take over MIS responsibilities from Rick Johnson, who returned to the United States. Another blow was the delayed return to Swaziland from Christmas leave of Aida Pasigna, the Continuous Assessment specialist. Fortunately, successful strategies were developed to ensure that none of the Project's key objectives were delayed by these developments.

Highlights of the progress in EPMT components during this reporting period include:

- the completion of end-of term continuous assessment tests for Grade 1 English and Maths,
- the preparation (writing, editing and printing) of 900 pages of head teacher training materials for Money Management, Instructional Leadership and Personnel Management.
- the completion of data entry from the school mapping exercise, the incorporation of those data into the MIS system and the preliminary use of that system by MOE officials to guide planning decisions (particularly in relation to budgeting),
- the presentation of results from the Decision Process Survey to two meetings of MOE officials, and
- further progress in staff training and materials development for Guidance and Counselling.

SECTION II

**PROGRESS TOWARDS
END OF PROJECT STATUS
INDICATORS**

EPMT End of Project Status Indicators (EOPS)²

- 1. Increased number of children complete seven years of primary school on time.**
 - Percentage of primary students repeating one or more grades decreased over LOP, as measured by Management Information System data.
 - Percentage of students leaving primary school before graduation reduced, as measured by MIS data.
- 2. Student achievement improved.**
 - Primary school pass rates increased over Life of Project, as measured by MIS data.
 - Continuous Assessment test scores increased over LOP, as measured by MIS and CA evaluation data.
- 3. Primary and secondary schools are better managed.**
 - Accuracy of accounts kept by head teachers improved, as measured by on-site evaluation of school money management.
 - Cooperation between head teachers and teachers increased, as measured by on-site evaluation of personnel management.
 - Student performance improved by improved instructional leadership, as measured under EOPS 2.
- 4. MOE using empirically generated data to make policy and planning decisions.**
 - Amount and utility of MOE management information improved, as measured by site visits to MOE Headquarters and Regional Education Offices, analysis of Research and Planning Unit reports and review of MOE study results.
- 5. Increased awareness among students of career choices and resources for identifying options.**
 - Career awareness of Grade 7 students measured by special evaluation carried out near the End of Project.

²These EOPS are based on the draft revisions currently under review by USAID.

1. Increased number of children complete seven years of primary school on time.

Baseline data. The education system has experienced rapid growth in the past 20 years. The number of schools has grown almost two-fold, the number of students is more than three times greater and teachers have increased by a factor of almost four. Low efficiency ratios -- largely created by students repeating often and by many students leaving the system before completing primary and secondary levels -- characterize the system today. A cohort analysis, based on 1988 flow rates applied to 1989 intake, indicated that the system invested 13 years to produce a primary school leaver in a 7-year cycle. The efficiency ratio, a measure of input divided by output, was calculated to be 1.84:1. In cost terms this suggests that the system is investing (in terms of teachers' salaries, facilities and learning materials) almost twice what would be required if it were completely efficient and generating a ratio of 1:1. (See Appendix II for further statistical analysis.)

Current situation. As demonstrated, efficiency is the prevailing issue in Swazi education at the present time. The main challenge lies in the advancement of policies and procedures that will contribute towards increased efficiency and thereby assist in the development of a cost-effective system.

In spite of rapid and sustained growth there are still about 34,000 children between the ages of 6 and 12 who are not in school. The gross enrolment ratio is close to 100%, indicating that there are large numbers of over-age children in the system. A factor contributing to inefficient learning, therefore, is the inappropriateness of the age of some children for their grade level. The system is structured like a pyramid, with approximately 79% of students in primary education, 20% in secondary and about one per cent in post-secondary institutions. Students in Form V (the final year of secondary) number about 10 % of those enrolled in the first grade.

The national pupil/teacher ratios of around 32:1 in primary and 20:1 in secondary compare favourably to other countries in the region. However, these averages mask wide disparities between districts and schools.

A review of efficiency ratios generated over a twenty-year period indicates fluctuations between 1.67 and 1.92, implying that no steady improvement is evident yet. An analysis of 1990 flow rates applied to 1991 intake has yielded a ratio of 1.59, indicating a considerable improvement in the latest year. The number of years invested in the primary system has fallen accordingly to 11. Until this trend is seen to continue in future years, however, it would be imprudent to draw any immediate conclusions from the one-year improvement.

Strategies for meeting the target. To achieve increased efficiency in the primary education system various policies and procedures need to be advanced and implemented. Areas for immediate policy consideration include strategies aimed at:

- increasing the amount and utility of management information in order to improve analysis of the system and thereby improve decision-making,
- reducing drop-out and repetition rates (particularly reinforcing continuous assessment and remediation as a high priority means toward achieving this goal),
- training head teachers in instructional leadership roles to improve the quality of teaching and in resources management to improve the learning environment,
- targeting appropriate age-for-the-grade in order to increase the effectiveness of learning,
- achieving equitable pupil/teacher ratios throughout the country (and perhaps raising these ratios as a cost-saving device),
- introducing multi-grade teaching in small rural schools (and double shifts in crowded urban environments) and
- establishing the affordability of free compulsory and universal primary education up to the end of Grade 4 to ensure a sustainable literate population (as recommended in the NERCOM Report).

2. Students achievement improved.

Baseline data. Not much analytical work has been done on pupil achievement. The existing end-of-cycle examinations (at the end of Grade 7, Form III and Form V) are the only measures of pupil achievement available presently. These indicate acceptable flows of students to the next level. Once again, however, sharp differences exist between schools.

A few comments on the effectiveness of the system, however, can be made. First, an International Association for Educational Evaluation study undertaken in 1980/81 included two sub-Saharan Africa countries in an evaluation of mathematics teaching -- Swaziland and Nigeria. The score for the test was the total number of correct answers in a 40-item "core" test. The mean score for Swaziland was reported to be low at 12.9 (Nigeria was 14.4.) Second, the percentage of illiterates in Swaziland decreased from 44.8 in 1976 to 36.4 in 1986. This represents an annual reduction of less than 1 per cent. A 1990 UNESCO evaluation of the Sebenta Literacy Programme indicated that a minimum reduction of 5 per cent per annum is required if any meaningful impact is to be achieved. Increased output from the primary education system, and improved quality of teaching, is necessary if literacy rates are to increase favourably. Third, UNICEF has highlighted studies which indicate that there is a correlation between high female literacy rates and low infant mortality rates in countries in the region. Swaziland is in the anomalous position where comparatively high female literacy rates exist side-by-side with high infant mortality. This would suggest that increased knowledge and skills is necessary if attitudes and behavioral changes are to be achieved.

No baseline data are available from Continuous Assessment at this time. We plan to start administering a pre-test to Grade 2 students in February, 1993, the results of which will be used as baseline data for Grade 1 for that year. Alternatively, we could test the Grade 1 students at the end of the current school year to generate the baseline data for Grade 1 this year. However, this second option may not be feasible due to logistical problems and time constraints.

Current situation. Two forms of Grade 1 tests for the first, second, and third terms have been completed for pilot testing. Form A tests were prepared by the two interns at UMass with editorial feedback from Dr. Ron Hambleton and his staff. Copies of these tests will be printed and copies sent to the pilot schools by the end of March. Form B (posterized) tests have been developed

by the CA staff in Manzini, tried out in the two lab schools, and revised for pilot testing. Several remedial posters have also been developed. One hundred copies of some of the posterized materials have already been printed and are ready for distribution.

These Grade 1 tests and remedial materials will be pilot tested in 16 schools starting in April this year. The pilot school head teachers and Grade 1 teachers will be trained in their use at two workshops during the last two full weeks of March.

Strategies for meeting the target. The following testing strategies will be tried out: (a) train the teachers how to construct good criterion-referenced lesson and unit tests using standard item specifications developed by the CA staff; (b) develop end-of-term tests to be used in all the schools to provide standard instruments for measuring student achievement; and (c) develop remedial materials and procedures and train teachers in their use. In addition, the Head Teacher Management Training Programme will have a direct impact on this target through improved instructional leadership by school heads.

3. Primary and secondary schools are better managed.

Baseline data. A needs assessment was carried out during 1990-91, including visits to 50 schools and a curriculum review of previous training programmes for school heads. The Final Report on the Training Needs Assessment provides detailed information about the status of head teacher training as of that time, including 36 major categories of needs. One critical need identified by this process was better financial management. No previous training had been done in this area, and all schools visited were experiencing trouble with the reporting and handling of money. Additional needs were identified in the areas of instructional leadership, personnel management and organizational management.

Current situation. Nine hundred pages of training materials have been developed in Money Management, Instructional Leadership and Personnel Management. Five training books have been printed to support these three areas. Regional training teams comprising 32 to 36 people have been trained to deliver these three courses. The first 200 head teachers from primary schools across the country have been trained in Money Management and Instructional Leadership.

Strategies for meeting the target. Development of the training programme will be completed during the second half of Year 2 with the preparation and printing of two manuals for Organizational Development and the training of trainers in this area. The Organizational Development course will be delivered to the 200 primary head teachers currently enrolled. A formative evaluation plan for training (FEPT) has been developed. One local consultant is already evaluating the Money Management course. Other consultants will be identified in the future to evaluate the Instructional Leadership, Personnel Management and Organizational Development courses.

The Head Teacher Training Technical Adviser will conclude his contract in July, 1992. Beginning in Year 3 of the Project, the primary responsibility for delivering the four training courses to the 500 remaining primary and secondary school heads over a three-year period, and for revising the instructional materials as necessary, will rest with INSET with continuing support from EPMT). A proposal will be developed with the Ministry of Education that all head teachers in the country be certified on the basis of successfully completing the Management Training Course or passing an equivalent examination.

4. MOE 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 and Central Ministries, to name principal sources) typically worked in isolation from each other. Senior management in the MOE were unable to retrieve information on a demand basis and were very sceptical of the reliability of these disparate sources.

No central source of information or central monitoring system existed, making it difficult for the MOE to manage information and establish monitoring systems. The annual school census which the 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 usable MIS data base, incorporating information from CSO, TSC and Treasury, has been established. A stock-taking of facilities, teachers and students in all primary and secondary schools has been undertaken under the auspices of the 1991 school mapping exercise. This information is incorporated into the MIS data base.

Senior personnel in the MOE are increasingly asking for information on various critical topics: teacher qualifications, the financial contributions of communities to schools, the housing situation for teachers etc. A more complete list of information requests and responses is attached. (See Appendix III).

Information from the data base was used to prepare a draft policy proposal for the training of head teachers, linking MIS very closely with another component of the EPMT Project -- the Head Teachers Management Training Programme. The preparation of the 1992/93 capital budget is presently being determined by information regarding pupil/desk ratios in schools, pupil/class ratios, the number of usable toilets in schools and the ratio of teachers to houses. Priority development proposals will be based on the disparities demonstrated by information in the MIS data base.

Strategies for meeting the target. The MIS system will continue to be developed and expanded. The mapping data base will be completed. Data on student achievement will be added from the Continuous Assessment Programme. Data base update procedures will be developed to ensure continuing accuracy and timeliness of data. Links to other MOE/GOS departments will be strengthened to be certain that the system always contains accurate, up-to-date information. First priority will be given to confirming a close working relationship with the Central Statistics Office to provide annual reports on each school in the country. Another important challenge will be to link with the Teaching Service Commission for data on the teaching force. MOE personnel will be trained in MIS procedures and use. The MIS system will be disseminated outside of Headquarters, and appropriate training will be provided to allow its use in regional offices and at other decentralized locations. Special reports will be prepared for senior MOE officials and linked to critical policy and planning issues through the Organizational Development component.

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

Baseline data. Before the implementation of the Career Guidance at Grade 7 level, there was no career guidance program for primary schools. Presumably, primary students were not aware of or only had a limited awareness of career choices. The only exception were the seventh grade students who were involved in the pilot test of guidance materials in four schools: Mbasheni Primary, St. Theresa Primary, Siteki Central Primary, and Ngwane Practising Schools. Baseline data will be collected this year through a simple survey questionnaire (attached to the Headmaster Training formative evaluation) in 20 randomly selected seventh grades in the country, with care to skip those schools involved in the pilot study.

Current situation. Social studies curriculum designers have been trained to infuse career concepts into the Grade 7 curriculum. Several sample lessons have been developed and a Career Guidance unit has been completed. These will be included in the revised seventh grade social studies textbook which is scheduled to be printed and used in 1993.

Strategies for meeting the target. During the remainder of the second project year, workshops will be conducted to train trainers in order to reach all primary head teachers (scheduled for March 5), and to train teacher leaders in four TIDCs (scheduled for April 1 to 7). ETGPS staff will be involved in these workshops so that they will be able to take over the training functions in the future. ETGPS staff will also take over the in-service function to train social studies teachers to use these materials right before the new textbook is to be used in the classroom from 1993.

SECTION III OUTPUTS

The outputs reported in this section may require revision if the EOPS are revised as per the draft in Section II. However, this report will use the outputs currently in effect, since no draft output revisions have been prepared yet.

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

Regional training teams have been selected and trained. Instructional materials have been written and printed for three of the four subject areas: Money Management, Instructional Leadership and Personnel Management. Training has been provided to the first group of 200 head teachers in two subjects: Money Management and Instructional Leadership. Training in the remaining two subjects will be delivered by April, 1992. Total training time will be approximately 150 hours.

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

Project support to this output consists essentially of procuring commodities to equip the three new TIDCs. Lack of progress in their construction has prevented such support up to now. However, MOE has resolved the questions about management authority for the TIDCs and chosen three sites for the new ones: Siphofaneni, Hluti and Mankanyane. Construction plans have been prepared. MOE hopes that work on the first Centre, Siphofaneni, will begin in the coming fiscal year. This means that EPMT support might begin in Project Year 3.

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

A preliminary report on the Decision Process Survey was presented to key MOE officers in November, 1991. A follow-up meeting in December failed due to poor attendance, but the PS has requested that the meeting be rescheduled in the first half of 1992. At the PS's request, work has begun on a new study of the costs and financing of primary and secondary education in Swaziland.

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

The School Mapping Study was completed, and the data originally entered was verified and corrected. The results were incorporated into the MOE Management Information System. On the basis of this expanded MIS, several key reports were prepared for MOE officials and used in policy and planning exercises. Perhaps the most important area affected by these reports was the capital budget. Issues such as relative funding levels for primary, secondary and tertiary education, capital funding across districts, and the relative importance of specific budget categories such as furniture and toilets were discussed with empirical information on the actual situation in the country and the implications of alternative policy decisions. Such information had not been previously available to Ministry decision makers.

5. Tested English language instructional program.

No action has been taken by MOE on implementing the recommendations in the report of the successful pilot test of Interactive Radio Instruction in English. Work towards this output, therefore, has been suspended.

6. Increased student time on learning.

The Project's impact on student achievement depends on the interaction among its various components. Better school management, improved student evaluation, the use of remedial instructional materials in English and Maths, improved decision-making/policy implementation and a system for tracking student achievement are the principal Project-supported activities in this regard. Progress during the reporting period included the successful inauguration of national management training for head teachers, continued preparation of continuous assessment materials, staff training for both the Head Teacher Management Training and Continuous Assessment components, initial use of the embryonic Management Information System by senior MOE officials for policy development and planning (particularly in relation to the capital budget), and the successful use of the Decision Process Survey to draw the attention of MOE professionals to the overlooked importance of issues such as student achievement and system efficiency.

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

End-of-term tests for Grade 1 (English and Maths) were completed in two alternate formats. Worksheets and practice exercises for remediation were drafted. Lab school tryouts of the posterized version of the tests were carried out. Work on Grade 2 and 3 tests and remedial materials began (ahead of schedule). Orientation seminars for the English and Maths subject panels were held. The first two members of the NCC Continuous Assessment staff began their internships in the United States, through the University of Massachusetts.

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

The Project's strategy in this area is to support MOE's efforts to infuse guidance into 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. During the reporting period NCC staff were trained in Career Guidance infusion. New guidance materials, developed jointly with NCC, were pilot-tested, revised, and used in additional training workshops.

SECTION IV INPUTS

LONG-TERM TECHNICAL ASSISTANCE

Long-term Technical Advisers currently working with the Project are:

1. Mr. Roy Thompson, Organizational Development Adviser and Chief of Party

Expended months of service: 18

Remaining months of service: 42

2. Dr. Harold Bergsma, Management Training Adviser

Expended months of service: 18

Remaining months of service: 6

3. Dr. Lily Chu, ETGPS Adviser

Expended months of service: 6

Remaining months of service: 6

4. Dr. Aida Pasiona, Continuous Assessment Adviser

Expended months of service: 18

Remaining months of service: 6

5. Dr. Philip Christensen, MIS Adviser

Expended months of service: 5

Remaining months of service: 18

During this reporting period, in August, Dr. Richard Johnson, MIS Adviser, resigned his services with the project and was replaced by Dr. Philip Christensen as the MIS Adviser.

At the end of October, 1991, Mr. Roy Thompson, Chief of Party and Organizational Development Adviser, fell sick. Dr. Philip Christensen was then assigned as Acting Chief of Party while Mr. Thompson was convalescing.

SHORT-TERM TECHNICAL ASSISTANCE

The following consultants worked on the project during this reporting period.

Mr. Kevin Braim

Mr. Braim conducted a three-week desktop publishing workshop from 4th to 22nd November, 1991. The purpose of the consultancy was to conduct one week's training on WordPerfect 5.1 and basic desktop publishing, with INSET and NCC Career Guidance participants, and two week's advanced desktop publishing training for Continuous Assessment staff. The consultant also prepared an evaluation of the progress of the workshop participants.

Dr. Richard Johnson

Dr. Johnson, former MIS Advisor, returned to Swaziland as an MIS consultant and worked a total of two and a half weeks intermittently November 18 - 22 and December 2 - 10, 1991. During this period Dr. Johnson worked on improving the quality of the mapping study data base and writing routines for consolidating information from multiple database into a single, easily accessible one. He also produced some critical tables for enrolment projections and flow rates based upon the 1990 CSO data.

Mr. Cooper Dawson

Mr. Dawson was hired on a three-month consultancy as an Organization and Policy Development Adviser. His consultancy began on December 3, 1991. Mr Dawson was brought in mainly to work with Organizational Development after Mr. Roy Thompson fell sick.

Mr. Ron Martin

Mr. Martin came back in January 1992, to follow up on the Money Management training for head teachers, which he had designed and conducted in August, 1991. The purpose of this consultancy was to conduct a review of the material he had put together for this component of the Head Teacher Management Training Programme.

PARTICIPANT TRAINING

The Project seeks to place four candidates in Masters degree programmes by August: one for Continuous Assessment, one for Head Teacher Training, and two for Career Guidance. In order to increase the chance that four applicants will be admitted to U.S. graduate schools, a larger pool of applicants was identified. In the following list, those candidates who are primary choices are marked with an asterisk. All candidates have been approved by the Ministry of Education. They have taken TOEFL on January 11 and GRE on February 1st. Their applications to the following U.S. universities have been processed.

CAREER GUIDANCE:

1. * Lineo Vilakazi
Ohio University
Colorado State University
New Mexico State University
Eastern New Mexico University
University of North Texas
2. * Vusi Manyatsi
University of North Texas
Colorado State University
Eastern New Mexico State University
3. Agnes Mtetwa
University of North Texas
Eastern New Mexico State University

HEAD MASTER TRAINING:

1. * Israel Simelane
New Mexico State University
University of North Texas
Ohio University
Colorado State University
2. Lindway Gladness Zwane
Ohio University
Colorado State University
New Mexico State University

CONTINUOUS ASSESSMENT:

1. Cynthia Sbusiso Hlophe
Boston University
Indiana University
University of Southern California
Ohio State University
2. * Ellen Ntombi Thwala
Indiana University
Boston University
University of North Texas
Ohio University
3. Michael Mhlungu Vusumuzi
Boston University
Colorado State University
University of North Texas
Indiana University

IN-COUNTRY TRAINING

1. On-the-job training. On-the-job training on posterized testing and remediation was provided to the 10 CA staff (six from NCC and four from INSET) over the six-month period. The training included how to conduct lab school tryouts and how to improve the materials based on formative data (LVR, or Learner Verification and Revision).

2. Workshop on desktop publishing and use of graphics software. A 10-day training workshop (Nov. 4-8 & 11-15) on desktop publishing (Ventura 3) and the use of graphics software (HP Paintbrush and Harvard Graphics) was conducted by Kevin Braim for seven of the CA Unit's professional staff, two typists, and one illustrator. This workshop has enabled the staff to produce camera-ready text and some computer-generated artwork for the Form A tests (tests using conventional formats), the Form B tests (posterized test programmes), and posterized programmed teaching materials for remediation.

3. Orientation seminars for subject panels. Two one-day orientation seminars were held for the English and Maths panels on Oct. 30th and Nov. 1st, respectively. These seminars were attended by all the members of the primary education subject panels and representatives from the national panels. The panel members agreed that future updates/discussions concerning CA would be included in their regular panel meetings.

4. Orientation seminar for TTCs and UNISWA lecturers. A one-day seminar was held for selected members of the TTC and UNISWA faculty, at which presentations were made by the TAs and the Swazi counterparts for the five components of the project.

<u>Dates</u>	<u>Training Activities</u>	<u>Description</u>
Aug 19-20	NCC curriculum designers	Career infusion for primary curriculum
Nov 12-13	Social Studies Panel	Career infusion for Social Studies subject panel

<u>Training Activities</u>	<u>Dates</u>	<u>Trainers</u>	<u>Description</u>
TOT Money Mgt.using Micro-teach format	Aug.22,23	Martin, Bergsma	36 trainees Practice teaching
TOT Plan for Inst.	Aug.27-30	Same team	How to manage money
Money Management I	Sept.9-13	36 Regional Trainers	200 H.T./4 Regions
TOT Money Part II	Oct. 7	Training Team	36 Trainers
Money Mgt.II	Oct.21-25	36 Regional Trainers	200 H.T./4 Regions
TOT Instructional Leadership	Nov.25-29	Training Team	36 Trainers
TOT Personnel Mgt.	Dec. 2-6	Training Team	36 Trainers
Insructional Lead.	Jan.13-17	36 Regional Trainers	200 H.T./4 Regions
Personnel Mgt.	Feb.10-14	36 Regional Trainers	200 H.T./4 Regions
TOT Organizational Management	March 2-6	Training Team	36 Trainers

GOS CONTRIBUTION FOR PERIOD

- Provision of housing for TA's	E	36, 000.00
- Provision of offices (w.p. houses)	E	17, 880.00
- Office utilities	E	860.00
- MOE telephones	E	1, 300.00
- Materials and supplies	E	1, 700.00
- Use of duplicating machine	E	2, 900.00
- Use of computers & other equip.	E	31, 700.00
- Fuel	E	15, 390.00
- MOE transport costs for w/shops etc.	E	14, 530.00
- Use of facilities for meetings	E	3, 500.00
- Furniture, houses and offices	E	12, 696.00
- Staff time general	E	20, 664.00
- Staff time workshops	E	332, 000.00
 TOTAL	 E	 508, 100.00
U.S. Dollars	\$	181, 464.00

Total contributions 1 August 1990 - 31 January, 1992

Year 1	E	449, 558.00
'This period	E	508, 100.00

<u>E1,106,795.00</u>
=====
\$ 395,284.00

INSTITUTE FOR INTERNATIONAL RESEARCH
EXPENDITURES FOR PERIOD

1.	Salaries	119,736.17
2.	Benefits	37,517.32
3.	Overheads	26,394.17
4.	Consultant Fees	7,543.11
5.	Travel, Transportation, Per diem	58,609.62
6.	Allowances	33,673.58
7.	Other Direct Costs	16,609.19
8.	Equipment & Supplies	6,174.05
9.	Training	58,880.12
10.	Sub Contracts	206,424.15
11.	G & A	65,672.17
		<u>\$ 637,236.01</u>
		=====

IIR CONTRACT EXPENDITURES
1 AUGUST 1990 - 31 JANUARY 1992

<u>Category</u>	<u>Contract</u> <u>Budget</u>	<u>Expenditures</u> <u>to 1/31/91</u>
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TECHNICAL ASSISTANCE

Long Term

Salaries and Wages	885,578	335,401.72
Fringe Benefits	259,641	104,145.75
Overhead	191,334	78,465.39
N.M.S.U. Sub (Bergsma)	183,663	132,363.88
Travel	324,220	128,380.41
Allowances	45,330	78,830.84
Other Direct Costs	194,398	55,718.41
Matl, Supl, & Equip.	105,505	104,671.32
G & A	255,651	111,272.40

TOTAL

2,445,320
=====

1,129,250.12
=====

Short Term

Consultants	65,525	28,767.25
N.M.S.U. Sub (Chu)	147,203	59,301.92
U.Mass Sub	223,072	10,388.51
Consultant Travel	134,524	26,319.21
G & A	58,672	14,023.12

TOTAL

555,050
=====

138,800.01
=====

Total Technical Ass.	3,083.183	1,268,050.14
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TRAINING

Long Term

In-Country Training	720,000	88,563.50
G & A	85,104	10,091.62
Masters Dgree	279,228	1,247.00
G & A	33,011	117.40

TOTAL

1,117.403
=====

100,049.52
=====

SHORT TERM

Umass Sub	94,980	17,459.96
G & A	11,227	1,934.16
TOTAL	<u>106,207</u>	<u>19,454.12</u>
	=====	=====
TOTAL TRAINING	1,223.610	119,513.64

COMMODITIES

MITCHELL SUB	638,223	104,878.17
G & A	75,438	12,331.40
TOTAL COMMODITIES	<u>713,661</u>	<u>117,199.53</u>
	=====	=====

POLICY STUDIES

CONFERENCES	10,000.00	10,000.00
EXPER.ACTIV.	000.00	000.00
G & A	1,182.00	1,015.00
TOTAL POLICY STUDIES	<u>11,182.00</u>	<u>11,015.00</u>
	=====	=====

TOTAL COSTS	5,031,636.00	1,515,808.31
AWARD FEE	203,869.00	42,707.00
GRAND TOTAL	<u>\$ 5,235,505.00</u>	<u>\$ 1,558,515.00</u>
	=====	=====

PEACE CORPS

Two Peace Corps, volunteers, Ms. Grace Caines, and Ms. Sheila Deevey, have been working with the Head Teacher Management Training Programme for one year now, and have provided valuable inputs such as direct training, writing training modules, supervising staff, organizing training venues and accounting. Most importantly, they have been instrumental in setting up the computer system to input all the modules written in a special format, and preparing photo ready copy for the training modules in Instructional Leadership, Personnel Management and Organizational Management.

A third volunteer, Ms. Susan Grolnic, joined the MIS component in January, working in the Research and Planning Unit at Ministry Headquarters. She will be providing technical assistance in MIS system development, data collection and analysis, report preparation, and computer training.

SECTION V

**PROGRESS ON ANNUAL
WORK PLAN ACTIVITIES**

CONTINUOUS ASSESSMENT

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
1. Develop Gr 1 tests & remedial materials.	[Shaded]											
3. Survey remediation needs Gr 2.				[Shaded]								
3. Develop Gr 2 test and remedial materials								[Shaded]				
4. Develop Gr 3 test and remedial materials.												[Shaded]
5. Identify 16 pilot schools.		[Shaded]										[Shaded]
6. Conduct seminars for math & Eng subject panels.			[Shaded]			[Shaded]						
7. Coordinate and plan with TTCs and UNISWA.			[Shaded]		[Shaded]		[Shaded]		[Shaded]		[Shaded]	
8. Train Gr 1 pilot school teachers.						[Shaded]						
9. Pilot test Gr 1 materials.							[Shaded]					
10. Send two interns for U.S. training.	[Shaded]											
11. Hold workshop on DTP for CA Unit.												
12. Conduct test development workshop (Gr 2 & 3).												[Shaded]
13. Select staff for internships.							[Shaded]					
14. Select a staff member for M.A. in U.S.		[Shaded]										

CONTINUOUS ASSESSMENT

1. Develop Gr 1 tests & remedial materials.

The end-of-term tests for Grade 1 English and Maths have been completed. "Form A" tests, which use conventional testing formats, were prepared by the two interns at UMAss with guidance and editorial feedback from Dr. Ron Hambleton under the University of Massachusetts subcontract with IIR. Posterized ("Form B") tests and posterized programmed teaching (remedial) materials were prepared by the CA staff in Swaziland with guidance and editorial feedback from Dr. Aida Pasiona. Worksheets and practice exercises for remediation have also been drafted.

Learner verification and revision (LVR) (e.g. lab school tryout) was undertaken in September and October for the posterized tests, and 100 copies of the pilot versions of two of these posters have been printed by a commercial printer. Other posters will be delivered to the printer as soon as approval is obtained. LVR could not be undertaken for the Form A tests, which were received from UMAss in early November, because of the final test schedules in the two lab schools. Efforts will be made to try out these tests in the lab schools (with Grade 2 students) before they are pilot tested.

2. Survey remediation needs in Gr 2.

This was not carried out due to lack of personnel available to conduct the survey. Instead, a small-scale survey will be conducted among the Grade 2 and 3 teachers of the lab schools. In addition, the CA staff will interview the Grade 2 and 3 teachers who will participate in the test development workshops in July, 1992, to find out what they perceive to be the major learning difficulties of their students during the last two years. The teachers' responses will guide the CA staff in the preparation of the first few sets of remedial materials. Test data will guide the preparation of the rest of the remedial materials for these two grades, as well as for Grade 1.

3. and 4. Develop Gr 2 and 3 tests and remedial materials.

Although the Gantt chart shows that work on Grade 2 and 3 tests and remedial materials will start in March and July, respectively, the CA staff have already completed the first draft of the objectives and are writing the item specifications for these two grades. The first and second end-of-term tests will be drafted in early April and tried out in the lab schools (LVR) in April, May, and June. The third end-of-term tests will be prepared during five-day training workshops for selected teachers in these two grades in July, to be conducted by Dr. Hambleton.

Experience with the Grade 1 materials development and LVR activities last year clearly showed the need to start the test development for the next two grades as early in the school year as possible, hence the decision to start this activity by December, 1991.

5. Identify 16 pilot schools.

The following schools were selected as CA pilot schools in consultation with the four Regional Education Officers.

- | | | |
|------------|---------------------|--------------------|
| Hhhohho: | ● Mayiwane Nazarene | ● Peak Central |
| | ● Ezulwini Catholic | ● Mangwaneni |
| Lubombo | ● St. Paul's | ● Lubombo Central |
| | ● Lusoti | ● Dlalile |
| Manzini | ● Mangcongco | ● Nazarene Primary |
| | ● Sibovu | ● Antioch |
| Shiselweni | ● Mlambo | ● Edwaleni |
| | ● Sibetsamoya | ● Mbhebha |

6. Conduct seminars for Maths & English subject panels.

The orientation seminars for the English and Maths subject panels were held on Oct. 30th and Nov. 1st, respectively. The second seminar, which was to be an update on CA activities and plans and had been proposed for January, 1992, was not held because both panels agreed to integrate this into subsequent panel meetings as a regular item in their agenda. The next annual seminar for subject panels will be scheduled towards the end of October, 1992.

7. Coordinate and plan with TTCs and UNISWA.

A one-day seminar was held with TTC and UNISWA faculty at which all five components (TAs and counterparts) made presentations. The report on the outcomes of that meeting was prepared by a special committee.

8. Train Gr. 1 pilot school teachers.

This training was moved from January to late March by the EPMT Training Coordination Committee chaired by the NCC Director. Two workshops have been planned. The first, a four-day workshop, will be for the pilot school head teachers and will also be attended by the Senior Inspectors for Maths and English, the teacher leaders, the CA staff from NCC and INSET. The second, a five-day workshop, will be for the Grade 1 teachers of the 16 pilot schools and their trainers.

9. Pilot test Gr.1 materials.

Pilot testing will start immediately after the training workshop for the pilot school teachers and head teachers.

10. Send two interns for U.S. training.

The two interns (CA Coordinator Tim Singwane, and English curriculum designer Concilia Munro) left for the U.S. last September and are coming back in late February.

11. Hold workshop on desktop publishing for CA Unit.

A ten-day workshop was conducted by a short-term consultant, Kevin Braim. It included training in desktop publishing with Ventura 3, scanning with the HP scanner, and the use of two kinds of graphics software (Harvard Graphics and PC Paintbrush).

12. Conduct test development workshop (Gr. 2 & 3).

This will be done in July.

13. Select staff for internships.

Two members of the CA staff are being considered for the next two internships. Their names will be submitted to the Steering Committee in April, with the proposed curriculum for their internship programme.

14. Select a staff member for M.A. training in the U.S.

One of the evaluators, Ellen Thwala, is the primary candidate for this training, to start in the fall semester of 1992-93. If for some reason she is unable to go at that time, the alternate candidates are Newman Khumalo, Cynthia Hlophe, and Michael Mhlungu. All of these staff have taken the required entrance exams (TOEFL and GRE) and have sent their applications to universities of their choice.

HEAD TEACHER TRAINING

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
1. Plan, design, schedule training.	█				█		█					█
2. Write training modules.	█											
3. Print, distribute materials.	█				█		█					█
4. Organise, monitor regional teams.	█						█					
5. Coach trainers: tryouts.	█			█			█				█	
6. Make and mail announcements.	█			█			█				█	█
7. Produce and distribute newsletter.	█			█			█					█
8. Register trainees, cycle one.	█			█			█					
9. Train Inset: module development.	█											
10. Train regional trainers.	█			█								█
11. Conduct POMI Headteachers course.		█				█		█		█		
12. Evaluate training.			█			█			█			█
13. Revise, publish material.	█				█		█					█
14. Finalise INSET turnover.										█		
15. Select/process participant	█											█
16. Develop formative evaluation plan.			█					█			█	
17. Coordinate and plan with TTCs and UNISWA.			█		█		█		█		█	
18. Order supplies and training publications.	█											

HEAD TEACHER MANAGEMENT TRAINER

1. Plan, design and schedule training.

Planning for the year was accomplished with input from INSET. This resulted in the development of a detailed chart which listed all of the training to be accomplished. The venues and dates for training were entered into the Master Calendar.

The training was designed to accomplish two major goals, the first being to train the new regional training teams in the content and in the methods of training. This was accomplished for Money Management, Instructional Leadership and Personnel Management. The second major goal was to work with trainers to put on the training for their regions for 200 Head Teachers. This was done for the first two subjects, with Personnel Management scheduled for early February.

The most difficult and challenging aspect of planning and designing was to research, write and print the training modules. Much work was required to set up writing teams with INSET and the Management Training staff. The syllabus was utilized as the conceptual base for the work and various persons (13) were scheduled to develop modules.

2. Write training modules.

Training modules were researched, developed and written by the team. This work required a high level of effort from the Management Training Team because training was necessary for the writers. Each version of a given module needed two or three revisions. The raw drafts were then put into the agreed format in the Trainers' Guide and the Trainees' Handbook. During the period through January, 1992, the Money Management Training Book, the Instructional Leadership Books (two) and the Personnel Management Books (two) were written and printed. This was a major part of the team's work load, since all the materials were original and tailored to the syllabus. Seven hundred pages of text for the Training Modules were written, edited and printed during this period, not including the 200 pages of text for Money Management training written by a consultant. (This text was also edited and printed by the team.)

3. Print, distribute materials.

One thousand, six hundred eighty books were printed and distributed to the trainers and 200 head teachers. The facilities, (e.g. one small photocopy machine and one computer) in the Management Training Office at Manzini were insufficient to publish this large volume of material. Another computer was borrowed from Career Guidance and personal computers were used to augment these in order to get the work done. All Training of Trainers books were put out in draft form using the office photocopy machine. All other books (1,680 copies) were sent to Webster Printers and the MITC Print Shop.

4. Organize, monitor regional teams.

Four Regional Training Teams were set up with assistance from INSET. Each team consisted of at least 4 appointees from REOs and two INSET Lecturers. This entire group of 32-36 people were trained to use the Trainers' Guides. They were given opportunities to learn to teach in front of the video camera during micro-teaching sessions. Each trainer became involved in peer critiques in a teaching-learning arena.

One the Regional Teams were trained, they were monitored by their team leaders and the Management Training office staff as they set up their respective training venues regionally. As they put on the training, the Management Team and the Director of INSET visited each training site to monitor what occurred in every region. Feedback was provided to trainers. A "Black Book" was kept at each training site to enter all concerns trainers may have had about their experiences teaching the materials. Training teams have now completed regional training in Money Management and Instructional Leadership.

5. Coach trainers: tryouts.

Each trainer was trained to use the Training Modules. Each went through a micro-teaching experience. Each has received feedback about his or her respective teaching. Coaching has been done at the training sites with the trainers to help them with various tasks, including the use of quizzes and tests.

6. Make and mail announcements.

The 200 trainees, 36 trainers and four REOs received regular notices about forthcoming training sessions. Letters were mailed to each person about each separate training activity. Radio announcements were made about training venues, and newspaper announcements were published to reinforce the information. Each trainee received a Cycle One Training Schedule which showed all the planned training activities, the venues and the dates.

7. Produce and distribute newsletter.

Six editions of the Management Training Newsletter have been distributed to trainers and trainees. The newsletter reinforced other announcements and provided retrospective information about training recently accomplished, plus a "Do You Know" section which discussed information about training methods.

8. Register trainees, cycle one.

A registration system was set up and implemented. Each trainee has a registration number plus a special data sheet which indicates all information about him or her, including sessions missed. A detailed score record is kept for each trainee to be used to determine his or her relative level of attainment. These records are on computer and can be used to determine whether to award a certificate at the end of training.

9. Train INSET: module development.

INSET staff received training in how to develop modules. Six special training sessions were scheduled. Individuals received one-on-one training and assistance as they worked on their respective modules. Their modules were, in most instances, a real team effort, since they required input from two or three staff members to be completed.

10. Train regional trainers.

Four regional training teams have received training in three POMI areas to date and have already begun to put on their training to regional groups of head teachers.

11. Conduct POMI head teacher course.

The major output, aside from production of training modules and training trainers, was teaching the Management Training Course in Cycle One. This course, based on the approved syllabus, is now half-completed, as planned. Evaluations have been made of each of the training sessions for purposes of remediation and changes to the programme.

12. Evaluate training.

Every trainee has been evaluated on each module completed. Scores of achievement tests results have been recorded. Each training session was evaluated by the trainees to help trainers improve their own training methods. A formative evaluation system is now in place and being implemented for Money Management.

13. Revise, publish material.

Materials already printed have been reviewed for revision, which will occur at the end of the cycle. Each book printed went through a revision process which included five separate revision steps. Additional revision work will need to be done before final versions of the modules are printed.

14. Finalize INSET turnover.

Planning is already underway in regard to INSET's eventual takeover of the work. Final planning will take place later in the year.

15. Select/process overseas participant trainees.

Two persons were selected for training. They have completed the necessary applications and tests with assistance from the Career Guidance TA.

16. Develop formative evaluation plan.

A plan has been developed and one consultant hired to date (for Money Management evaluation). The work will continue during the rest of Cycle One.

17. Coordinate and plan with TTCs and UNISWA.

One coordination meeting has been held and a report submitted to the Chief of Party. Additional meetings need to be held during the rest of the cycle.

18. Procure supplies and training publications.

All training supplies were ordered to meet training needs for each training session. No additional publications were ordered during the first half of the year. However, publications to support training were received from our order last year.

MANAGEMENT INFORMATION SYSTEM

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

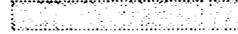
1. Complete the mapping database.



2. Disseminate database & train in use.



3. Make illustrative graph/chart annual report.



4. Present findings to MOE administration.



5. Produce CSO-linked questionnaire.



6. Develop database update procedures.



7. Write draft continuous assessment system.



8. Trial test CA MIS at regional offices.



9. Provide OJT and formal training to MOE colleagues.



10. Survey MIS across MOE.



11. Update overall MIS programmes.



MANAGEMENT INFORMATION SYSTEMS

1. Complete the mapping database.

Field work for the school mapping exercise was completed on schedule at the end of July, 1991. It represented a complete stock-taking of all primary and secondary schools in the country, including data on catchment area, school construction, student access to books and curriculum. EPMT project funding was augmented by UNICEF, WFP and the Special Projects Fund at the MOE, as well as by the MOE itself.

The mapping exercise was conducted with the support of the REOs. Six hundred seventy-three schools were surveyed in four regions over a six-week period, with between seven and nine enumerators assigned to each region. Every school was visited and a six-plus page questionnaire was completed for each school. The data were subsequently entered in the MIS database, for which a program was specifically written by the MIS Specialist. The questionnaires have been stored in 16 volumes for reference in the data improvement process.

The quality of the mapping exercise data has been improved by validation of problematic fields. Many anomalies have been resolved. Nine dBase routines for consolidating information from multiple databases into a single easily accessible database have also been written.

2. Disseminate database and train in use.

A general enquiry routine has been programmed for accessing the mapping database. This has facilitated the production, on demand, of one-page information sheets on particular schools.

Another routine was developed for printing the entire database. This produces a profile of each school in the country in one book and has proven useful for administrative and management purposes. The profile contains information on the location of the school, the postal address and telephone number, student and teacher numbers, fees, number and purpose of buildings, books and various derived ratios. Copies of the profile have been distributed to all senior management in

the MOE, the Teaching Service Commission and the REOs. Copies have also been distributed to USAID, UNICEF and WFP.

A new school list was also prepared indicating basic information about the school, including the names of head teachers and pupil/teacher numbers. The list has been shared with the CSO to facilitate their annual survey of schools and to update the list of schools surveyed. Copies have been distributed to all departments in the MOE and to the REOs.

Training in the use of the database, particularly at regional level, will take place later than originally planned. The MOE has been preoccupied with the opening of schools in the new school year, and more especially with the provision of places for Forms I and IV students.

3. Make illustrative graph/chart annual report.

The intention is to produce a short report annually in which salient information on the education system is published in tabular form with supporting graphs and charts. The publication will be titled "Swaziland Education in Pictures."

Drafts of the following information have been prepared for 1991:

- Education pyramid by sex
- School attendance by age and by sex
- Distribution by age and by sex in primary schools
- Class sizes for primary schools
- Enrolment by region by grade and sex (primary and secondary)
- Primary teacher qualification by sex
- Secondary teacher qualification by sex
- Pupil-teacher ratios, primary and secondary

- Primary enrolment by sex (with projections to Year 2000)
- Secondary enrolment by sex (with projection to Year 2000)
- Facilities by region by school level
- Annual changes in educational system efficiency

4. Present findings to MOE administration.

Various analyses of the mapping data have been undertaken and reports prepared for different departments in the MOE. A list of reports indicating purpose and officials requesting information is available in Appendix III. It is encouraging to note that senior management in the Ministry is beginning to appreciate the use of empirically generated data for decision-making.

5. Produce CSO-linked questionnaire

As part of the process of updating the mapping data, a questionnaire was prepared and negotiated with the CSO. It was agreed that the questionnaire should be no longer than one A4 page. The questionnaire will provide additional information not collected by CSO in their annual survey of schools, (for example, fees).

The CSO will include the questionnaire in their annual survey, which is conducted at the end of March each year. As completed questionnaires are returned to CSO, they will be passed on to MIS for updating the database.

6. Develop database update procedures.

Closer collaboration with CSO will ensure an effective database update process. The comments in item 5 above are evidence of this goal being achieved. The sharing by CSO of their complete database, in machine readable format, will continue. This procedure was started last year with the 1989 returns. The 1990 returns format has been obtained.

1991 teacher payroll data was obtained from Treasury for use in assessing the accuracy of the MIS and the TSC. Proposals have been drafted for support to a TSC MIS. The assumption still holds that their office will maintain a comprehensive and up-to-date database accessible to the RPU (and therefore forming a part of the MIS).

Information gained during the mapping exercise has enabled MIS to improve data on more than 7,200 teachers in the system. However, without regular update procedures in a TSC MIS, the work done so far will rapidly become outdated and be of historic value only. Since personnel costs represent approximately 60% of total expenditure on all education activities in Swaziland (98% of primary and secondary expenditures), a TSC MIS is indispensable.

7. Write draft continuous assessment system.

During November, a consultant performed preliminary work on the draft continuous assessment system with the CA adviser. They decided on the format for the forms, possible ways of indicating competencies, and a schedule for trial testing of the system. The consultant is scheduled to return in February to continue development and write a draft system. At that time a sample assessment sheet will be developed for a demonstration workshop involving staff in the testing centre.

8. Trial test CA MIS at regional offices.

This activity must be postponed until Year 3 because of the delayed start of the CA pilot test.

9. Provide on-the-job training and formal training to MOE colleagues.

A consultant was hired to undertake training for nine colleagues at NCC over a 10-day period. The training consisted of a refresher course in WordPerfect 5.1 and desk top publishing using Ventura 3.0. Four IBM-compatible computer systems and 1 HP laser printer were made available for the course. Emphasis was given to advanced-level word processing and the production of professional materials. The importation of graphic images from various software sources was also included. The capacity of NCC to enhance the appearance of materials produced has been increased.

10. Survey MIS across MOE.

This activity is planned for April through July, 1992.

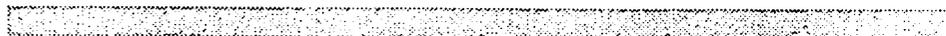
11. Update overall MIS programmes.

This work will be undertaken during the months of June and July, 1992.

CAREER GUIDANCE

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

1. Advise on ETGPS roles & conduct monthly seminars.



2. Conduct staff upgrading training workshops



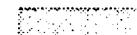
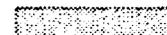
3. Conduct Career Guidance teacher training workshop.



4. Visit Botswana Career Guidance Office with ETGPS staff.



5. Select and process candidate for overseas training.



6. Train NCC staff in Career Guidance infusion.



7. Field-test Career Guidance materials.



8. Train education leaders to use CG materials through INSET.



9. Train lecturers for CG pre-service teacher training.



10. Include Career Guidance in TTCs, UNISWA curriculum.



11. Coordinate with TTCs, UNISWA.



12. Edit and print job files.



13. Revise and print training manuals.



14. Print counselling booklets.



CAREER GUIDANCE

1. Advise on ETGPS roles & conduct monthly seminars.

These activities have occurred regularly. Seminars have been conducted once a month. During these seminars, topics related to guidance are discussed. These seminars are also used as a forum for the exchange of information and ideas related to the planned activities.

2. Conduct staff upgrading training workshops.

The workshop was postponed from January 20-24 until February 3-7. This delay was caused by the fact that the materials needed for the workshop did not arrive on time.

3. Conduct Career Guidance teacher training workshops.

Scheduled for May.

4. Visit Botswana Career Guidance Office with ETGPS office staff.

This educational tour was rescheduled at the request of Botswana Guidance Department for February 10 - 14.

5. Select and process candidates for overseas training.

Three candidates were nominated: Lineo Vilakazi, Vusi Manyatsi and Agnes Mtetwa. They took their GRE and TOEFL tests and have completed their U.S. graduate school applications. The primary candidates are Vusi Manyatsi and Lineo Vilakazi.

6. Train NCC staff in Career Guidance infusion.

NCC staff were trained in an Infusion Workshop on August 19 and 20. Materials developed jointly by NCC staff were field tested in four pilot primary schools by ETGPS staff. Based on the pilot-test results, the Career Guidance materials were revised again. These revised materials were used for a workshop designed for the Social Studies Panel members on November 12 and 13.

7. Field-test Career Guidance materials.

Career Guidance materials were field-tested in four pilot schools in four regions: St. Theresa Primary on October 14, Siteki Central Primary on October 15, Mbasheni Primary on October 16 and Ngwane Practising School on October 17. The evaluation report was submitted.

8. Train education leaders to use CG materials through INSET.

To take place later this year.

9. Train lecturers for CG pre-service teacher training.

Work on this activity began in Year 1. Efforts are being made to support ETGPS staff so that they can take over this responsibility after the departure of the Technical Adviser.

10. Include Career Guidance in TTCs, UNISWA curriculum.

An initial meeting was held in November with representatives of Teacher Training Colleges and the UNISWA Faculty of Education. There will be follow-up discussions during the second half of the year to ensure that career guidance is included in the pre-service teacher training curriculum and that lecturers are trained to teach this subject.

11. Coordinate with TTCs, UNISWA.

On November 29, a seminar was held with TTCs and UNISWA representatives. Contacts will be continued in February.

12. Edit and print job files.

To take place later this year.

13. Revise and print training materials.

To take place later this year.

14. Print counselling booklets

To take place later this year.

ORGANISATION AND MANAGEMENT

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

1. Administer & manage the project.	[Activity]											
2. Prepare GOS contribution budget.	[Activity]											
3. Prepare Annual Work Plan Budget.	[Activity]											
4. Plan and hold annual conference.	[Activity]											
5. Prepare and distribute conference report.	[Activity]											
6. Process second year consultancies.	[Activity]											
7. Identify process and place MA students.	[Activity]											
8. Procure equipment for Testing (CA) Unit & TIDCs.	[Activity]											
9. Hold MOE staff seminars.	[Activity]											
10. Convene Research Council meetings.	[Activity]											
11. Organise second research study.	[Activity]											
12. Prepare quarterly and annual reports.	[Activity]											
13. Identify, process C.A. interns.	[Activity]											
14. Complete decision process study.	[Activity]											
15. Hold Steering Committee meetings.	[Activity]											
16. Hold meetings w/teacher education institutions.	[Activity]											
17. Conduct Project Advisory Committee mtgs.	[Activity]											
18. Resolve policy issues	[Activity]											

ORGANIZATION AND MANAGEMENT

1. Administer and manage the project.

On-going activity.

2. Prepare GOS contribution budget.

Accomplished in September, 1991.

3. Prepare annual work plan budget.

Accomplished in August, 1991.

4. Plan and hold annual conference.

With the agreement of the Ministry and USAID, it was decided that EPMT should support a series of seminars on topics of interest to MOE rather than holding one larger conference for the sake of having a meeting. Two such seminars have already taken place successfully, one to review the EPMT annual work plan (23rd September, 1991) and another to review the findings of the Decision Process Survey (14th November, 1991). Further meetings are under consideration by the Principal Secretary, including a follow-up to the Decision Process Survey seminar and a review of the costs of education in Swaziland.

5. Prepare and distribute conference report.

Not required in the absence of an annual conference (see item 4).

6. Process second-year consultancies.

On-going activity. For a list of consultants provided during this reporting period, see Section IV (Inputs).

7. Identify, process and place MA students.

Section IV (Inputs) lists the candidates and alternates who have been identified for four MA training positions beginning in August, 1992.

Processing of their applications was well underway by the end of this reporting period.

8. Procure equipment for Testing (CA) Unit and TIDCs.

All approved equipment for the CA unit was procured. A brief supplementary list was in the process of being prepared at the end of the reporting period. Equipment procurement for the TIDCs is on hold pending further progress on their construction by GOS.

9. Hold MOE staff seminars.

The intent of this activity, to bring together senior staff within the Ministry to examine specific problems and issues, is being met through the series of seminars explained above under item 4.

10. Convene Research Council meetings.

Three attempts were made during the reporting period to convene a Research Council. One failed completely, and two meetings had such poor attendance that the purpose of the exercise was thwarted. Therefore, it was decided to abandon this strategy in favour of direct, ad-hoc discussions on possible research questions with the Principal Secretary and senior MOE officers.

11. Organize a second research study.

This was deferred until the second half of the year.

12. Prepare quarterly and annual reports.

With USAID's agreement, it was decided that quarterly reports are unnecessary. Therefore, this semi-annual report is the first submission due this project year after the annual work plan.

13. Identify and process CA interns.

Accomplished. Two interns from the NCC's Continuous Assessment Unit (Tim Nsingwane and Concilia Munroe) were sent to U. Mass. in September, 1991, and were completing their internship as the reporting period concluded.

14. Complete decision process study.

The initial study was completed and presented to the Ministry at a seminar in November, 1991. Additional analysis of returns from school heads is now being carried out by the consultant.

15. Hold Steering Committee meetings.

On-going activity.

16. Hold meetings with teacher education institutions.

A successful meeting was held in November with representatives of the Teacher Training Colleges and the UNISWA Faculty of Education. It was agreed that teacher training institutions should stay in close contact with the work supported by EPMT so that appropriate changes can be made in the pre-service curriculum to support the innovations being introduced.

17. Conduct Project Advisory Committee meetings.

The Principal Secretary has decided not to pursue this for the time being.

18. Resolve policy issues.

On-going activity.

SECTION VI

**PROPOSED MODIFICATIONS
TO THE YEAR 2
WORK PLAN**

We propose the following changes to the approved work plans. Revised Gantt Charts reflecting these proposals follow.

CONTINUOUS ASSESSMENT

2. Survey remediation needs Gr 2.

Revise task to read "Survey remediation needs of Grade 2 and 3 students." Revise date to July. The new development schedule means that we must focus next on both grades that will be implemented nationally in 1994. The most cost-effective way to do this is to have the CA staff interview teacher-participants thoroughly during the July workshop already planned.

3. Develop Gr 2 test and remedial materials.

Revise task to read "Develop Grade 2 and 3 tests." Revise dates to December-July. Our experience with developing Grade 1 materials indicates that we have to start developing the second and third grade materials much earlier than the July, 1992, date in the original plan. For the sake of better management, we should separate the test development and remedial materials development activities in the work plan.

4. Develop Gr 3 test and remedial materials.

Revise task to read "Develop Grade 2 and 3 remedial materials." Revise dates to April-July. See rationale for task 3. By April we should have some test data from the pilot schools to suggest the learning areas on which to focus when preparing remedial materials or new remediation strategies to the teachers. This task will continue into Year 3, through September, 1992.

8. Train Gr 1 pilot school teachers.

Revise task to read "Train pilot school head teachers and Grade 1 teachers." Revise dates to March. The EPMT Training Coordination Committee advised that the original schedule (January training) was not the best time for this activity and suggested March instead. It was also suggested that head teachers be included to ensure their full support.

9. Train INSET: module development.

Revise task to read "Train INSET: module development and computers." Add activity in April and May to represent two weeks of computer training in Word Perfect for nine members of INSET. The training will be provided through SIMPA, with assistance from Ms. Shiela Deevey. Total cost to the project for training materials and lunches will be \$350.

11. Conduct POMI Head Teachers course.

Drop the 2nd Instructional Leadership course in May and move it to its normal place in the 2nd POMI cycle (1992-93).

MANAGEMENT INFORMATION SYSTEMS

2. Disseminate database and train in use.

Revise dates to September-July. Dissemination of elements of the database will continue into the second half of planned work plan activities. Training in use of the database at regional level will continue into the second reporting period, too, particularly since regional office computer capability is generally weak.

3. Make illustrative graph/chart annual report.

Revise dates to September-June. As reported, the drafts for this activity have been prepared. Designing a format and making arrangements for publication and distribution are tasks that need to be undertaken.

6. Revise dates to December-May.

This activity will continue into the second reporting period. The CSO annual survey of schools is presently gearing up for 1992. Schools should complete questionnaires as of the end of March, after which they are returned to CSO for entry into database. Procedures for updating the MOE database will therefore need to be developed further.

8. Trial test CA MIS at regional offices.

Drop. The postponement of CA pilot testing until April 1st means that this activity cannot begin until Year 3.

9. Provide OJT and formal training to MOE colleagues.
Some of the job training is being given to MOE colleagues on demand. However, training in the RPU cannot take place until counterparts are appointed and formally assigned MIS tasks. The primary purpose of this activity, therefore, cannot be accomplished until counterparts are in place.

11. Analyse costs of primary and secondary education.
Add tasks shown. Assign dates as February-March. The Principal Secretary is interested in arriving at estimates of such costs as can be derived from fees paid by students for various activities, with a view towards reviewing GOS policy on financing education.

GUIDANCE AND COUNSELLING

9. Train lecturers to use CG materials through INSET.
Replace this task with "Incorporate Career Guidance into Head Teacher Management Training." Change dates to December - March. The original task can be taken over by the ETGPS staff, as explained in the previous section. The new task reflects a commitment to integrating the various components of EPMT and building a firm foundation for institutionalizing the Project's efforts.

ORGANIZATION AND MANAGEMENT

4. Plan and hold annual conference.
Revise task to read "Plan and hold special seminars." Revise dates to cover entire year.
5. Prepare and distribute conference report.
Drop. Reports or minutes will be issued as part of each seminar.
9. Hold MOE staff seminars.
Drop. Subsumed under item. 4.
- 10 Convene Research Council meetings.

Drop. Objective will be met through ad-hoc discussions with senior MOE officials.

12. Prepare quarterly and annual reports.

Revise tasks to read "Prepare semi-annual project reports."

Revise dates to January-February and July-August.

17. Conduct Project Advisory Committee meetings.

Drop. MOE does not support such a committee at this time.

CONTINUOUS ASSESSMENT (YEAR 2, REVISED)

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

1. Develop Gr 1 tests & remedial materials.

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

2. Survey remediation needs Gr 2.

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

3. Develop Gr 2 test and remedial materials.

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

4. Develop Gr 3 test and remedial materials.

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

5. Identify 16 pilot schools.

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

6. Conduct seminars for math & Eng subject panels.

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

7. Coordinate and plan with TTCs and UNISWA.

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

8. Train Gr 1 pilot school teachers.

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

9. Pilot test Gr 1 materials.

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

10. Send two interns for U.S. training.

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

11. Hold workshop on DTP for CA Unit.

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

12. Conduct test development workshop (Gr 2 & 3).

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

13. Select staff for internships.

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

14. Select a staff member for M.A. in U.S.

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

CAREER GUIDANCE (YEAR 2, REVISED)

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
1. Advise on ETGPS roles & conduct monthly seminars.	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████
2. Conduct staff upgrading training workshops						██████████	██████████	██████████				
3. Conduct Career Guidance teacher training workshop.										██████████		
4. Visit Botswana Career Guidance Office with ETGPS staff.			██████████									
5. Select and process candidate for overseas training.		██████████					██████████				██████████	
6. Train NCC staff in Career Guidance infusion.	██████████			██████████								
7. Field-test Career Guidance materials.			██████████									
8. Train education leaders to use CG materials through INSET.									██████████			
9. Incorporate Career Guidance into Head Teacher Management Training.					██████████	██████████						
10. Include Career Guidance in TTCs, UNISWA curriculum.									██████████			
11. Coordinate with TTCs, UNISWA.			██████████		██████████	██████████	██████████	██████████	██████████		██████████	
12. Edit and print job files.											██████████	
13. Revise and print training manuals.											██████████	
14. Print counselling booklets.												██████████

HEADMASTER TRAINING

(YEAR 2, REVISED)

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
1. Plan, design, schedule training.												
2. Write training modules.												
3. Print, distribute materials.												
4. Organise, monitor regional teams.												
5. Coach trainers: tryouts.												
6. Make and mail announcements.												
7. Produce and distribute newsletter.												
8. Register trainees, cycle one.												
9 Train Inset: module development, computers.												
10. Train regional trainers.												
11. Conduct POMI Headteachers course.												
12. Evaluate training.												
13. Revise, publish material.												
14. Finalise INSET turnover.												
15. Select/process participant												
16. Develop formative evaluation plan.												
17. Coordinate and plan with TTCs and UNISWA.												
18. Procure supplies.												
19. Order training publications.												

MANAGEMENT INFORMATION SYSTEM (YEAR 2, REVISED)

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
1. Complete the mapping database.	██████████											
2. Disseminate database and train in use.			██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████
3. Make illustrative graph/chart annual report.			██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████
4. Present findings to MOE administration.				██████████	██████████							
5. Produce CSO-linked questionnaire.					██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████
6. Develop database update procedures.					██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████
7. Write draft continuous assessment system.						██████████	██████████	██████████	██████████	██████████	██████████	██████████
8. Provide OJT and formal training to MOE colleagues.	██████████	██████████			██████████			██████████	██████████	██████████	██████████	██████████
9. Survey MIS across MOE.								██████████	██████████	██████████	██████████	██████████
10. Update overall MIS programmes.											██████████	██████████

15-01-92	Capital Budget Monitoring Report	Under Secretary, Chairman C-BIC	Under Secretary, x 20 Members C-BIC	MOE Reports, MOW Reports
17-01-92	Qualifications of teachers by qualification level, age, citizenship and sex	PS	PS, MIS	Mapping Study
20-01-92	Estimates of Intake into Form IV	PS	PS, Director, Chief Inspectors	1990 CSO Data
24-01-92	Draft policy statement on conditions for participation in heads of schools training programme. profile of heads of schools	Advisor, Headmaster Training Programme, Director of In- Service Training	Advisor, Headmaster Training Programme, Director, In- Service, MIS	Mapping Study

SECTION VII
ISSUES AND CONCERNS

CONTINUOUS ASSESSMENT

1. The goal of implementing Continuous Assessment for all seven grades by 1995 is ambitious. Such a rapid pace may force compromises that jeopardize the innovation's success. Concern is growing in several quarters that we may be trying to move too quickly. In retrospect, a more feasible plan would have been to develop and pilot test materials for only one grade each year. However, the Project Grant Agreement and contract as currently written do not allow this.
2. A lack of support staff creates production bottlenecks. These bottlenecks, already evident in the production of Grade 1 materials, will become even worse when simultaneous production of materials for Grades 2 and 3 begins in concert with related pilot testing and training needs.
3. Heavy demands on the curriculum designers' time to become resource persons at the regular infusion workshops for Maths and English textbooks reduce their availability for CA work.

HEADMASTER TRAINING

4. Management Training faces a problem of keeping up the morale and momentum of the trainers used in Cycle One. There is an urgent need to work on an incentive system for the trainers and to get the MOE to agree on a policy on certification of headmasters. These two issues are linked, and until resolved are impediments to the sustainability of the Management Training Programme.
5. The second issue facing Head Teacher Training now, but which is on the annual work plan, is to carefully work out the staffing and logistics with INSET for the complete logistic take over of the Management Training Programme. This is a major task which will require much work during the period from May to July in order to formalize these arrangements.
6. A third concern is that of having good and reliable training sites. Recent problems with the Prison and TTC Manzini show how vulnerable the programme is in this regard. There is no major training facility in the country that can house 100-200 people for residential training. This may mean that we set different training priorities in Cycle 2, that is to put on all our training during holidays in the two available TTCs, recognizing that

trainers will be unhappy to give up 5 weeks of their 'holidays' to do training.

7. Finally, uncertainties about the future of INSET raise concerns about its ability to absorb and sustain the Head Teacher Management Training Programme. Unresolved issues include adequate staffing and grading for INSET.

MANAGEMENT INFORMATION SYSTEMS

8. The Research and Planning Unit, where the MIS component is located in the MOE, has been severely hampered in carrying out its functions. One major problem is lack of necessary staff, primarily due to inappropriate post grading levels and vacancies. First, there is no counterpart for the MIS Specialist. Second, there is no data entry capability. While the MIS is rapidly becoming an important element of Ministry planning and operations, unless the staffing problems can be solved in time for the EPMT-provided staff to give the necessary training before they leave in 1993, the RPU will be unable to take over and maintain the system.

9. The MIS must depend on the Teaching Service Commission for data about the teaching force. These data must be timely, accurate and easily incorporated into the databases. This means that the TSC must move quickly to establish the kind of computer-based record-keeping system recently implemented in Lesotho. Without such a system, the MIS will be severely crippled.

CAREER GUIDANCE

10. The major problem faced by the Career Guidance component is still the lack of staff. The three promised Primary School Career Guidance positions are not filled yet, and will probably not be filled by the end of this project year. The Primary Career Guidance that can possibly be implemented with the current ETGPS staff is rather limited in scope. This is the basic reason that the staff at NCC were involved in the infusion and the implementation of Primary Career Guidance.

11. Another major issue is that the ETGPS department was solely concerned with career guidance at the secondary school level. The current aptitude testing occupies a large part of their resources, both in terms of manpower

and facilities. The test they have used up to now is very much outdated and the practice of career guidance based on this test is no longer suitable. Although the EPMT Project is essentially a primary school improvement project, we need to update and streamline ETGPS's current career guidance testing and practice at secondary level in order to re-direct their resources to primary career guidance.

ORGANIZATION AND MANAGEMENT

12. A variety of unexpected needs (such as the TSC computerization proposal) and the strains on existing resources created by ambitious goals and tightening time lines have placed a heavy load on the consulting and local-hire staff budgets in the EPMT contract. Without additional resources in these two areas, we may not be able to provide as much support as would be desirable to improve chances for success in all aspects of the project's work.

SECTION VIII RECOMMENDATIONS

CONTINUOUS ASSESSMENT

1. Implement the recommendation approved in PIL 10 to provide additional technical assistance for Continuous Assessment during Year 3 of the Project.
2. During Year 3, assess whether the current schedule for CA development and implementation is feasible. If necessary, begin discussions on any modifications required to ensure that the Ministry's objectives are met in a way that maximizes the chances of success for CA.
3. Find ways of providing additional assistance to the production process. One possibility would be to engage a full-time production specialist. This person should already know WordPerfect, should be familiar with (or able to quickly learn) desktop publishing with Ventura 3, be able to supervise the typists and the illustrators, possess (or be able to acquire) a basic knowledge of design and layout for instructional materials, be able to liaise between the CA Unit and commercial printers, and be able to track production progress. One option would be to find a Peace Corps Volunteer to meet this need. A second possibility would be to add at least one full-time typist, familiar with WordPerfect and trainable in desktop publishing and computer graphics, for the exclusive use of the CA Unit. The Ministry of Education should be asked to second a suitable staff member. Both possibilities should be seriously considered.
4. Find innovative ways of meeting the training challenge within the limits of the professional staff's time. One approach would be to package the training into "peer group learning modules" that place greater responsibility for learning on the trainers themselves and which can be used effectively by minimally trained trainers. An initial attempt at such a training module should be tested in the March workshop.

HEAD TEACHER MANAGEMENT TRAINING

5. Complete the implementation of the policy that Head Teachers to be trained in the Management Training Course in order to be confirmed in their posts. The sustainability of the training programme under INSET will hinge on the implementation of this objective by the Ministry of Education.

6. Put in place an incentive plan for trainers by the end of Cycle One (July 31st). There is an urgent need to implement a policy regarding incentives for trainers prior to Cycle 2 in order to insure that the programme can be sustained by INSET.

7. Hire Mr. Ron Martin to work for five days to revise the Money Management Training Module during the month of May.

8. Hire local consultants to carry out formative evaluations of each of the four POMI courses.

9. Assist the MOE to redouble its efforts to regularize the status of INSET, with particular emphasis on establishing and properly grading positions.

MANAGEMENT INFORMATION SYSTEM

10. The MOE should be assisted to arrive at a quick solution to the RPU staffing problems, ensuring that an MIS counterpart and data entry personnel are in place within six months or less.

11. The TSC should be given additional support to computerize its present system of maintaining teacher records. The proposal already agreed in principle by MOE that EPMT provide consulting support to adapt the Lesotho system to Swaziland's needs should be implemented as quickly as possible.

CAREER GUIDANCE

12. Assist the MOE to fill the three Primary School Career Guidance positions as soon as possible.

13. Assist ETGPS to update and streamline their current career guidance testing and practice at the secondary level, as well as strengthening primary career guidance.

ORGANIZATION AND MANAGEMENT

14. Investigate any necessary adjustment to the project budget to allow the necessary short-term technical assistance and locally hired staffing resources to be provided in support of project objectives.

APPENDICES

APPENDIX I

UNIVERSITY OF MASSACHUSSETS SUB CONTRACT REPORT



UNIVERSITY OF MASSACHUSETTS
AT AMHERST

Laboratory of Psychometric and
Evaluative Research

Hills House
Amherst, MA 01003
(413) 543-0262

FROM: Ronald K. Hambleton, PI *RKH*
EPMT Project, UMass Subcontract

DATE: February 14, 1992

TO: Philip R. Christensen
Acting Chief of Party
EPMT Project

CONCERNING: Six-month Progress Report (August 1, 1991 to January 31, 1992)

I am very pleased to be submitting our six-month progress report to you. As per your request, I have organized our report into two main sections: Continuous Assessment and Internships. Within each section, I have organized our material into two sub-sections: Description of Activities and Recommendations.

Continuous Assessment

Description of Activities

A great amount of work has been done on the project since August 1, 1991:

1. We completed a 38-page evaluation report of our summer 1991 test development workshops (August, September).
2. We corresponded with Roy Thompson about methods for improving communications between the United States and Swaziland. (August)
3. We prepared a set of budget revisions to enable us to complete some essential work on the Teacher Handbook of Testing. (October)
4. We prepared a (draft) set of 20 overheads (teaching aids) to assist us in the training of teachers in 1992 and beyond.
5. We prepared an extensive set of examples (8) to represent "drafts" of item specifications, critiques, and rewrites. Two examples of each combination of factors were prepared: subject (reading and mathematics) and format (multiple-choice and performance). These materials are now being revised and will be incorporated into the Teacher Handbook.
6. We worked closely with Tim and Concilia to prepare:
 - a. Reading and Math Item Specifications.
 - b. Reading and Math Term 1, 2, and 3 Grade 1 Tests (apart from the artwork).

- c. Reading and Math Test Administration Manuals for the six tests (which included scoring keys and interpretation guides).
- d. Sample Report Forms.

The development of these materials required large amounts of time, many drafts were prepared, and several versions during the process were forwarded to IIR (October, November, and January). Final version of the materials described above, ready for field-testing (except for artwork), will be brought by Tim and Concilia to Swaziland at the end of February (August to January).

7. We responded to numerous requests for information (including this report). For example, on December 18, I provided Dr. Pasigna with our thoughts on poster tests. On January 7, I provided Phil Christensen with an extensive progress report and recommendations. On January 8 (and earlier in October) reports on the internship program were submitted. Other correspondence, too, on various technical matters has been prepared as needed.

Recommendations

Recent communications have served to further clarify the UMass role in the project and recent planning documents/drafts of documents from the Acting Chief of Party and Dr. Pasigna have been helpful. At this time, we have several recommendations:

1. Our operating budget needs to be revised to reflect the additional time that I am spending on the project.
2. Improve communications between Swaziland and UMass by initiating a call once every week (at a pre-planned time) to update both parties on expectations, activities, and problems.
3. Prepare a plan to define the UMass advisory and technical role in test development. This plan could be initiated by IIR and then approved by UMass. I would be pleased to assist in the drafting of the plan.
4. Forward copies of the test materials that were tried out in the fall in Swaziland so that UMass can provide technical feedback, match to objectives, content, scoring, directions, etc. (This is our correct advisory role in the project.)
5. Forward as soon as possible the grade 2 and 3 mathematics and english objectives so that we can begin our preparation for the 1992 summer workshops.
6. Approve our request (October 23, 1991) for transferring funds from one category to another and using year 1 funds in year 2 to prepare a draft of the teachers' handbook for test development.

Internships

Description of Activities

I am pleased to be providing this report of the activities of our two interns, Tim Nsingwane and Concilia Munro. Both Tim and Concilia arrived at UMass in late August. Their arrival was not without problems - airline scheduling made in Swaziland had them traveling through Washington (which was inconvenient for them and us), living accommodations at the University's international house were judged unsuitable by Tim and Concilia, and alternative arrangements needed to be made on short notice, and financial arrangements took more time to sort out with UMass than was desirable. But, I don't want to dwell on the negatives because they were quickly and successfully addressed.

Tim and Concilia's internships at UMass were divided into three parts: (1) technical training, (2) test development, and (3) site visits. With respect to technical training, Tim and Concilia attended five courses: one on global environment (with George Urch), one on statistics (with R. Swaminathan), and three on measurement practices - theory and practice of testing, advanced measurement seminar, and criterion-referenced measurement (which I taught). Each course met for three hours a week. Their performance in each class was excellent, and the last one in particular was exactly on target for their work in Swaziland. In addition, they attended occasional educational seminars and workshops on running several important computer programs related to testing. A key part of their technical training was a two-day visit to the Educational Testing Service where they met some important testing specialists and heard presentations on a variety of testing topics.

The second part of the training involved gaining skills in preparing tests. This training included preparing and reviewing domain specifications and test items (broadly defined to include multiple-choice items and performance-based items), organizing test materials into tests and preparing instructor's manuals and scoring keys, developing guides for test score interpretations, and designing report forms. Perhaps I should mention, too, that they have had the opportunity to review many commercial criterion-referenced tests and manuals in preparing the Swaziland tests. All of this work was carried out in close consultation with Mohapi and myself, and with regularly scheduled meetings at least once a week. I might add that it was not uncommon for work to take place over holidays and on weekends as well as during the regular work week. It is my impression that Tim and Concilia have learned a great deal through the process of preparing good drafts of the term 1, 2, and 3, grade 1 math and english tests and test manuals. In fact, it is my opinion that they are well prepared to train others in Swaziland about the test development process.

I am also pleased to report that the third part of their training has begun. Tim and Concilia visited two local schools during the weeks of January 6 and 13 to learn how students are continuously monitored through an educational program, how special needs children are identified and instructed, and how teachers group students based on the students' competencies to maximize their growth. In February, Tim and Concilia will spend time in two Connecticut schools (one large urban school and one rural school) to see how continuous assessment is done. Also, they will spend a day with the Department of Education in Connecticut learning about the design and implementation of large-scale student assessment programs. Also, Tim and

Concilia will spend several days learning about continuous assessment in two or three school districts in New York and the Washington, DC area. It is too early to evaluate fully this facet of the internship, but considerable time has been spent locating suitable sites for the interns to visit, and planning with the sites to insure cooperation and accomplishment of our goals. (The New York visit was arranged by IIR.)

I think Tim and Concilia have had a very successful internship to date at UMass. They have worked hard and have been very successful, and we have tried to stimulate them by providing a wide range of hands-on experiences including test development and visits to schools. We expect that the last three weeks of their internship will be equally productive.

Recommendations

At this time, I do have a couple of recommendations:

1. Advance planning and preparation are needed to insure a smooth transition of interns from Swaziland to Amherst: Planning should begin six months in advance.
2. Budget matters must be carefully worked out in advance to insure that UMass is capable of meeting expectations. (For example, I believe our first two interns had only \$600.00 for travel. Most of this was spent on the visit to ETS.)
3. If at all possible, interns of the same sex should be paired up for their stay in the U.S. to maximize the limited funds that interns are provided for housing.
4. Unless extra funds can be made available to the interns, interns should be strongly encouraged in the future to live on campus in international student housing.
5. Arrival dates should be chosen so as to avoid conflict with U.S. holidays such as Labor Day! Perhaps interns should arrive a week early to become acclimated to Amherst.
6. Tim and Concilia should be consulted for their suggestions.

With respect to recommendation 6, Tim and Concilia suggested to me that a work plan should be prepared for future interns. Here is a recommended work plan (slightly edited from the one forwarded to the Acting Chief of Party on January 9):

• Goals of the International Program •

1. Gain experiences in test development procedures including item specification writing and review, test item writing and review, and test production.
2. Gain technical knowledge in the process of test development, and the uses of criterion-referenced test scores.

3. Spend time in carefully selecting American schools learning about continuous assessment, instructional grouping, interfacing of curriculum and testing, etc.

Proposed Activities

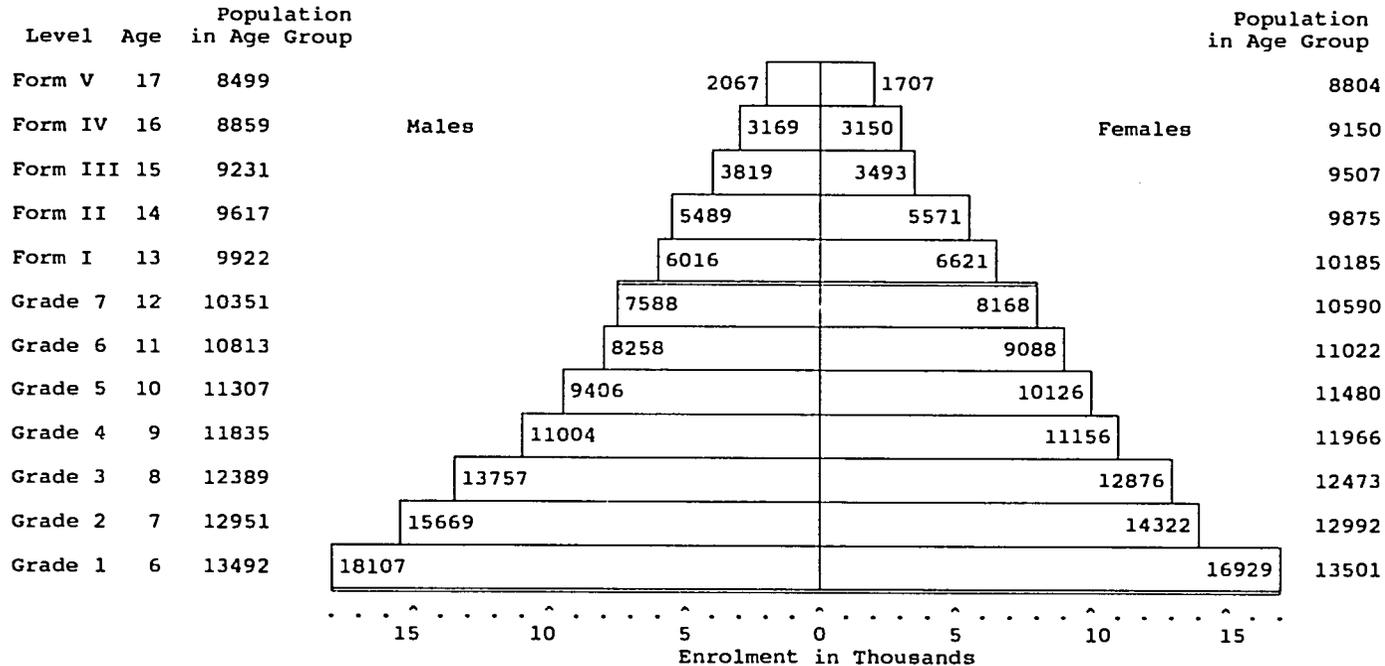
1. Work on the production of term tests in mathematics and english under the guidance of UMass technical staff.
2. Attend two to four testing, statistics, research methods, and curriculum courses to gain technical skills.
3. Spend four to six weeks in January and February of 1993 visiting schools and state departments of education to observe continuous assessment programs in operation.

APPENDIX II
STATISTICAL TABLES

Growth of Education in Swaziland

Year	Primary			Secondary		
	Schools	Pupils	Teachers	Schools	Pupils	Teachers
1945	207	11360	---	---	318	---
1950	205	14331	400	10	328	---
1955	248	21900	634	12	794	48
1960	298	34450	940	21	1540	110
1961	305	37640	1060	24	1921	111
1962	310	41031	1215	30	2515	139
1963	320	44534	1212	31	2653	156
1964	342	47894	1487	32	2783	168
1965	332	49513	1375	32	2930	185
1966	344	55005	1468	31	3221	205
1967	349	59287	1539	31	3792	232
1968	358	62108	1627	31	6126	300
1969	366	64411	1739	42	6777	366
1970	372	69055	1706	54	8027	432
1971	374	71455	1895	54	9001	448
1972	400	76343	2015	62	10681	491
1973	403	81694	2112	64	12459	550
1974	403	86110	2220	66	14301	611
1975	412	89528	2363	67	16227	739
1976	420	92721	2513	67	17396	885
1977	436	96835	2672	70	19359	978
1978	436	100700	2853	76	20584	1073
1979	440	105607	3016	81	22091	1158
1980	450	112019	3278	82	23198	1292
1981	470	119913	3586	86	24826	1433
1982	468	125303	3769	86	26469	1501
1983	468	129767	3922	89	27801	1518
1984	467	134528	4039	89	28833	1569
1985	466	139345	4107	90	29914	1561
1986	471	142206	4290	100	30489	1617
1987	477	147743	4462	113	32942	1760
1988	481	152895	4665	125	35278	1906
1989	490	157208	4890	134	41881	2088
1990	497	166454	5083	135	41128	2213

Swaziland Education Pyramid, 1990



- Notes: (a) Only the pupils in primary and secondary/high schools are shown.
 (b) Figures for school-age population are medium variant estimates based upon the census of 1986.
 (c) There were an estimated 83138 primary school age (6-12) males in the population, with 83789 in school--a gross enrolment ratio of 1.01. The net enrolment ratio was 0.77.
 (d) There were an estimated 84024 primary school age (6-12) females in the population, with 82665 in school--a gross enrolment ratio of 0.98. The net enrolment ratio was 0.80.
 (e) Out of an estimated population of 46128 males age 13-17, 20560 were in Forms I through V--a gross enrolment ratio of 0.45. The corresponding net enrolment ratio was 0.31.
 (f) Out of an estimated population of 47521 females age 13-17, 20542 were in Forms I through V--a gross enrolment ratio of 0.43. The corresponding net enrolment ratio was 0.36.

Cohort Analysis Based Upon 1989 Flow Rates Applied to 1990 Intake

Both Sexes

Rates:	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7
Promote	0.762	0.789	0.764	0.784	0.817	0.854	0.779
Repeat	0.203	0.192	0.182	0.141	0.133	0.123	0.122
Dropout	0.035	0.019	0.053	0.075	0.049	0.023	0.099

Year:								By year:	
								Number	
								Enrolled	Drops
1990	1000							1000	35
1991	203	762						965	22
1992	41	301	601					943	39
1993	8	89	348	459				904	55
1994	2	23	133	331	360			849	51
1995		6	42	149	307	294		798	35
1996		1	13	53	158	287	251	763	44
1997			3	17	63	164	276	523	36
1998			1	4	21	72	174	272	20
1999				2	6	26	82	116	9
2000					3	8	32	43	4
2001						3	11	14	1
2002							4	4	1
2003									
2004									

Survival and Dropout by Grade:								Graduates	Drops
Begin-	1000	955	933	872	796	750	729	647	352
Drop-	45	22	61	76	46	21	82		
Pup/yr-	1254	1182	1141	1015	918	854	830	7194	
Average duration of study for graduates:					8.31			Pupil/years:	7194
Average duration of study for drop-outs:					5.14			Output(grads):	647
Average study time for the cohort:					7.45			Years invested:	11.12
								Efficiency:	1.59
								As percentage:	62.96

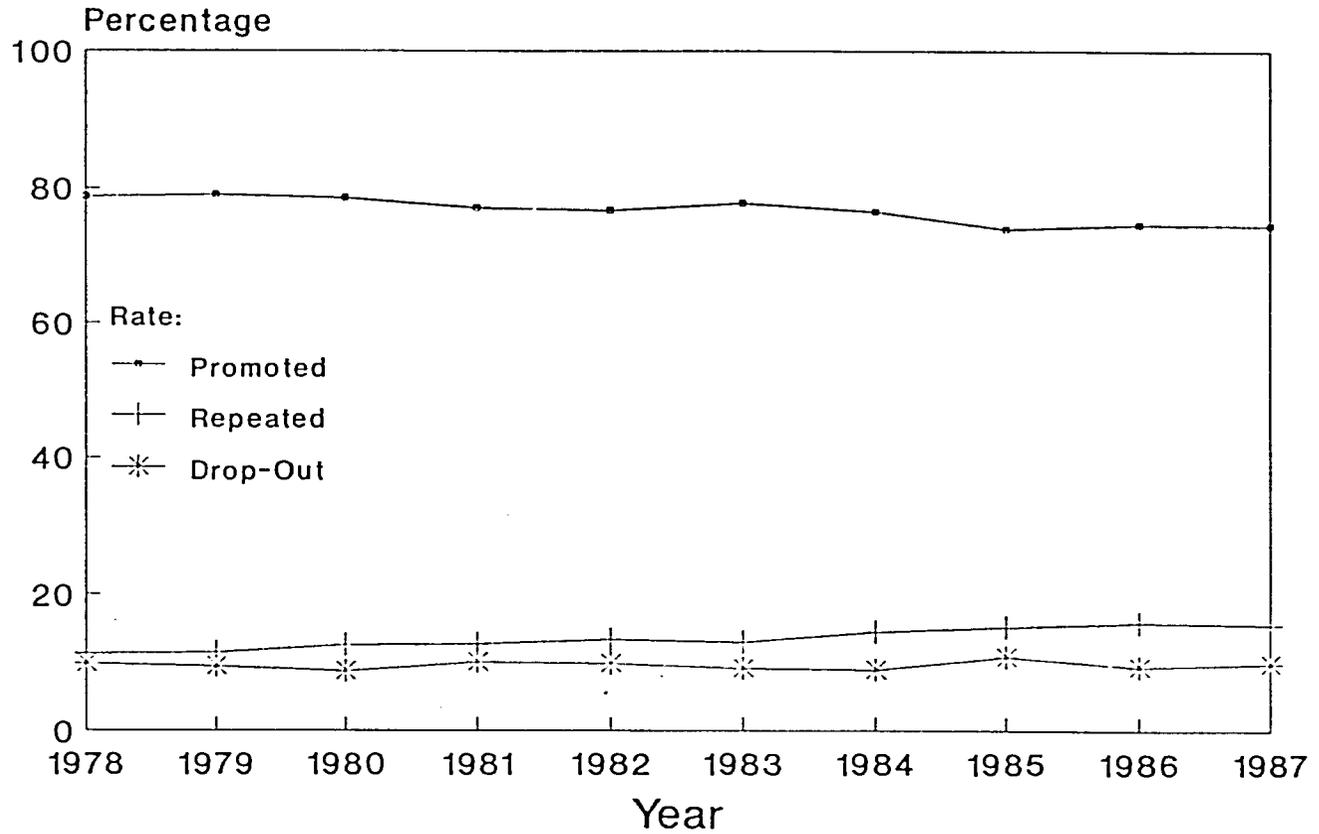
Note: Grade 7 promotion is the proportion of Grade 7 students who received a pass mark on the Swaziland Primary Certificate examination.
 The efficiency ratio is a measure of input divided by output. A value of 2.00, for instance, indicates that the educational system is investing (money, facilities) twice what it would be if the system were completely efficient.
 Rates are based upon the Central Statistics Office report for 1990. Therefore they indicate the rate at the end of the 1989 school year.

Annual Flow Rates and Efficiency Ratios at Year End - 1973 to 1989

Year End:	Grade:	Grade:							Overall	System Output*	Efficiency Ratio
		1	2	3	4	5	6	7			
1973	Promoted	0.837	0.925	0.859	0.820	0.794	0.817	0.590	0.802	516	1.82
	Repeated	0.095	0.057	0.077	0.110	0.122	0.118	0.256	0.110		
	Dropped	0.068	0.019	0.064	0.071	0.084	0.066	0.154	0.089		
1974	Promoted	0.836	0.907	0.826	0.816	0.799	0.819	0.665	0.800	508	1.78
	Repeated	0.098	0.064	0.085	0.109	0.113	0.121	0.187	0.105		
	Dropped	0.066	0.030	0.089	0.075	0.088	0.061	0.148	0.094		
1975	Promoted	0.825	0.886	0.824	0.802	0.800	0.805	0.675	0.791	493	1.81
	Repeated	0.102	0.076	0.099	0.105	0.110	0.117	0.188	0.109		
	Dropped	0.073	0.038	0.077	0.092	0.090	0.078	0.137	0.100		
1976	Promoted	0.828	0.881	0.819	0.821	0.801	0.799	0.707	0.794	514	1.78
	Repeated	0.106	0.088	0.107	0.103	0.115	0.115	0.155	0.110		
	Dropped	0.066	0.032	0.075	0.076	0.084	0.086	0.138	0.096		
1977	Promoted	0.815	0.875	0.826	0.817	0.794	0.797	0.709	0.789	507	1.77
	Repeated	0.113	0.065	0.101	0.102	0.120	0.112	0.170	0.111		
	Dropped	0.074	0.040	0.074	0.081	0.086	0.091	0.121	0.100		
1978	Promoted	0.817	0.882	0.802	0.820	0.800	0.788	0.696	0.787	498	1.83
	Repeated	0.111	0.089	0.115	0.109	0.119	0.118	0.159	0.114		
	Dropped	0.072	0.029	0.083	0.072	0.081	0.094	0.144	0.099		
1979	Promoted	0.820	0.886	0.811	0.821	0.800	0.796	0.693	0.790	521	1.78
	Repeated	0.111	0.098	0.111	0.105	0.123	0.115	0.168	0.115		
	Dropped	0.069	0.015	0.078	0.074	0.077	0.089	0.139	0.095		
1980	Promoted	0.812	0.870	0.803	0.823	0.816	0.823	0.713	0.786	579	1.67
	Repeated	0.136	0.108	0.126	0.121	0.120	0.124	0.158	0.126		
	Dropped	0.052	0.022	0.071	0.056	0.064	0.053	0.129	0.088		
1981	Promoted	0.775	0.846	0.794	0.816	0.811	0.816	0.705	0.771	522	1.74
	Repeated	0.131	0.110	0.139	0.116	0.122	0.124	0.161	0.128		
	Dropped	0.094	0.044	0.067	0.068	0.067	0.059	0.135	0.102		
1982	Promoted	0.778	0.839	0.799	0.817	0.794	0.812	0.706	0.767	533	1.74
	Repeated	0.143	0.123	0.137	0.116	0.135	0.121	0.166	0.134		
	Dropped	0.079	0.038	0.065	0.067	0.071	0.066	0.128	0.099		
1983	Promoted	0.789	0.853	0.805	0.826	0.805	0.814	0.701	0.778	553	1.71
	Repeated	0.136	0.120	0.135	0.112	0.128	0.121	0.170	0.130		
	Dropped	0.075	0.027	0.060	0.061	0.067	0.065	0.129	0.092		
1984	Promoted	0.777	0.835	0.788	0.799	0.797	0.792	0.764	0.765	580	1.67
	Repeated	0.157	0.143	0.151	0.142	0.142	0.135	0.133	0.145		
	Dropped	0.066	0.022	0.061	0.059	0.061	0.073	0.103	0.090		
1985	Promoted	0.769	0.810	0.765	0.791	0.785	0.778	0.690	0.740	497	1.92
	Repeated	0.174	0.150	0.161	0.136	0.141	0.135	0.152	0.152		
	Dropped	0.057	0.040	0.074	0.073	0.073	0.087	0.158	0.108		
1986	Promoted	0.770	0.804	0.794	0.811	0.786	0.785	0.708	0.747	572	1.80
	Repeated	0.190	0.159	0.167	0.136	0.147	0.140	0.154	0.159		
	Dropped	0.039	0.037	0.039	0.054	0.067	0.075	0.138	0.095		
1987	Promoted	0.761	0.798	0.772	0.784	0.812	0.810	0.742	0.745	567	1.74
	Repeated	0.186	0.170	0.164	0.143	0.138	0.117	0.132	0.156		
	Dropped	0.053	0.031	0.055	0.073	0.050	0.073	0.126	0.098		
1988	Promoted	0.760	0.782	0.776	0.773	0.768	0.776	0.767	0.734	532	1.84
	Repeated	0.187	0.177	0.155	0.155	0.142	0.119	0.118	0.160		
	Dropped	0.053	0.040	0.041	0.073	0.090	0.105	0.115	0.106		
1989	Promoted	0.762	0.789	0.764	0.764	0.817	0.854	0.779	0.746	647	1.59
	Repeated	0.203	0.192	0.182	0.141	0.133	0.123	0.122	0.165		
	Dropped	0.035	0.019	0.053	0.075	0.049	0.023	0.099	0.089		

Notes: The output is the number of expected graduates (those passing the SPC) from a hypothetical cohort of 1000 pupils entering Grade 1, allowing pupils unlimited repetition. The efficiency ratio is a measure of input divided by output. A value of 2.00, for instance, indicates that the cost per graduate is twice what it would be if the educational system were completely efficient. It could also be interpreted as meaning that one could educate twice as many pupils with the same facilities and staff under optimum efficiency.

Promotion, Repetition and Drop-Out Rates Primary Schools - 1978 to 1987



The three rates sum to 100%.

APPENDIX III
MIS REPORTS

Management Information System Reports
as of 19 February 1992

Date	Description	Requested by	Circulation	Database(s)
04-12-91	Profile of Primary and Secondary Schools in Swaziland showing enrolments, repeater rates, pupil-teacher ratios, last MOE visit, fees, access to school, latrines, classroom buildings, condition of buildings, books, pupil-class ratios and construction activities, by region	Regional Education Officers (REOs), Planning Unit	Planning Unit, Regional Education Officers	Mapping Study, CSO data
05-12-91	Projected teacher housing requirements and costs	PS	PS, Director, Under Secretary, Executive Secretary Teaching Service Commission (TSC), President, Swaziland National Association of Teachers (SNAT)	Mapping Study 20-09-91, CSO Data and Budget Data

05-12-92	Capital Budget Monitoring Report	Under Secretary, Chairman, Capital Budget Implementation Committee (C-BIC)	Under Secretary, x 20 Members C-BIC	Ministry of Education Reports, Ministry of Works Reports
06-12-91	Profile of Primary and Secondary Schools in Swaziland showing enrolments, repeater rates, pupil-teacher ratios, last MOE visit, fees, access to school, latrines, classroom buildings, condition of buildings, books, pupil-class ratios and construction activities, all schools alphabetically	Planning Unit and Mapping Project	Principal Secretary (PS), Director, Under Secretary, Executive (TSC), Financial Controller, Planning Unit, MIS and major donors to mapping study: USAID, WFP and UNICEF	Mapping Study, CSO Data
13-12-91	Pupil-Desk Ratio in Swaziland Schools, showing the number of pupils per desk	Financial Controller	Under Secretary, Financial Controller and Capital Budget Implementation Committee	Mapping Study

16-12-91	Secondary & Primary Schools' List: addresses, telephone numbers and names of Heads, also showing nos of pupils and teachers and CSO Code, Pay Code and Enumeration Area	Director of Education, Chief Inspectors and Planning Unit	PS, Director, 3 x Chief Inspectors, 3 x Planning Unit, MIS, 13 x Senior Inspectors, 4 x Regional Education Officers (REOs) and Central Statistical Office	Mapping Study CSO Data
17-12-91	Summary of numbers of teachers and houses, in ascending order ranging from schools with no houses	Under Secretary, Chairman of Capital Budget Implementation Committee (C-BIC)	Under Secretary, x 20 Members Capital Budget Implementation Committee, including REOs, MIS	Mapping Study
17-12-91	Number of toilets in use in schools	Under Secretary, Chairman, C-BIC	Under Secretary, x 20 Members of C-BIC, including REOs, MIS	Mapping Study
31-12-91	Secondary schools with pupil-teacher ratios <22	PS	PS, Director, 3 x Chief Inspectors, MIS	Mapping Study, CSO Data
03-01-92	Visits to schools by Educational Personnel	Chief Inspector, Secondary	Chief Inspectors, x 4 REOs, MIS	Mapping Study

03-01-92	Secondary school enrolment projections 1991 - 2000	PS	PS, Director, Chief Inspectors, MIS	1990 CSO Data
05-01-92	Estimates of intake into Form 1	PS	PS, Director, Chief Inspectors	1990 CSO Data
06-01-92	Schools, Pupils and Teachers 1985 - 1990	Planning Unit	Planning Unit, Educansult Prevocational Education Study	1990 CSO Data
08-01-92	School list by pay-code	Planning Unit	Planning Unit, MIS	Mapping Study
08-01-92	1992/93 budget allocation by sub-sector (%)	Under Secretary, Chairman C-BIC	PS, Director, Under Secretary, Financial Controller, x 20 Members C-BIC	Budget Data
09-01-92	Information on schools in the same general area as Elunyaweni Primary School	Planning Unit	Minister for Education, Planning Section, MIS	Mapping Study
14-01-92	List of Teachers in Swaziland Schools, by school	Executive Secretary TSC		Mapping Study
14-01-92	List of Teachers in Swaziland Schools, Alphabetically	Executive Secretary TSC		Mapping Study