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PD ABG-659

84032

ENTER INFORMATION ONLY IF NOT INCLUDED ON COVER OR TITLE PAGE OF DOCUMENT

1. Project/Subproject Number

645 0230  
546 - 31

2. Contract/Grant Number

PDC-5832-I-00-0095-00

3. Publication Date

July 1993

4. Document Title/Translated Title

Mid-Term Evaluation of the Swaziland Education Policy, Management, and Technology Project

5. Author(s)

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6. Contributing Organization(s)

Creative Associates International, Inc.

7. Pagination

1-38; Annexes I

8. Report Number

II

9. Sponsoring A.I.D. Office

10. Abstract (optional - 250 word limit)

11. Subject Keywords (optional)

1. 4.  
2. 5.  
3. 6.

12. Supplementary Notes

13. Submitting Official

Lisette Handal

14. Telephone Number

(202)966-5804

15. Today's Date

08-25-93

16. DOCID

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17. Document Disposition

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**MID-TERM EVALUATION  
of the  
SWAZILAND EDUCATION POLICY, MANAGEMENT,  
AND TECHNOLOGY PROJECT**

by

**Leon E. Clark**

**Bryan Axtell**

**July 1993**

**This evaluation was conducted by Creative Associates International, Inc., at the request of the U. S. Agency for International Development under Contract Number PDC-5832-I-00-0095-00.**

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## ACRONYMS and ABBREVIATIONS

CA	Continuous Assessment
CAII	Creative Associates International, Inc.
CG	Career Guidance
CSO	Central Statistics Office
DIES	District In-Service Educators
EOPS	End of Project Status indicators
EPMT	Educational Policy, Management and Technology Project
ETGPS	Educational Testing, Guidance and Psychological Services
GOS	Government of Swaziland
HTMT	Head Teacher Management Training
IIR	Institute for International Research
INSET	In-Service Education Training Unit
IRI	Interactive Radio Instruction
LT	Lead Teacher
LITS	Local In-Service Teachers
MIS	Management Information Systems
MOE	Ministry of Education
NCC	National Curriculum Centre
OD	Organizational Development
PCV	Peace Corps Volunteer
POMI	Personnel Management, Organizational Development, Money Management and Instructional Leadership
PP	Project Paper
PTC	Primary Teaching Certificate
PTD	Primary Teaching Diploma
REO	Regional Education Officer
RPU	Research and Planning Unit
SCOT	Swaziland College of Technology
TA	Technical Adviser
TIDC	Teacher Innovation and Distribution Centre
TOT	Training of Trainers
TSC	Teachers Service Commission
TTC	Teacher Training College
UNISWA	University of Swaziland
USAID	United States Agency for International Development
VOCTIM	Vocational and Commercial Training Institute)

## **EXECUTIVE SUMMARY AND MAJOR RECOMMENDATIONS**

The overarching goal of the Swaziland Education Policy, Management and Technology Project (EPMT) is to establish an efficient and high quality human resource base for sustained development and economic growth in Swaziland. The project purpose is to improve both the quality and the efficiency of basic education. It is designed to achieve this purpose by providing support in five areas:

- (1) Continuous Assessment (CA) -- to introduce a comprehensive system of testing and remediation into all primary schools;
- (2) Head Teacher Management Training (HTMT) -- to provide specialized training for all school heads so they are better equipped to manage their schools and improve the quality of education therein;
- (3) Management Information Systems (MIS) -- to give decision-makers accurate, useful information about the education system on which they can base effective policies and plans;
- (4) Organizational Development (OD) -- to carry out research and strengthen the operation of the Ministry of Education (MOE); and
- (5) Guidance and Counseling -- to help students make more realistic decisions about their futures.

By any standards, this is an enormously ambitious project, attempting to bring about change at every level of Swazi education, from the way teachers teach to the way principals administer to the way policy is formed to the way students find jobs. In the process, old information is to be managed in new ways; new information is to be created through research; and communication systems and decision-making processes are to be transformed through OD.

In theory, all of these components are interlocking and mutually reinforcing, working together to form one unified system; in practice, each of these components is a system within itself, complex, requiring focused attention to bring about change. If one project has not been able to create transformations in all of these components, not to mention uniting them into a whole, it is most understandable.

In fact, the EPMT staff has been extremely productive, extending themselves above and beyond the call of duty. In the first three years of the project, they have implanted all

of the technical inputs required of the components: classroom tests for CA; training modules for HTMT; and data collection and processing systems for MIS and OD. In addition, they have conducted or supervised hundreds of hours of training in country and arranged for participatory training abroad. Most of these accomplishments, however, have come through the efforts or under the direction of expatriate Technical Advisors (TAs). The question now is what will happen when the project leaves Swaziland. How many of the project components will become institutionalized in MOE? How sustainable will they be?

In a sense, the easier half of the project has now been done: the technical half. There is a technical solution to writing test specifications, to processing data, to writing training modules. Experts can be hired to do this. But for teachers to teach differently, for policy makers to attack problems differently, for principals to lead differently, a change in attitude and an acquisition of knowledge and skills is required. This is a process of human development for which there is no technological fix. If these behavioral changes are to take root, i.e., if the components of the project are to become institutionalized, then a paradigm shift away from front end technical inputs to back end behavioral outputs must take place.

The CA component of the project, the centerpiece of EPMT, is a case in point. CA contains two main elements: testing and remediation. Thus far, EPMT has devoted virtually all of its CA resources to the creation of tests and the design of a national data capture program. Only four and a half days of training have been given to teachers in toto, and of that only two days were devoted to remediation. But CA, in essence, is a call to teachers to transform the way they teach, shifting their classroom focus from teaching to learning, spending time assessing students' achievements and providing remedial instruction -- all activities that are not prominent features of education in Swaziland.

The key to this change is to provide training and continuous support for teachers -- in each school, each region, each subregion -- to slowly bring about the style of teaching CA implies: teaching to objectives; commitment to mastery learning; the use of active learning techniques; and the assumption that all children can learn. EPMT must channel its CA resources into this kind of implementation, or by the end of the project there will be piles of tests in Swazi schools but no changes in Swazi classrooms. Strategies must be developed to tap existing in-service and outreach networks of Teacher Leaders (TL), Local In-Service Teachers (LITs), District In-Service Education Specialists (DIES), newly-trained Head Teachers, Inspectors, personnel from the Regional Teachers' Centers (TIDCs) and trainers from the In-Service Education and Training Unit (INSET).

The first and most important step in this direction is to shift the project focus away from test creation to teacher behavior; to scale back future investments in test designs, whether through foreign consultants or overseas training, and to channel those resources into teacher training and institutional support for INSET, both for CA efforts and for

**HTMT courses.**

A similar shift should take place with the MIS and OD components of the project. Enough data exist now to engage every MOE officer for the next year and beyond, but most MOE officers are not engaged, either with data analysis or policy creation. The need is to create a culture, an environment, where data are not only respected (and often mythologized) but used, and more, even demanded because the analysis of problems requires more information. Seminars, workshops, discussion groups, training sessions (even films and video games), as well as regular meetings of task forces and policy makers, will have to be held over time to ensure the institutionalization of both MIS and OD.

The HTMT component of the project is well on its way to becoming institutionalized in MOE, but the quality of the training must be improved and the capability of INSET to provide that training must be created to increase the likelihood that HTMT will improve the management of Swazi schools.

The Guidance and Counseling component of the project has already achieved its EOPS, and given the needs still existing in other project components, it would be inadvisable to invest additional project resources in this component.

It should be mentioned that the somewhat unusual design of EPMT, in which the lion's share of project inputs and TA services are concentrated in the early stages of the project, make it very difficult to launch new initiatives in the second half of the project. However, if existing resources, especially Swazi personnel, can be mobilized to focus on EPMT tasks, the major components of the project can take root.

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

Specifically, the evaluation team makes the following recommendations.

#### **Continuous Assessment (CA)**

1. The introduction of continuous assessment term tests to schools should be limited to one grade per year – grade 2 in 1994, grade 3 in 1995 and grade 4 in 1996.
2. The MOE needs to staff the CA unit with a sufficient number of full-time support staff – secretaries, an illustrator, and materials production workers – so that professional staff do not squander their time on routine activities and production deadlines can be met.

3. The training of classroom teachers in continuous assessment should be done directly by the regional training teams that are already established.
4. The MOE should designate the training of teachers for CA as one of its highest priorities, allowing regional training teams to devote sufficient time to this task.
5. The funds now planned for CA staff internship training and for test development workshops in testing should be reviewed, and reallocated to teacher training as needed.
6. The training needs of teachers in grades 5 through 7 will need to be met following project completion, and the MOE should plan on keeping the regional training teams intact at least until such training has been completed.
7. The learning modules contained in the *Handbook for Continuous Assessment and Remediation* should be revised using the simplest language possible, compatible with the maintenance of the professional content of the materials.
8. The CA Unit should also consider publishing five separate modules as opposed to the single large manual.
9. Given their success in writing the first five training modules for the Handbook, the CA Unit staff could profit from additional training in the writing of training modules.
10. Additional efforts are needed to get appropriate continuous assessment procedures and techniques included in the pre-service courses offered by the education departments of the TTCs.
11. Development work on additional subjects requires continued professional commitment from the MOE.
12. Baseline data on student achievement in English and mathematics should be gathered in November of each year as is planned. However, this needs to be scaled back to one grade per year, with grade 2 measured in 1993, grade 3 in 1994 and grade 4 in 1996.
13. The Scantron data capture program should not be continued on a national basis.
14. The MOE should implement the Interactive Radio Instruction program for English language.

#### **Head Teacher Management Training:**

15. HTMT should be extended to secondary Headmasters, including the administration of the final examination; all certification requirements for school administrators should apply equally to primary and secondary schools.
16. The HTMT teams, assisted by INSET and NCC staff, should redesign the POMI final exams to make them more reflective of the management skills taught in HTMT courses; they should also draw up a set of proposals for MOE's dealing with the certification and testing of school administrators, indicating in particular which body, or bodies, could assume responsibility for administering the program.
17. The HTMT teams should reduce the number of topics covered in each area of POMI training, concentrating on a limited number of key themes. (Alternatively, more time could be devoted to each area of the training, as 75 percent of the Head Teachers in one study have already recommended.) Whatever the solution, any module used should be followed as written very closely; improved training and learning should result.
18. HTMT teams should build follow-up sessions into their basic training plans and work schedules, using monthly Open Days at the TIDCs or other mechanisms for meeting with head teachers. Once all school administrators have gone through the basic HTMT, virtually all school management training should be follow-up training, aside from perhaps one basic course each year for new or aspiring head teachers.
19. HTMT teams should revise the POMI training modules to include Back-to-Work Plan activities at the end of each topic. An exercise in writing clear, measurable objectives should be included in these activities, introduced during the first Back-to-Work Plan session.
20. The HTMT teams, in collaboration with the two UNISWA researchers and the core EPMT staff, especially the MIS and OD personnel, should design a research plan to look into the management practices of school administrators, such research to serve the dual purpose of evaluating the HTMT and providing school-level information for the MIS and OD components of the project. Regional personnel such as REOs and Inspectors should be drawn into this planning process as soon as possible.
21. The HTMT teams, when planning and designing school management monitoring and research activities, should involve tertiary educational institutions, especially the TTCs, drawing in both the faculty and students as active participants.
22. The director of INSET, along with the HTMT trainers in INSET, should plan a series of in-house "practice sessions" in which INSET trainers use the HTMT modules as written, with each presentation followed by an in-depth discussion of

the training techniques used; local trainers, EPMT staff and any MOE personnel with training experience should be invited to participate in the "processing" of the presentations.

23. EPMT should shift resources in its budget to provide for high quality TOT training in Swaziland or abroad for a minimum of two current or to-be-hired INSET trainers.
24. MOE should strengthen INSET, as planned in 1990, by (i) appointing a fulltime director at grade <sup>22</sup>, (ii) establishing INSET as a separate unit within the Department of Teacher Education and Curriculum Development, and (iii) raising the grade levels of INSET trainers. 24
25. EPMT should initiate a dialog with UNISWA, the TTCs and appropriate MOE departments concerning the ultimate disposition of HTMT and certification, with the aim in mind of institutionalizing and regularizing the training and certification process by the end of the project period.

#### Management of Information Systems and Organizational Development

26. The MIS and OD TAs should expand their outlets and methods for distributing information to MOE and, further, to Regional Education Officers and schools.
27. MIS meetings should be held periodically in the REOs to plan data collection and to analyze regional results, with the aim of enlarging the role of REOs in MIS and thereby moving the center of gravity of MIS slightly away from the capitol.
28. The MIS and OD TAs should prepare or help to prepare press releases that would highlight important education issues or clarify issues that may be of current concern; it is understood that such releases would be sent out via the Principal Secretary's office.
29. The MIS and OD TAs should meet with the PS and other MOE officers to plan a systematic approach to providing information to parents; once the system is in place, the TAs should meet periodically with MOE officers to choose themes and topics that serve both parents' needs and those of MOE.
30. The MIS and OD TAs should conduct a series of "Educational Issues Workshops," organized around subsectoral themes, in which participants examine data sets as possible sources of answers to questions they may have.

31. The MIS and OD TAs should organize problem-solving skills development workshops in MOE, conducted either by themselves or other facilitators brought in from EPMT, UNISWA, or other training or professional organizations.
32. The MIS and OD TAs should redirect research efforts towards classroom and school activities, feeding into the CA and HTMT components of the project; they should attempt to find research supervisors who can direct such research and who, in particular, can work with teachers and administrators to involve them as participant-observers in school and classroom studies.
33. The contractor in Washington should do a literature search of teacher-conducted classroom research and send a collection of key articles to EPMT for use in the project.
34. EPMT should consider shifting resources from computer programming to hiring an OD specialist to facilitate the integration of computer modelling data into MOE decision-making.
35. EPMT should investigate the possibility of using local OD courses or specialists to facilitate policy dialog within MOE and beyond, to regions and schools.
36. Project staff, especially the COP and the MIS and OD TAs, should begin planning now with MOE officials to find ways to integrate the MIS and OD components into the RPU, thereby strengthening the RPU and increasing the chances of institutionalizing the project components in MOE.

#### **Guidance**

37. The ETGPS needs to ensure that plans are fully developed for providing assistance to grade 7 teachers on the teaching of the career awareness units when the introduction of the new grade 7 social studies textbook actually occurs.
38. Guidance programs should emphasize the variety of occupations available and link this variety to differences in interests as well as to differences in abilities.
39. The ETGPS unit should work with the Rotary Club and other groups and institutions to provide seminars that will focus on possible employment opportunities at lower occupational levels.
40. The funds now planned for a guidance consultant should be reallocated to those components where additional and continued training is essential to sustaining project initiatives.

## **CHAPTER I: INTRODUCTION**

This report presents the findings of a mid-term evaluation of the Educational Policy, Management and Technology Project (645-0230), jointly funded by the United States Agency for International Development (USAID) and the Government of Swaziland (GOS). Begun in 1990, the project was originally scheduled to run for five years. In 1992 the project paper was amended to extend the project by one year to 1996 and to revise the End of Project Status Indicators (EOPS).

The total cost of the EPMT project is approximately \$9,629,000, with USAID contributing \$6,900,000, GOS \$2,530,000 and U. S. Peace Corps \$200,000. The prime contractor for the project is the Institute for International Research of Rosslyn, VA., with sub-contracts going to the University of Massachusetts, Amherst, and New Mexico State University to provide training and consulting services, both in Swaziland and in the U. S.

### **Background**

The educational system of Swaziland has improved significantly in the past 20 years, expanding to the point where virtually all Swazi children receive some primary education and where roughly half of these students are girls. Since 1968 the percentage of primary school teachers meeting 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 suggest that Swaziland has reached a milestone in its efforts to develop a strong human resources base.

At the same time, however, the quality of Swazi education has failed to keep pace with its growth. The dropout and repetition rates continue to be very high, with only 56% of children completing the seven-year primary cycle and only 17% completing on time. On average it takes almost 12 years to produce a primary school graduate; it takes more than nine years to get a student through five years of secondary school. Such inefficiencies, problematic under any circumstances, become intolerable in a country with a population growth rate of 3.2 percent per year, which produces increasingly large intake classes each year. Clearly, the need is to reduce the dropout and repetition rates -- through improved instruction, school management and educational planning. It is precisely these objectives that the EPMT Project is designed to address.

### **EPMT PROJECT GOALS**

The EPMT Project builds on two previous AID-funded education projects in Swaziland: the Primary Curriculum Development Project, 1975-1984, and the Swaziland Teacher Training Project, 1984-1989.

In its attempt to improve the quality and efficiency of basic education, EPMT provides long-and short-term technical assistance; participant training both in the U. S. and in-country; and training and equipment for teachers and school administrators. The project is organized into five components:

1. Continuous Assessment is the core project component. This is an effort to develop a system of testing and remediation that will improve the quality of learning in the primary schools.
2. Head teacher management training is the second critical component. Training efforts are aimed at personnel management, organizational management, money management and budgeting, and instructional leadership.
3. The development of a Management Information System will provide MOE decision makers with information of utility in developing education policies and strategies.
4. The Organizational Development effort is aimed at identification of needs for action in the system and at training education staff to better utilize information for better organizing the education structure and systems.
5. The Guidance component is designed to strengthen the vocational guidance efforts of the MOE, and to extend career and occupational awareness to pupils at upper primary level.

#### **End-of-Project Status**

The EOPS for the project, keyed to the five major components of the project, are as follows:

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

### **Evaluation Strategy and Methodology**

This mid-term evaluation mission was conducted by Creative Associates International, Inc. of Washington, D. C., under a contract with USAID. The mission team consisted of Dr. Leon E. Clark, professor and director, International Education Program, American University, Washington, D. C., and Dr. Bryan Axtell, independent consultant. Dr. Clark, the team leader, was responsible for evaluating the Head Teacher Management Training, the Management of Information Systems and the Organizational Development components of the project, reported in Chapters III and IV; Dr. Axtell was responsible for Continuous Assessment and Guidance and Counseling, described in Chapters II and V.

According to the "Statement of Work," the main purpose of this evaluation mission was "to assess the progress towards accomplishing the End of Project Status Indicators (EOPS), identify design or implementation problems, and make recommendation for mid-course corrections." The team was asked to "give special attention to the capability of the MOE and its various units to carry out and sustain the systems and programs initiated by the technical advisors and make recommendations for corrections where sustainability appears to be a problem."

The evaluation team spent six weeks in Swaziland, from June 3 to July 16, 1993. Prior to arrival, team members reviewed project documents and the team leader met with Dr. Paul Spector, principal investigator of the project and president of IIR, and with other officials of IIR and USAID/Washington.

During the first week in Swaziland, the team held extensive meetings with USAID officers and EPMT project staff, reviewed project documents and testing and training materials produced by the project, and made plans to visit project sites, training events and schools and education offices. During the next four weeks, the team visited three of Swaziland's four regions, attended meetings of teachers, observed and participated in a training of trainers workshop for the Head Teacher Management Training component, met with Teacher Leaders and administrators at Regional Education Centers, visited schools, observed teachers applying elements of the Continuous Assessment component, and conducted detailed interviews with numerous educators and officials of the Ministry of Education, including the Director of Education and the Principal Secretary.

The methodology used by the team consisted of structured and open-ended interviews; focus group discussions; direct observation; and analysis of case study material (project documents), project-produced materials and commissioned studies.

A first draft of this report was completed during the fifth week of the mission. It was shared and discussed with USAID officials and EPMT personnel, largely to correct factual errors. A second draft was then prepared and given to the Principal Secretary of the Ministry of Education, Mr. M. E. Vilakazi. A final meeting was held with the PS,

USAID and the EPMT chief of party to discuss the major recommendations of the report and the implications for future project activity. The final evaluation report was presented to USAID/Swaziland prior to the team's departure.

The evaluation team would like to state clearly from the outset that we feel EMPT has been enormous productive during the first three years of the project. The EPMT staff and those associated with it have laid a firm foundation for what everyone agrees is a very ambitious and complex undertaking. The team's recommendations for shifting focus during the next three years -- for emphasizing institutionalization through training - - grows out of the natural progression of the project rather than out of any failing during the first phase.

### **Structure of the Report**

The Executive Summary provides an overall assessment of the EPMT project -- its general design, accomplishments to date, and needs for successful completion -- and then lists some 40 recommendations made by the evaluation team.

Chapter I describes the project in more detail, gives background information on education in Swaziland and explains the modus operandi of the evaluation team.

Chapter II focuses on the Continuous Assessment component of the project; Chapter III on Head Teacher Management Training; Chapter IV on Management of Information Systems and Organizational Development; and Chapter V on Guidance and Counseling. Each chapter presents a brief history of the component under discussion, followed by a listing of accomplishments and an assessment of how well the component is progressing towards project objectives and final institutionalization in Swaziland. Recommendations are spread throughout each chapter, some intended for EPMT staff and some for MOE.

Annex I lists the institutions and people consulted in the course of the evaluation. Annex II contains the "Statement of Work" under which the evaluation mission was carried out.

### **Acknowledgements**

While it is not possible for the evaluation team to thank publicly the scores of people who have helped us during our stay in Swaziland -- especially those who spent hours responding to our endless questions and requests for information -- we would like to acknowledge some people who played a very special role. Dr. Philip Christensen, chief of part of the project, was unfailingly helpful in providing not only the usual materials produced by projects but also the unwritten background and history that enriches the context in which projects function. He made the EPMT as transparent as any evaluation could hope for. Mr. Edward Baker, Project and General Development Officer at USAID/Swaziland, filling in for the HRD Officer, quickly grasped the essence of the

project and made invaluable contributions to the process of reshaping the project's direction. Mrs. Lessiah Nkambule, the Project Manager, provided endless support and some hand-holding throughout our stay, helping us to avoid some pitfalls and in general smoothing our way. And finally Lorraine McCue at USAID helped us in many ways, big and small, to merge the worlds of IBM and Macintosh and put our report in final form. Without her help, we might still be in Swaziland.

## **CHAPTER II: CONTINUOUS ASSESSMENT**

At the center of Swaziland's plans for improving the quality of education available to students is the introduction of a comprehensive program of Continuous Assessment (CA). This is a very ambitious undertaking, the success of which requires a definitive commitment on the part of the MOE, a commitment not only in financial support, but also in the dedication of scarce professional resources which are essential to the development of CA materials and techniques and the subsequent internalization of these procedures into the school teaching and learning environment.

The EPMT project was designed to assist with all the necessary facets of developing the required base for this program – development of the professional expertise required to guide both materials development and the training of teachers to carry out the implementation, design and production of materials for assessment and remediation in the classroom, and, of critical importance, the preparation of teachers through both pre-service and in-service education for the formidable task of bringing those efforts to successful implementation in the classroom.

Recognizing that this was a vast undertaking, the MOE agreed that during the life of the EPMT project, the emphasis would be on English and mathematics and that grades 1 through 7 would be addressed. It has long been accepted in Swaziland, by education officials, parents, and employers, that a strong grounding in these two basic and essential subjects was crucial to later learning, whether in school or in employment. The MOE would use the period of project assistance to develop the necessary institutions and professional capability in order to carry on the development and implementation efforts to additional subjects following project completion.

- o **Institution building.** Training and developing the staff, trainers and infrastructure needed to insure that the continuous assessment program becomes a central and guiding force in primary education.
- o **Materials development.** The national implementation of a viable continuous assessment program requires the careful elaboration of learning objectives, the development of test specifications for use in assessing learning, and the introduction of learning materials and techniques needed for remediation or for enrichment of learning.
- o **Teacher training.** The central requirement for the institutionalization of the continuous assessment process in learning is a well-trained, dedicated, and enthusiastic corps of teachers. Both in-service and pre-service training are essential if continuous assessment is to become the guiding force in an educational system of increasing quality.

There was difficulty in creating and filling the posts needed to staff the Continuous Assessment unit of the National Curriculum Centre (NCC). As this unit would play the central role in the development and implementation of criterion referenced tests and remedial materials, as well as the provision of training for teachers in how to use the materials within the continuous assessment framework, this delay caused serious difficulties in planning and meeting initial project activities and targets.

- o In July of 1991 seven NCC staff were appointed to the Continuous Assessment Unit – four curriculum designers, two each in maths and English, and three evaluators. In addition, the NCC provided the Continuous Assessment Unit with the services of an illustrator and two secretaries, all three on a part-time basis.

With these staff, and USAID housing at William Pitcher Teacher Training College as temporary office space, the Continuous Assessment Unit was able to begin assisting with the work already initiated by the Technical Adviser. During the subsequent two years of operation the Continuous Assessment Unit has developed professional expertise and capability through a variety of training experiences.

- o 4 members of the Continuous Assessment staff have completed a 6-month internship program at the Laboratory of Psychometric and Evaluative Research at the University of Massachusetts at Amherst. Two additional staff are due to depart for this internship in August of 1993. The internship experience has provided participants with both theoretical and applied knowledge on the development of criterion referenced tests and the implementation of a continuous assessment learning environment.
- o one member of the Continuous Assessment staff should complete a master's degree in educational measurement by December of 1993, and a second member of staff is scheduled to depart for the same training in August of 1993.
- o A variety of in-service and on-the-job training experiences have been provided to the Continuous Assessment staff by the TA for continuous assessment and by other consultants and trainers – on Criterion Referenced Testing (CRT), remediation techniques and development, use of computers for test production, and the development of training modules for use in teacher training.
- o The University of Massachusetts has provided two-week workshops on test development to teachers in the sixteen pilot testing schools.

That there is a high level of professional expertise available to organize and guide the many facets of developing a comprehensive program of continuous assessment is

clear. The training provided to the CA Unit staff has been relevant, thorough, and – once the staff had been appointed – timely.

One difficulty has been the lack of full time Swazi secretarial and production staff. This has caused some problems in the timely preparation and development of continuous assessment materials. One PCV assisted the Continuous Assessment unit for about 6 months before leaving in June of 1993 and a second PCV is about 6 months into his 2-year tour. These two volunteers have been primarily responsible for layout of test booklets, preparation of materials for trial testing and publication, maintenance of data base files of pilot test data, and the training of CA Unit staff to carry out these activities. However, it remains that without MOE commitment to the appointment of production and clerical staff, professional staff must pick up the slack, to the detriment of other pressing development and training concerns.

In April of 1993, the Government of Swaziland began the construction of a 5-office complex to house the Continuous Assessment unit. This building is adjacent to the NCC, and should provide easier communications and cooperation between the Continuous Assessment unit staff and other NCC professionals.

The program for developing test materials is well established. Detailed learning objectives have been generated with the assistance of the English and mathematics subject panels, NCC staff, and Continuous Assessment staff; item specifications and trial tests are being developed by Continuous Assessment staff as part of their intern experience at the University of Massachusetts, and trial testing and revision of tests is being completed by the CA unit in Swaziland, using local laboratory schools for first tryout and 16 specified pilot schools for the complete trial testing program.

The six term tests for grade 1 (three each in English and mathematics), the associated teacher test administration and scoring instructions, and the student-parent report indicating achievement on the learning objectives, have been completed. These are clearly a professional effort, and reflect the care and thoughtfulness that has attended their development.

Development work on term tests for other standards is in progress: objectives have been written at least through grade 6, test item specifications have been developed through grade 5, and materials are available for the development of pilot tests for grades 2 and 3. However, there is now too much development work to be done, by too few staff, and with too little support from office and clerical staff. There is the danger that development will not be as carefully done or that other pressing requirements for CA staff time will be ignored.

In June of 1993, the grade 1, term 1 English and maths tests were administered on a national basis. In addition to being the first implementation of national continuous assessment testing, this was also the introduction of the Scantron data capture program.

The test answers of every pupil were transferred by the teachers to machine readable answer sheets to be scored at the TIDCs. This program was intended to provide a national picture of student achievement on the continuous assessment tests. It also provides a computer printout of pupil responses to the test questions which can be kept by the school.

Teachers were not convinced that the Scantron program was of value. There has been negative feedback regarding the time required to complete the Scantron answer sheet and the time at the TIDC needed for the computer equipment to score and record the test answers. At the end of this exercise, teachers say they do not know any more than they did before – that once they had scored their pupils tests they knew what children have mastered or not mastered, and the Scantron exercise was simply that – exercise. They feel that they can use their time in more productive ways.

Teachers are clearly the critical factor in the improvement of the quality of education in Swaziland. Without a skilled and dedicated teaching force who are capable of carrying technical innovations into the classroom, progress in providing better educational opportunities to Swazi pupils will be slow. It has been clear from the beginning of the EPMT project that provision of training to the Swazi teachers would need to be very carefully addressed. The provision of technically excellent materials, in the form of objectives-based tests or specific remediation exercises, would be of little benefit if teachers were not conversant with the educational reasons in support of a continuous assessment program and were not capable of implementing such a program at the school level.

- o INSET has dedicated one day per month of its Open Days in-service program to supporting CA training for teachers.
- o To assist the CA Unit with the teacher training role, INSET has assigned 4 of its training staff to work two days a week with the CA program.
- o Two of these officers have attended a 2-month internship program with the University of Massachusetts. A third has been selected to begin master's training in educational measurement in the fall of 1994.

The MOE recognized at an early stage the critical nature of teacher training to the successful institutionalization of continuous assessment in the schools, and decided that the training of grade 1 teachers should be as direct as possible – that the teacher trainers should be those professionals most closely involved with the development of continuous assessment materials and with the responsibility for ensuring the implementation of the program in the educational system. Thus, instead of training the LITS and selected grade 1 teachers as a cadre to train teachers, regional training teams would be used to train primary head teachers and grade 1 teachers. This decision is a

further indication of MOE commitment to generating the best continuous assessment effort that is possible.

The regional teams received training-of-trainers workshops designed to prepare them to carry the primary responsibility for training the primary head and grade 1 teachers. The personnel of the teams is drawn from the CA unit staff (both NCC and INSET), other staff from INSET, teacher leaders from the TIDCs, and selected inspectors, head teachers, panel members and skilled primary teachers.

- o The CA unit staff (both NCC and INSET) were trained to write learning modules built around peer group learning which would be used in the training of head teachers and grade 1 teachers.
- o The result of these training efforts is the *Handbook for Continuous Assessment and Remediation* which was written by the CA Unit staff. This handbook consists of 5 learning modules and the compilation of item specifications for English and mathematics for grade 1.

The *Handbook* was first used in January of 1993 with the regional training workshops for head teachers and grade 1 teachers on the implementation of continuous assessment in grade 1. These workshops were expected to reach all schools and grade 1 teachers, but this goal was not reached. A disappointing turnout of about 80% of head teachers and grade 1 teachers attended the initial workshop. Subsequent make-up workshops in April reached additional schools and teachers, and now an estimated 90 – 95% of the head teachers and grade 1 teachers have received the workshop from the regional training teams.

The workshop introduced the teachers to wealth of new ideas, techniques, and procedures – teaching to objectives, the use of classroom tests to measure learning of specific objectives, mastery learning, and the use of remedial and enrichment materials to aid mastery learning. It is expected that teachers will employ their new learning in their classrooms, and that examples of unit tests and remedial materials will become increasingly evident as time goes on.

Unfortunately, there has been no organized follow-up to the initial workshop. The CA staff has visited some schools, and in one instance responded to a request for a training session on the development of remedial materials for classroom use. But these activities have been on an *ad hoc* basis. At this point there is little information or observation on how well teachers are implementing CA procedures in their classrooms. Given the new and challenging nature of many of the CA techniques, it is to be expected that many teachers will require extensive additional follow-up and supervision in implementing CA. An intensive follow-up program is needed to provide support and encouragement to teachers, and to determine where additional training efforts are needed.

The TIDCs are the obvious and logical locus for the extensive follow-up training and support that will be needed by teachers, and the EPMT project has funds available for equipping three TIDCs. Unfortunately, the MOE has not been able to begin construction of these facilities. A series of site location problems, architectural drawing changes, and non-allocation of funds for construction has prevented progress in the development of these facilities. It does not seem possible at this late date to include the new TIDCs in plans for an expanded and comprehensive CA training program for teachers. In fact, EPMT needs to start planning for the reallocation of the funds designated for TIDC equipment to project training activities that require additional assistance.

The modules of the *Handbook* are in second or third draft status at this time, but training needs appear to be requiring the *Handbook's* use before additional revisions can be made. The Teacher Training Colleges and the University of Swaziland have requested the full training workshop as a staff development activity. This training is scheduled to occur before revisions to the modules are possible. Similarly, the training of grade 2 teachers scheduled to begin in January of 1994 may occur before additional editing and revision can be completed.

### **Issues and Recommendations**

1. The delays at the beginning of the project led the CA unit and EPMT to propose a plan for developing and implementing two primary grades per year of continuous assessment tests. This would allow for English and mathematics to be completely implemented in grades 1 through 7 by the completion date of the project.

The CA Unit has had difficulty meeting production schedules, which is partly due to the lack of production staff. At the time of this evaluation

- o two evaluation posts are vacant (in the process of being advertised)
- o one evaluator is in a master's program
- o one evaluator is leaving shortly for a master's program
- o two curriculum designers are leaving shortly for 6-month internships
- o one PCV working with production has just completed her contract
- o the TA has finished her tour and will be leaving shortly.

For the next few months, and longer if suitable candidates are not found for the vacant posts, the CA Unit will be operating with two professional development staff, one PCV working with the production of materials, and the four INSET-CA staff who provide two days per week of assistance to the Unit. Under these conditions, the development and implementation of materials for 2 grades per year becomes tenuous, at best.

**Recommendations:**

The introduction and implementation of continuous assessment term tests to schools should be limited to one grade per year – grade 2 in 1994, grade 3 in 1995 and grade 4 in 1996. During the life of the project, grades 1 through 4 in English and maths will be implemented. The CA Unit, with returning trainees and some full time support staff supplied by the MOE, will implement the remaining grades 5 through 7 following project completion

The MOE needs to staff the CA unit with a sufficient number of full-time support staff – secretaries, an illustrator, and materials production workers – so that professional staff time is not squandered on routine activities and production deadlines can be met.

2. The incorporation of continuous assessment into the classroom is directly dependent upon the quality of training that is being received by teachers. The statement of objectives, listing of test item specifications, development of classroom tests, assessment of pupil strengths and weaknesses, and especially the design and employment of remedial strategies and techniques, are not easy to understand and master. Using head teachers and/or teachers who have received training in continuous assessment procedures to train other teachers carries the great danger not only of dilution of relevant information, but the presentation of ideas and concepts that are misunderstood or only partly understood.

**Recommendations:**

The training of classroom teachers in continuous assessment should be done directly by the regional training teams that are already established. This will insure the highest quality training available. The training plan should include specific dates for routine follow-up training and supervision. The zone schools, as used by INSET, seems one likely means of providing the necessary follow-up contact with all schools on a regular basis.

The majority of the regional training teams have other job responsibilities in addition to continuous assessment training. The MOE should designate the training of teachers in the implementation of continuous assessment as of the highest priority, so that the members of the regional training teams can provide the time commitment to training that is required.

The funds now planned for CA staff internship training and for test development workshops in testing should be reviewed, and reallocated to teacher training as needed.

During the life of the EPMT project, the teachers of grades 1 through 4 will have received training. The training needs of teachers in grades 5 through 7 will need to be met following project completion, and the MOE should plan on keeping the regional training teams intact at least until such training has been completed.

3. The *Handbook for Continuous Assessment and Remediation* is the primary training vehicle for preparing teachers to implement continuous assessment procedures. It is designed not only as the basis for workshop training, but the separate modules can be used for self-instruction by the teacher after returning to her school. The level of English used in the materials seems more difficult than is necessary for teachers to learn the skills required to implement continuous assessment in their classrooms. A simpler presentation in English, while maintaining necessary professional content, would make the modules substantially more useful to many teachers who may be struggling with English.

**Recommendations:**

The learning modules contained in the *Handbook for Continuous Assessment and Remediation* should be revised using the simplest language possible, compatible with the maintenance of the professional content of the materials. If at all possible, this should be done before the training of grade 2 teachers is undertaken in early 1994. Due to the staff shortages in the short term, revision before 1994 does not seem likely. The revision might be the major focus of a future trip of the CA consultant, working with an English designer of the CA Unit.

The CA Unit should also consider publishing five separate modules as opposed to the single large manual. Teachers would find it easier to use and probably somewhat more conducive to learning.

Given their experience in writing the first five training modules for the Handbook, the CA Unit staff could profit from additional training in the writing of training modules. This could be related particularly to level of English language used in such materials, writing for the language level of a specified audience, and some analyses that can be carried out on written material to assess the reading level.

4. While the continuous assessment training modules will be presented to the TTCs and to the University of Swaziland as part of a staff development program, there is little indication that efforts are underway to incorporate or coordinate continuous assessment

methods in the pre-service programs of these institutions. As the in-service efforts of the regional training teams are essential in reaching teachers already in the field, comparable pre-service efforts are needed to prepare new teachers just entering the field.

**Recommendation**

Additional efforts are needed to get appropriate continuous assessment procedures and techniques included in the pre-service courses offered by the education departments of the TTCs. Without this pre-service effort, new teachers will not only have a difficult time when first entering the classroom, but will also require immediate in-service training from already stretched INSET and Continuous Assessment staff.

5. The initial EPMT project design calling for the development and implementation of English and mathematics materials in grades 1 through 7 has been found to be overly ambitious. The MOE should look at plans for the development and implementation of continuous assessment in additional subjects carefully, recognizing the mistakes made in the past and being aware of the commitment required in terms of professional staff and financial resources.

**Recommendation:**

There is a minimum commitment required from the MOE in professional staff, development and implementation costs, and training to ensure successful continuous assessment development for a subject. Development work on additional subjects requires continued professional commitment from the MOE. Without such committed support, there is the real danger of inadequate and/or inappropriate materials being produced and distributed, to the detriment not only of the subject involved, but to continuous assessment and education in general.

6. The gathering of data on student achievement can provide useful information for assessment of project progress, for attainment of educational goals, and for planning of educational policies and interventions. The gathering of such data needs to be as unobtrusive as possible, and should not have a negative impact on the educational system it is intended to help.

**Recommendations:**

Baseline data on student achievement in English and mathematics should be gathered in November of each year as is planned.

However, this needs to be scaled back to one grade per year, with grade 2 being measured in 1993, grade 3 in 1994, and grade 4 in 1995. With the grade 1 data collected in 1992, there will be data on 4 grades by the time EPMT is concluded.

The Scantron data capture program should not be continued on a national basis. Teachers do not see this exercise as useful to them in the classroom, and the benefits that may accrue are outweighed by the negative impact on teachers. When national information on student achievement in English and maths is required by the MOE, such information should be gathered on the basis of a sample of schools.

8. The EOPS most directly relevant to the work in developing a continuous assessment educational program is number 2, which reads "student achievement is improved in grades 1 - 7 in mathematics and English." In light of Recommendation 1, this needs to be rewritten to read "...grades 1 - 4...". With the baseline data being gathered routinely in November of each year, information should be available at project completion date to assess the degree to which the EOPS has been achieved.

#### **Additional Issue**

The government of Swaziland has long recognized the importance of improving pupil performance in English. Beginning in grade 3, English becomes the language of instruction, so a solid background in the language is essential to educational progress. The need for improved English language competence has also been stressed by employers, who find it substantially easier to train those employees who have received a thorough education in English.

Swazi educators have been concerned about pupils' poor performance in English. Not only is the overall level of English language capability low, but there are often inconsistencies in a pupil's mastery of English skills. The MOE sees a need to strengthen all English language skills – listening, speaking, reading, and writing.

Interactive Radio Instruction (IRI) has been shown to be an effective way to provide good English instruction to children through daily lessons, and is a way to help teachers with limited English language skills to teach more effectively. Radio lessons are also efficient and cost-effective, while providing a rich learning experience to pupils.

To assess whether IRI is a viable approach for improving English language competence in Swaziland, the EPMT project conducted a 6-month survey and pilot test between October 1989 and May 1991. Using the *English in Action* series of radio lessons, the pilot program had three objectives:

- o to test the first 40 IRI lessons in 20 test schools with grade 1 pupils.
- o to analyze the state of radio broadcasting and reception.
- o to provide evaluative information which would allow the MOE to make informed decisions about the value of IRI.

The final report of the pilot project was submitted May 17, 1990, and was supportive that IRI would be a positive influence in improving English instruction and education. Among the important findings of the evaluation were:

- o 31 of 35 teachers involved said radio reception was better than adequate, with the other 4 saying it was adequate – none said it was less than adequate.
- o Over 90% of the teachers involved felt their students were ahead of where they would have been if they hadn't had instruction by radio.
- o All nineteen program evaluators, regional inspectors, and regional education officers consulted about the value of IRI were favorable to the full implementation of the radio programs.

#### **Issue and Recommendation**

1. In spite of the positive results of the pilot test of the IRI materials, no decisions have been reached by the MOE on the implementation of the IRI program in Swaziland. In view of the continuing need for improved English language learning, the MOE needs to support all programs that will assist in such an improvement.

#### **Recommendation:**

The MOE should implement the Interactive Radio Instruction program for English language. While it is not feasible to use the EPMT project to fund the program, other sources of funding should be investigated.

### CHAPTER III: HEAD TEACHER MANAGEMENT TRAINING

The Swaziland MOE has been aware for more than a decade that school management has not kept pace with the demands of a rapidly-expanding education system. Reports of fiscal mismanagement, absenteeism and a general absence of leadership among Head Teachers have appeared with increasing regularity in recent years. In 1986, in response to widespread concern with the way schools were being run, MOE conducted a series of management workshops for Head Teachers. Since then, sporadic one-day workshops or meetings have been held with school administrators, but a systematic, full-blown management training effort was not launched until the arrival of the EPMT project.

From the beginning, EPMT considered school management to be central to everything it was trying to accomplish, "a key requirement for attainment of project purpose and for successful implementation of all project activities." The Project Paper (PP) goes on to say:

Arguably, headmasters are the single most influential factor affecting quality and efficiency in the school system. They can affect morale, the quantity and quality of instruction, the relevance of curriculum in their schools to the needs of the community, the availability of instructional materials and training aids, and the relations with parents and the larger community.

Indeed, evidence from several countries suggests that school leadership, along with parent involvement, makes the major difference between an outstanding school and one that is only average.

#### Accomplishments to Date

The Head Teacher Management Training (HTMT) component of EPMT has compiled an impressive list of accomplishments in the first three years of the project. Working with only one American Technical Advisor (TA) for two years, assisted by two Peace Corps Volunteers, and four newly-hired trainers from the In-Service Education and Training Unit (INSET), the HTMT team was able to:

Conduct a nationwide assessment in the schools to identify key management needs. Four areas were singled out: Personnel Management, Organizational Management, Money Management and Budgeting, and Instructional Leadership, referred to collectively as POMS.

Design and publish four volumes of training modules, one for each area of the POMS, totalling more than 1,000 pages;

companion volumes of materials for trainees were also produced.

Provide five weeks of POMI training for 400 of the 535 primary school Head Teachers in the country. The other 135 Head Teachers plus a group of secondary school Headmasters will be trained by the end of August 1993.

Train four eight-member regional teams of trainers (consisting of INSET Trainers, Head Teachers, Inspectors and Teacher Leaders) to continue the training. A second Training of Trainers (TOT) workshop was held in February and June of 1993 to qualify more trainers for the regional teams.

Establish the principle in the MOE that all Head Teachers must be certified to be school administrators.

Establish the practice that Head Teachers must attend one five-week POMI course and pass a final examination to receive a course certificate, which presumably will be required when certification for administrators becomes mandatory.

Design and use a final qualifying exam at the end of POMI courses.

Design four sets of study questions to help Head Teachers prepare for the qualifying exam.

Assist the MOE in regularizing school auditing procedures and in publishing the results.

It would seem that HTMT is well on the way to becoming a permanent feature of Swazi education. And if certification is required of all administrators, then some form of HTMT will undoubtedly become institutionalized. Of all the components of EPMT, the HTMT is perhaps the most sustainable and promises to have the most immediate impact on the efficiency of Swazi schools. However, a number of issues remain to be resolved if HTMT is to realize its full potential in improving educational leadership.

### **Remaining Issues**

1. The question of whether to extend the HTMT to secondary school Headmasters has not been resolved by the EPMT staff. Original plans called for training all school heads, but project sentiment is now leaning towards concentrating on primary school heads only, for reasons of economy. This limitation on HTMT, however, could have several negative consequences and could jeopardize the gains made at the primary level.

First, it would create two classes of head teachers, those who need the training, the primary teachers, and those who do not, the secondary Headmasters. In truth, according to INSET trainers, the secondary Headmasters have not distinguished themselves in TOT training sessions. Second, the process of testing head teachers and certifying them -- only now getting off the ground -- would be undermined by focussing on only one class of head teachers. (Indeed, it is unlikely that MOE would certify only primary head teachers.) And finally, the overall perception of school management -- its importance and therefore the need for management training -- would be adversely affected, greatly reducing the likelihood of institutionalizing HTMT in INSET or elsewhere.

**Recommendation:**

HTMT should be extended to secondary Headmasters, including the administration of the final examination; all certification requirements for school administrators should apply equally to primary and secondary schools.

2. The exams now given at the end of HTMT courses leave much to be desired. For each of the four parts of POMI there is a 50-item multiple choice test. The questions, while often dealing with important topics, simply require the recall of factual information. No comprehension or application of knowledge is asked for. Even so -- or perhaps **because of** the inert nature of the questions -- only about 80 percent of the head teachers manage to score above 50 percent, the passing grade.

The HTMT team has expressed a need to revise the tests, primarily to correct misleading questions and wrong answers. However, there is an equally pressing need to revise the exams to cover higher order operations like analysis, synthesis, judgment and the design of original solutions. Given the limited number of head teachers who will be taking these exams, it should be possible to break out of the multiple choice format and ask teachers to write answers that analyze scenarios and offer solutions to everyday problems that administrators face. Such questioning would be consistent with the objectives of the training itself, where participants are expected to examine their attitudes and practices, and develop new skills.

Moreover, if these tests are to be used routinely to certify administrators, the passing grade of 50 should be reexamined; a certifying body within MOE should be identified to administer the tests; and a schedule of examination dates should be set. At the very least a makeup test should be given each year for those who have taken the HTMT course and failed one or more tests.

### **Recommendation**

The HTMT teams, assisted by INSET and NCC staff, should redesign the POMI final exams to make them more reflective of the management skills taught in HTMT courses; they should also draw up a set of proposals for MOE's dealing with the certification and testing of school administrators, indicating in particular which body, or bodies, could assume responsibility for administering the program.

3. The quality of the training itself falls short of the goals and even the procedures outlined in the training modules, which are quite professionally done. While four INSET trainers helped with the production of the modules, much of the design and writing, and all of the editing and computer inputs, were done by the American professor TA and his two PCV assistants. Not surprisingly, the modules are well written and full of participatory training techniques: case studies, group tasks, group presentations, role plays, discussions, debates, and hands-on practical exercises. Unfortunately, few of these techniques are used in the training, partly because of the way the trainers have been trained and partly because there is simply too much material to cover in the time allotted, almost forcing the trainers to **talk about** the topics rather than explore them. The net result is diminished learning and lost opportunities to empower the trainees, one of the guiding principles of the modules.

### **Recommendation:**

The HTMT teams should reduce the number of topics covered in each area of POMI training, concentrating on a limited number of key themes. (Alternatively, more time could be devoted to each area of the training, as 75 percent of the Head Teachers in one study have already recommended.) Whatever the solution, any module used should be followed as written **very closely**; improved training and learning should result.

Any topics not covered in the initial training courses can be handled in follow-up sessions. Indeed, follow-up training should be built into the overall HTMT design. Meaningful learning and behavioral change will not likely take root without reinforcement. Follow-up sessions, lasting only a day or half a day, can accomplish this; such sessions will also convey the message that MOE is serious about the development of management skills.

**Recommendation:**

HTMT teams should build follow-up sessions into their basic training plans and work schedules, using monthly Open Days at the TIDCs or other mechanisms for meeting with head teachers. Once all school administrators have gone through the basic HTMT, virtually all school management training should be follow-up training, aside from perhaps one basic course each year for new or aspiring head teachers.

To reinforce the idea that skills development is a continuing process, and to prepare for follow-up sessions, each trainee should be required to prepare a Back-to-Work Plan during the initial training phase. Plans should be started on the first day of training, with entries made at the end of each topic or module covered; plans should then be shared in small groups with other trainees for mutual reinforcement.

These Plans can serve as the basis for follow-up training sessions or for individual discussions with MOE personnel, such as visiting Inspectors or REOs. (Just as teachers have curriculum guides and lesson plans, head teachers should have management plans listing targets and strategies for the academic year. Such plans should be required as part of MOE head teacher certification program, with the inspectorate drawn into the process.) From the point of view of training, however, the Back-to-Work Plan, or management plan, is most useful as a standard against which the head teachers can measure their progress. Without such a plan and without follow-up sessions, the amount of change that can be expected in school administration through HTMT alone will be small indeed.

**Recommendation:**

HTMT teams should revise the POMI training modules to include Back-to-Work Plan activities at the end of each topic. An exercise in writing clear, measurable objectives should be included in these activities, introduced during the first Back-to-Work Plan session.

4. Follow-up training sessions provide an ideal setting for regular monitoring of Head Teacher progress and for the airing of administrative issues as they arise. They also lead naturally into more detailed evaluations of HTMT and, beyond that, into research studies of school management. One of the objectives of the MIS component of EPMT is to generate research that will provide information for policy decisions. Research into school management practices will serve this objective and also feed into

the OD component of the EPMT by identifying organizational issues at the school and regional levels, leading to discussions among Head Teachers, REOs, Inspectors and HTMT staff. Such activities are consistent with MOE's commitment to decentralization.

(Two research evaluation studies of HTMT were conducted in June-July 1992, one month after the completion of the first cycle of training. One study looked at the Personnel Management section of POMI, the other looked at the Money Management and Budgeting section. The researchers, both faculty members at UNISWA, found that Head Teachers who had completed the training, when compared to a control group that had not been trained, were better informed about administrative procedures; they could locate records more readily; they placed a higher value on budgeting and planning; and they kept better records, although they did not know how to use the information contained in the records. Both studies, following on the heels of the training, are highly impressionistic, and as the researchers point out, there is a need for follow-up studies that look at actual behavior. That kind of research can now be done, a year after the initial training.)

**Recommendation:**

The HTMT teams, in collaboration with the two UNISWA researchers and the core EPMT staff, especially the MIS and OD personnel, should design a research plan to look into the management practices of school administrators, such research to serve the dual purpose of evaluating the HTMT and providing school-level information for the MIS and OD components of the project. Regional personnel such as REOs and Inspectors should be drawn into this planning process as soon as possible.

As a footnote to the above recommendation, it would be important to draw the TTCs into this research planning process. Until now they have not been involved in the HTMT or any other component of EPMT, for that matter. While the TTCs are not research institutions, they do train the future school administrators of the country, and because all their students must do practice teaching, they are in touch with the schools. In fact student teachers, as fresh observers of school environments, would be useful informants in any school management study. Some might in fact decide to devote their final-year research project to school management. The point of this research proposal is to increase and channel the flow of information about the administration of schools; the more education actors involved, the better.

**Recommendation:**

The HTMT teams, when planning and designing school management monitoring and research activities, should involve tertiary educational institutions, especially the TTCs, drawing in both the faculty and students as active participants.

5. A three-week HTMT Training of Trainers (TOT) workshop was held during the period when the evaluation team was in Swaziland, providing an excellent opportunity to observe the training skills of the four INSET trainers assigned to HTMT as well as several of the Head Teachers and Inspectors who serve, or will serve, on the regional training teams. It also made it possible to interview at length the American TA for HTMT, who had returned to Swaziland to direct this TOT.

It should be stated at the outset that this training was not what is usually considered TOT. The focus of the training was more on the content of POMI than on training skills. In other words, the trainers, when presenting a training module, would tend to lecture about the management issues in the module rather than illustrate the training techniques called for. They would tell the trainees they should follow the outline of the module when training Head Teachers, but then they themselves would skip over most of the interesting, participatory activities. At a minimum, TOT trainers should model various techniques, and after using them, step back (shift to the meta level) and discuss the technique used: What happened? Who did what? What led you to do that? What did you learn? Who taught that to you? What are the strengths of this technique? When would you use it? What are its weaknesses? When would you avoid using it?

Such analysis of the training was not conducted during the TOT workshop. Nor were the trainees given much of a chance to practice training. Only once in the three weeks of training was each of the trainees allowed to lead the training, and then for only 10 minutes, before a video camera for analysis later. Unfortunately, the task given to each trainee was to **introduce** the module, which meant most of them simply tried to give an engaging 10-minute lecture on the module **coming up**, which of course they never got to. Considering there were only 12 trainees in the TOT, this amount of stand up "training experience" is hard to justify. The video analysis that followed tended to focus on poise and confidence, qualities the trainees probably brought with them to the training, rather than on new training skills they should have been practicing. The feedback they got from the trainers and fellow participants, written on a form (Appendix 0), was brief, polite and not sufficiently probing to help the trainees grow as trainers.

The most immediate challenge facing the HTMT trainers is how to bring their training skills up to the level of the training modules they are using. If they could simply do that -- use the modules well -- the quality of the HTMT would be improved enormously.

**Recommendation:**

The director of INSET, along with the HTMT trainers in INSET, should plan a series of in-house "practice sessions" in which INSET trainers use the HTMT modules **as written**, with each presentation followed by an in-depth discussion of the training techniques used; local trainers, EPMT staff and any MOE personnel with training experience should be invited to participate in the "processing" of the presentations.

6. The above recommendation is a low-cost self-improvement intervention; it represents the kind of staff-development activity that any "learning organization" pursues. But the weaknesses of the TOT course and the limited training skills exhibited by the INSET trainers suggest a much deeper problem: INSET does not have the capability to provide the quality of training that EPMT or other MOE activities require. In the absence of any other training unit in MOE, INSET becomes the training resource of first and last resort, relied upon to provide training for curriculum infusion, teacher upgrading, CA, school management, and a variety of other courses and workshops held at the TIDCs and elsewhere. In effect INSET is the main vehicle by which the MOE attempts to implement programs and bring about change. As such, INSET is a service unit for all other subsectors of MOE.

To do this job, however, INSET needs a nucleus of trainers who are skilled in handling the key elements of a typical training sequence. They should be able to: (i) conduct a needs assessment; (ii) set goals and performance objectives based on this assessment; (iii) select or create appropriate training strategies and materials to achieve those objectives; (iv) evaluate the effectiveness of the training both short-term and long-term; and (v) design follow-up activities. If INSET trainers were skilled in this sequence, they could **design** training for any purpose; in effect they would be the training consultants for MOE.

The importance of having a strong training unit in MOE cannot be overstated; the planting of innovation depends on it. Perhaps one of the most conspicuous oversights in the EPMT project is the absence of any provision for participant training in training. It is not too late to make an adjustment, however, especially now that the project is shifting from design to implementation.

**Recommendation:**

EPMT should shift resources in its budget to provide for high quality TOT training in Swaziland or abroad for a minimum of two current or to-be-hired INSET trainers.

7. It should be mentioned that organizational issues within INSET, if not resolved, would significantly impede the improvements suggested here. Specifically, it is imperative (i) to appoint a fulltime director of INSET and (ii) to establish INSET as a separate unit within the Department of Teacher Education and Curriculum Development, with the director being equal in grade to the director of NCC and the principals of the TTCs. This independent status, combined with potential upgrades in training positions, would make it possible to attract talented young staff members to INSET.

If these strengthening measures are not taken immediately, the very survival of INSET as an effective training unit will be brought into question. And as a consequence, the future of HTMT will be put into jeopardy. In 1990 the MOE agreed to these strengthening measure for INSET, but three years later, these measures have not been taken.

**Recommendation:**

MOE should strengthen INSET, as planned in 1990, by (i) appointing a fulltime director at grade 22, (ii) establishing INSET as a separate unit within the Department of Teacher Education and Curriculum Development, and (iii) raising the grade levels of INSET trainers. - 28

8. Looking beyond the project period of EPMT, it is possible that INSET may not be the ideal location for conducting HTMT or certifying school administrators. In the near term, for the next two to three year, INSET will shoulder this responsibility, but ultimately MOE may want to shift the burden to UNISWA or the TTCs. It is common in many countries for aspiring school administrators to take courses at universities to qualify for certification; it is also common for ministries of education to provide in-service courses for this purpose. MOE will have to decide how it wants to handle the training and certification of its administrators. EPMT can be helpful in this decision-making process by initiating a dialog with UNISWA, the TTCs and various departments within MOE. Involving college faculty members and MOE officers in the actual training and follow-up activities (recommended above) would be a good beginning.

**Recommendation:**

EPMT should initiate a dialog with UNISWA, the TTCs and appropriate MOE departments concerning the ultimate disposition of HTMT and certification, with the aim in mind of institutionalizing and regularizing the training and certification process by the end of the project period.

**Conclusion**

The HTMT component of EPMT has made impressive strides during the first half of the project. It has completed, or is well on its way to completing, the Project Outputs for Head Teacher training, namely:

- a. Results of study on headmaster training and requirements;
- b. Training syllabus and materials produced and distributed to Teacher Training Colleges; and
- c. Headmasters, Deputy Headmasters and school committee persons trained.

The EOPS most directly relevant to this component, viz., “3. Primary and secondary schools are better managed,” is also within sight, although in the absence of concrete indicators, it will be hard to know just what difference HTMT has made. It seems almost certain, however, that by improving the quality of its training, by involving tertiary educational institutions in its work, and by ensuring the institutionalization of administrator certification, HTMT will greatly improve its chances of making a difference in the quality of Swazi education.

#### **CHAPTER IV: MANAGEMENT OF INFORMATION SYSTEMS AND ORGANIZATIONAL DEVELOPMENT**

While the MIS and OD components of EPMT are listed separately in project documents, they have become so closely related in project implementation that it seems logical, if not necessary, to discuss them in tandem. There is one Technical Advisor (TA) for each component, but they work across the hall from each other at MOE and share information and strategies almost daily. Moreover, the Chief of Party (COP), who joined the project originally as the MIS TA, works in the same building and considers himself the third member of the MIS/OD troika.

These components benefit not only from the cooperative support of three team members but also from the talents of the two TAs, who are very able and productive mid-career professionals. Over the past two years, they have accomplished the following, *inter alia*:

Established a data base on primary and secondary schools.

Prepared a report on the educational status of women and children in Swaziland.

Initiated a study of the book rental and distribution scheme.

Completed a study of the cost of education in Swaziland.

Completed a study of the procurement and maintenance of school furniture.

Applied a World Bank simulation of education finance to Swaziland.

Supervised a decision process study.

Conducted a school mapping study.

There is little doubt that the MIS and OD TAs have made their presence felt in MOE. They have assembled information, made it available on request, and attempted to influence decision-making in the ministry. In some limited instances, as the TAs would be quick to point out, they have made a contribution to rational decision-making by providing empirical evidence. Essentially, however, they have established procedures to collect data, maintain data bases, and to distribute information, although the process of distribution is only now beginning in earnest.

In structured interviews in MOE, every respondent was able to identify the MIS and OD TAs as sources of information, places where they would go if they needed data. They also expressed an appreciation for the TAs' presence and their contributions to MOE. However, when asked the last time they had requested information from either TA, only one official could cite an instance. And when asked the question, "What kinds of information would you like to have right now that would help you make better decisions?" not one official in MOE was able to give one example.

These responses suggest the following: MOE personnel are aware of the MIS function in the project and they have very positive attitudes towards it; they generally do not use this resource, with some notable exceptions; and they do not have a felt need for new or different kinds of information.

### **Information Environment**

Given this level of participation, it is still useful to simply make the MIS function visible by trying to create a data rich environment.

#### **Recommendation:**

The MIS and OD TAs should expand their outlets and methods for distributing information to MOE and, further, to Regional Education Officers and schools.

The MIS TA has already planned to put out bi-monthly reports on education topics. Such reports can be tailored to different clientele, some more complex than others; some presented in graphic form only; some useful to teachers; some useful to administrators. With some help, the TA might consider putting out a report once a month. There is a special need, recognized by the TA, to draw the Regional Education Officers (REOs) into the data collecting and processing network.

#### **Recommendation:**

MIS meetings should be held periodically in the REOs to plan data collection and to analyze regional results, with the aim of enlarging the role of REOs in MIS and thereby moving the center of gravity of MIS slightly away from the capitol.

The need to create a receptive environment for educational information goes beyond the educational system itself and extends to the general public, especially to parents of school-aged children. With the plethora of information available in the MIS data bases,

it should be possible to find several stories that would interest the public, e.g., the success of girls and women in education in Swaziland, far outdistancing most other African countries.

**Recommendation:**

The MIS and OD TAs should prepare or help to prepare press releases that would highlight important education issues or clarify issues that may be of current concern; it is understood that such releases would be sent out via the Principal Secretary's office.

With the introduction of new education programs, such as CA, the need for public awareness is especially acute, not only to allay the fears of parents but to win their active support if possible. Indeed, MIS can be helpful to MOE in providing various kinds of information to parents through a variety of channels, e.g., REOs, TIDCs, the Teachers Service Commission (TSC) and schools themselves.

**Recommendation:**

The MIS and OD TAs should meet with the PS and other MOE officers to plan a systematic approach to providing information to parents; once the system is in place, the TAs should meet periodically with MOE officers to choose themes and topics that serve both parents' needs and those of MOE.

**Creating Demand**

The next step in trying to foster an empirically oriented organizational culture in MOE -- the next step after creating a data-rich environment -- is to create demand for information; in effect, to stimulate felt needs among MOE officials for information they do not have, and further, to plant the habit or inclination to look for information when clarifying issues, setting priorities, solving problems or forming policy. One way to do this is to hold workshops or seminars in which sectoral or subsectoral issues are discussed and then further investigated using data sets. While this can be a time-consuming training or educational process, it is perhaps the only way to transform data from inert information to vital answers to questions that participants themselves ask. It is generally advisable to organize such workshop around themes, e.g., primary school dropouts or building construction costs, and then to invite participants with a professional interest in the theme.

**Recommendation:**

The MIS and OD TAs should conduct a series of "Educational Issues Workshops," organized around subsectoral themes, in which participants examine data sets as possible sources of answers to questions they may have.

**Developing Skills**

Following naturally from the recommendation above, the next step in the culture-changing process is the development of data analysis skills to be used as part of a rational/logical problem-solving strategy. Training modules, in which participants must translate, analyze and then apply data to problem solutions, can be developed. More appropriate here, however, would be the creation of so-called inquiry modules, in which participants attack a real problem, form hypotheses to help explain the cause or causes of the problem, evaluate the hypotheses against data, select a working hypothesis, test this hypothesis against more data, and if possible come to a conclusion. At this point, participants are ready to pursue solutions. Again, this process is time consuming, but problem-solving, data-using skills can only be developed through use.

**Recommendation:**

The MIS and OD TAs should organize problem-solving skills development workshops in MOE, conducted either by themselves or other facilitators brought in from EPMT, UNISWA, or other training or professional organizations.

It should be noted that the MIS TA, on her own, has launched a series of computer skills workshops to which she invites everyone in MOE. A few people have taken advantage of this. The first workshop dealt with graphs, the second with line graphs, and the third with pie charts. Such skills, along with many other elements of computer literacy, have been transferred by the MIS and OD TAs to a small number -- perhaps five -- MOE staff members.

**Generating Data: Research**

The final stage of creating an empirically oriented organizational culture is to go beyond the use of data to the creation of data through research. The EPMT project design recognizes this fact and asks the MIS TA to conduct or supervise research studies. This has begun in a very limited way. One MOE staff member at present, under the guidance of the OD TA, is looking into the book rental and distribution scheme in Swazi schools. Under optimal circumstances, much more research could be done, and the TAs are aware of this. Ideally, for example, ethnographic studies of teaching practices, with particular concern for student assessment and follow-up remediation, could be

conducted; not only would such studies feed directly into the CA component of EPMT but they would yield other valuable insights into classroom environments that could be used in both in-service and pre-service teacher training. Similarly, studies of school management would provide valuable material for the HTMT program. [See Recommendations in Chapter 3] With sufficient funds, research could be commissioned. Failing that, students from UNISWA and the TTCs could be enlisted, as could teachers and administrators themselves. In fact, the OD TA presented a paper in 1991 listing various ways that teachers can be involved in researching the very system in which they work.

**Recommendation:**

The MIS and OD TAs should redirect research efforts towards classroom and school activities, feeding into the CA and HTMT components of the project; they should attempt to find research supervisors who can direct such research and who, in particular, can work with teachers and administrators, involving them as participant-observers in school and classroom studies.

Interesting research has been conducted in recent years using classroom teachers as participant-observers of their own behavior and that of their students. One of the virtues of this kind of research is that it taps the expertise of those who are closest to the process of teaching and learning. Also, it is research that teachers can learn to do quite easily; it does not require sophisticated knowledge of statistics or computer software. Several articles have been written in the past 5-10 years describing in concrete detail how this type of research is done.

**Recommendation:**

The contractor in Washington should do a literature search of teacher-conducted classroom research and send a collection of key articles to EPMT for use in the project.

One problem with the research dimension of MIS is that neither the MIS nor the OD TA is a researcher by training and therefore not ideally suited to conduct or guide research studies, although both are capable of doing some of this. Moreover, it is difficult to find Swazi researchers who could perform this role. Perhaps UNISWA faculty members, or a visiting Fulbright scholar, could be found to conduct studies, and more importantly, to serve as mentors to Swazi students, MOE staff, and teachers and administrators.

It may be almost as difficult to implement the earlier recommendations concerning data analysis and problem solving. Fortunately, the MIS TA has extensive experience

in training and could do an excellent job; unfortunately, she will be leaving the project in December, to be replaced with a PCV who has technical skills in computer science, but is not a trainer. Her Swazi counterpart, who has just been assigned, was hired through the mathematics department of MOE; his background is in math and computer science.

Unfortunately, what is needed now in MIS is not more technical inputs. According to the MIS TA, the technical aspects of the component have been well organized and can be maintained with minimal levels of expertise. What is needed now are personnel with transfer skills, the ability to draw members of MOE into the MIS network; in effect, trainers. They may not be readily available, but without training activities in MOE, the ministry staff and officers will continue to perceive MIS as a somewhat archane activity controlled by specialists pulling printouts out of black boxes.

### **Organizational Development**

While there are no EOPS listed for OD per se, it is understood in the project that the effectiveness of MIS depends upon a supportive organizational environment, and conversely, that MIS should influence the way in which decisions are made and policy is formed in that organization.

EPMT sponsored an organization study of MOE in late 1991 entitled "Decision Process Study: A study of problems inherent in the education system which affect the decision process." The study's findings resemble a textbook list of weaknesses that any large organization at one time or another, to one degree or another, is likely to fall prey to: poor flow of information; decisions made at the top without consultation with those expected to implement policies; passive resistance at the lower levels of the hierarchy and a sense that change is being imposed; autocratic leadership; lack of delegation; immobility at every level except the top; lack of accountability, etc.

Two one-day meetings of MOE personnel and others involved in Swazi education were organized by the OD TA in late 1991 and early 1992 to discuss the findings of the study. The first meeting focussed on identifying problems; the second introduced a Project Planning Matrix, which was used to prepare plans of action in curriculum revision, teacher improvement and school management. The organizational issues identified in the Decision Process Study were not really confronted.

There is little evidence of any other specific follow-up work conducted in MOE to improve management practices. That is, typical OD interventions -- management audits, T-group sessions, team-building activities, coaching and counseling sessions with selected managers, management training in-house or through courses -- such activities have not taken place. In effect, there is no OD program in this project. There is, however, a hope that improved information will lead to better decision-making and improved efficiency in the system. That is a large burden to place on information alone.

In effect, however, the OD TA has taken on the burden and done a remarkable job. (He was first hired as the MIS TA; he is not a management specialist, although he has worked as a manager.) By assembling information, processing it, sharing it with MOE officers -- in addition to organizing conferences and meetings -- he has managed to influence MOE decisions, inject rationality into at least two construction and procurement processes, and in general serve as a model of informed rationality in MOE.

Unfortunately, he will be shifting to half-time on the project in September 1993, to five months on the project in 1994 and only two months in 1995. He does not occupy an MOE position and there is very little likelihood that a position will be created.

OD in the ministry, then, is on a gradual slope downward, as least as far as deliberate interventions are concerned. The Decision Process Study made 36 recommendations for improving the management processes of MOE. That list could still be put to good use, but it would require the services of an OD specialist, which the project may wish to consider. Plans call for the consulting services of an American computer programmer during the next year. But the computer sophistication of the MIS and OD components are already beyond the capabilities or needs of the Ministry. Moreover, the OD TA will be working half time beginning in September on a World Bank Japan Grant to install an education policy computer simulation model developed by the Research Triangle Institute. This follows an earlier installation of a World Bank simulation model for education finance.

**Recommendation:**

EPMT should consider shifting resources from computer programming to hiring an OD specialist to facilitate the integration of computer modelling data into MOE decision-making.

More generally, the project may wish to pursue traditional OD objectives, e.g., improved communication, shared decision-making, in which case local management training organizations such as the Institute for Development Management or the Swaziland Institute of Management and Public Administration may have courses or consultants who could begin the process of opening up policy dialogs within the educational system.

**Recommendation:**

EPMT should investigate the possibility of using local OD courses or specialists to facilitate policy dialog within MOE and beyond, to regions and schools.

### **Institutionalization**

On the question of institutionalizing MIS and OD in the ministry, there is good news and bad news. The good news is that a very strong base of accurate information on Swazi schools exists. The Central Statistical Office (CSO) conducts an annual survey of schools. Their data are supplemented by information collected by the MIS component; in other cases their data are cross-checked by MIS. In addition, these data are then used by the MIS and OD TAs to present readable profiles and projections, making the basic data from CSO more useful and user-friendly. It is safe to say, Swaziland has better education data and makes better use of those data than most countries in Africa.

The bad news is that most of the processing of education data is done by outside experts, creating a dependency relationship with MOE. The hiring of a Swazi counterpart for the MIS TA is a positive move away from that dependency. However, the counterpart will be working alone once the EPMT project comes to an end. The MIS and OD functions are grossly understaffed now for what they are attempting to do. This situation will probably get worse. In theory MIS and OD fall under the Research Planning Unit (RPU) of the ministry. In practice they operate independently. The RPU is itself understaffed and underutilized; it is perceived as largely moribund by most in MOE. If institutionalization depends upon the initiative or strength of the RPU, then MIS and OD will exist, if at all, only at the margin of the ministry.

#### **Recommendation:**

Project staff, especially the COP and the MIS and OD TAs, should begin planning now with MOE officials to find ways to integrate the MIS and OD components into the RPU, thereby strengthening the RPU and increasing the chances of institutionalizing the project components in MOE.

One reason for hope is that dependency may become an addiction and MOE will simply feel it cannot function without a strengthened RPU. In truth, as Swazi education grows increasingly complex, this will indeed be the case.

## **CHAPTER V: CAREER GUIDANCE**

The Educational Testing, Guidance and Psychological Services (ETGPS) unit of the Ministry of Education is responsible for organizing the occupational information and career guidance materials available to students, conducting the aptitude testing program at secondary school, and providing on-going training to designated careers teachers in the secondary schools.

End of Project Status indicator five from the project amendment states "Increased awareness among students of career choices and resources for identifying employment options." The EPMT project was to assist the MOE in extending career information to Swazi students at the primary and junior secondary levels. Four major outputs were expected to result from project interventions.

The professional capability of the ETGPS unit required strengthening to carry out the extension of its activities to primary and junior secondary students. One of the outputs in the guidance component of the project was to train 4 MOE staff to the master's level in guidance, with the first candidates to begin training by August of 1990.

Three additional posts for the guidance unit were to be created and filled by the MOE. Due to long delays in accomplishing this staff expansion, and to a lack of suitably qualified existing staff, it was decided to provide master's training to only two officers from ETGPS and to use the other two training positions for Continuous Assessment(CA) staff.

Two ETGPS staff members have been sent to the United States for master's training, one in guidance and one in measurement. They departed for training in August of 1992 and are expected to complete training about June 1994.

The TA for guidance spent two short term consultancies in Swaziland during 1990 and 1991 before taking up the one year TA post. She worked with ETGPS staff on guidance strategies and organizational planning for the unit, and provided a variety of training workshops related to the goals of ETGPS.

ETGPS staff, guidance teachers, TTC lecturers, LITS and DIES, and NCC staff have all received in-service workshops on career guidance, implementation of guidance strategies in their own programs, and their role within the guidance program as a whole.

The level of degree training in the ETGPS is sufficient to carry out effectively the demands placed upon the unit for guidance and measurement services to the schools. Much of the guidance work of ETGPS is focused on the careers teachers, conducting

training to enhance their skills, assisting in the organization of career days, and developing and providing materials and information to enhance their activities. With the training ETGPS staff has received they should be able to continue to provide training support for career teachers.

Four specific guidance documents have been produced with the assistance of the TA working with ETGPS. They are designed to meet several of the felt needs of both ETGPS staff and other education professionals involved in the guidance program.

*Career Education Lessons* is a compilation of lesson plans for Forms I to V on guidance concepts and activities that were prepared by third year students at William Pitcher Teacher Training College;

*Counselling Articles* is a selected group of relevant guidance articles designed to give the career guidance teachers a useful reference work of information and ideas;

*Career Interest* is a booklet of self report techniques for students from upper primary through high school that provide some basic information on the interests and preferences of the student, and how these are related to a variety of jobs and occupations;

*Career File* is a listing of occupations with a description of educational requirements and employment opportunities in Swaziland, organized by related occupations and coded to the information generated by the *Career Interest* self report techniques.

The *Career File* was developed to address the third guidance output, the production of a job/occupation manual for Swaziland. It should be noted that the majority of jobs listed for the formal sector require advanced training, and most frequently O-level education for admission to the advanced training. Very few jobs are available to those leaving school at the end of 10 years, and almost none for those leaving after 7 years of education.

Similarly, there are almost no formal training opportunities for students leaving school without an O-level education. VOCTIM (Vocational and Commercial Training Institute) accepts some "good" JC level passes and SCOT (Swaziland College of Technology) accepts some JC passes into their craft level courses.

Career Days, organized either regionally/nationally by ETGPS staff, or by career teachers for a small area (not often), presentations at the annual Trade Fair, and the Rotary Club sponsored seminar are some active efforts to reach students, and teachers, with career information, as well as including employers in the guidance program of ETGPS.

The Rotary Club seminar has also tended to focus on those jobs requiring high levels of educational attainment. The sugar and banking industries have spoken primarily on the technical, scientific and office occupations available. Unskilled or semi-skilled jobs that may require on-the-job-training and experience, but do not require formal training, have not been addressed. This reflects the needs of the employers, but is not of direct value to a great many of the school leavers who are seeking some sort of gainful employment.

The main vehicle for providing career information to primary schools will lie with the revised grade 7 Social Studies textbook. This book will include 7 units designed to give students a beginning awareness of life out of school and the employment prospects that are available when they leave school. The publication of this book was delayed until 1994, and at last report has been delayed again until 1995. Given the initial introduction of this book so close to project completion, it does not seem feasible to plan EPMT support for this aspect of career guidance.

The ETGPS staff do provide instruction to TTC third year students on the seven lesson units that will be included when the book is available in schools. This occurs during three teaching sessions, providing some orientation to career information at the primary level and how the lesson units should be taught.

#### **Issues and Recommendations**

The ETGPS appears to have the professional capability to sustain the extensions and improvements to the guidance program that have occurred as a result of EPMT assistance. With the return of two officers from master's training in the United States in 1994, the MOE should be able to support fully and to expand the strategies that have begun to extend career guidance and awareness into junior secondary and upper primary classes. While the general picture for sustaining the guidance efforts is quite promising, there remain several areas of concern which need to be recognized and addressed.

1. One of the major strategies for providing career and occupational awareness to primary students is the 7 units on careers that are to be included in the new grade 7 social studies textbook. This textbook is not expected to be introduced until sometime in 1995, very close to the date of project completion. EPMT will have little time to be involved with this extension of career awareness to primary schools.

#### **RECOMMENDATION:**

The ETGPS needs to ensure that plans are fully developed for providing assistance to grade 7 teachers on the teaching of the career awareness units when the introduction of the new grade 7 social studies textbook actually occurs.

2. Many of the career programs and activities remain focused on occupations requiring advanced training and on jobs in the professional and managerial fields. While this level of career and training information and guidance remains important to government, employers, and students, the extension of such efforts to lower-level fields and training, as well as to more technical and vocationally oriented fields, needs to be strengthened.

#### **RECOMMENDATIONS:**

Guidance programs should emphasize the variety of occupations available and link this variety to differences in interests as well as to differences in abilities. Awareness of training opportunities for occupations other than the traditional white-collar professions should continue to be a focus of ETGPS guidance activities

The ETGPS unit should work with the Rotary Club and other groups and institutions to provide seminars that will focus on possible employment opportunities at lower occupational levels. While not many of these job opportunities are available, every avenue should be investigated to find those that do exist.

3. There is an additional visit of the guidance consultant planned for after the return of the two master's candidates to the ETGPS unit. This is intended to provide additional training to those people who will be working directly with primary guidance activities. The guidance program is already well established and its materials and strategies coming into place. The provision of consultant training to two recent master's degree recipients is probably a training luxury. This is particularly true in light of the evaluator's recommendations for increased training for the continuous assessment and head teacher training components of EPMT.

#### **RECOMMENDATION:**

The project needs to very carefully delineate the training requirements of the continuous assessment and head teacher training components of EPMT over the remaining three years of project assistance. The funds now planned for a guidance consultant should be reallocated to those components where additional and continued training is essential to sustaining project initiatives.

## Annex I

### KEY PERSONS INTERVIEWED

#### USAID/Swaziland

Valerie Dickson-Horton	Mission Director
Ed Baker	Chief Project and General Development Officer
Don Foster-Gross	Project Officer
Jack Royer	Program Officer
Lessiah Nkambule	EPMT Project Officer
Lofana Dlamini	Project Management Specialist
Valencia Msibi	Ag Program/Evaluation Officer

#### Ministry of Education

M. E. Vilakazi	Principal Secretary
S. Simelane	Director of Education
E.C.N. Dlodlu	Chief Inspector, Primary Education
Cranmer Magagula	Chief Inspector, Curriculum and Teacher Training
Della Nsibandze	Director, EGTPS
Elphas Dlamini	Ag Head, Research and Planning Office
Lomthandazo Mavimbela	Asst Planning Officer

#### Educational Policy, Management and Technology Project

Phil Christenson	Chief of Party
Aida Passigna	Adviser, Continuous Assessment
Cooper Dawson	Adviser, Management Information Systems
Sue Grolnic	Specialist, Management Information Systems
Harold Bergsma	Consultant, training of trainers
O. Ginindza	Trainer
M. Dlamini	Trainer
Paul Spector	Project Director, IIR

#### In-Service Education Training Unit

Irma Allen	Acting Director
David Mlambo	Lecturer
Jabu Fakudze	Lecturer
A. Masuku	Lecturer
M. Dlamini	Lecturer
T. Ginindza	Lecturer
R. Sibiyi	Lecturer

**University of Swaziland**

Malangeni Simelane Sister Anita	Professor Asst to Vice Chancellor
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**National Curriculum Centre**

Tim Nsigwane	Director
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**Continuous Assessment Unit**

Concilia Munro	Coordinator
Nqobile Gwebu	INSET/CA Trainer
Busi Nkomo	INSET/CA Trainer
Dumile Vilakati	INSET/CA Trainer
Dan Smith	PCV, Continuous Assessment Unit

**Teacher Innovation and Distribution Centres**

Elizabeth Nxumalo	Teacher Leader, Mbabane
Marcussey Hlope	Teacher Leader, Manzini
Jan Pommerville	PCV, Manzini

**William Pitcher Teacher Training College**

Janet Manyatsi	Deputy Principal
Fikile Mdluli	Maths Lecturer
Veronica Mngomezulu	Education Lecturer
Zacharia Ndlangamandla	Education Lecturer

**Training of Trainers Workshop Participants**

S. Thwala	Teacher Leader, Manzini
J. Dlamini	Head Teacher (primary)
P. Magagula	Head Teacher (secondary)
C. Sacolo	Head Teacher (primary)
P. Sukati	Inspector (primary)
J. Mahlalela	Inspector (primary)
E. Shabangu	Head Teacher (primary)
D. Nhlabatsi	Inspector (secondary)
Mr. Kunene	Head Teacher (secondary)
Mr. Mathunjwa	Head Teacher (secondary)

**St. Joseph's School**

**Mr. Gamedze  
Mr. Khumalo  
Mr. Vilakati**

**Head Teacher  
Dept. Head Teacher, Primary  
grade 5 teacher**

**Teacher Feedback Session on CA Implementation**

**28 grade 1 teachers, led by Elizabeth Nxumalo, Teacher Leader**

**Annex II**  
**SCOPE OF WORK**

## STATEMENT OF WORK

### BACKGROUND:

USAID/Swaziland authorized a six year, \$6,900,000 grant to the Government of Swaziland for the Educational Policy, Management and Technology (EPMT) Project on August 15, 1989. The project goal is to establish an efficient and high quality human resource base for sustained development and economic growth in Swaziland. The project purpose is to improve the quality and efficiency of basic education. EPMT is designed to achieve this purpose by providing support in five areas: (1) Continuous Assessment - to introduce a comprehensive system of testing and remediation into all primary schools; (2) Head Teacher Management Training - to provide specialized training for all school heads so they are better equipped to manage their schools and improve the quality of education therein; (3) Management Information Systems - to give decision-makers accurate, useful information about the education system on which they can base effective policies and plans; (4) Guidance and Counselling - to help students make more realistic decisions about their futures; and (5) Organizational Development - to carry out research and strengthen the operation of the Ministry of Education. The following end of project status (EOPS) indicators will directly measure the achievement of the project purpose: (1) the number of children who complete 7 years of primary school on time increases from 160/1000 to 200/1000; (2) student achievement is improved in grades 1-7 Math and English; (3) primary and secondary schools are better managed; (4) Ministry of Education is using empirically generated data to make policy and planning decisions; and (5) increased awareness among students of career choices and resources for identifying employment options.

The Institute for International Research (IIR) was selected as the prime contractor to implement the project. The Project Grant Agreement was signed on August 15, 1989 and implementation began in August 1990 when the first technical advisors arrived in country.

The Project Paper was amended on June 15, 1992 to add one year to the project from August 15, 1995 to August 14, 1996 and to restate the project end of project status (EOPS) as they appear above.

**DESCRIPTION OF PLANNED ACTIVITY:**

The purpose of this evaluation is to assess the progress towards accomplishing the End of Project Status Indicators (EOPS), identify design or implementation problems, and make recommendations for mid-course corrections. The evaluation will be conducted in Swaziland from mid May through June 1993.

**ARTICLE I. Title**

Educational Policy, Management and Technology Project  
Number 645-0230  
Mid-Term Evaluation

**ARTICLE II. Objective**

To assess, in a participative manner, progress towards accomplishing project objectives.

**ARTICLE III. Scope of Work**

A two person evaluation team will review project activities and progress to date, determine whether the key assumptions at the time of project design in 1989 are still valid, identify problems and make recommendations for needed mid-course corrections. In cases where it is still too early to measure outputs the team will recommend the best means of measuring outputs and EOPS, examine the indicators in the Mission's Assessment of Program Impact (API) and recommend a realistic timeframe for reporting on impact. They will review project outputs, noting whether a logical relationship exists between inputs, outputs and expected EOPS. They will quantify progress made towards achieving output indicators and provide a detailed explanation of those areas where project outputs either meet or fall short of projections.

The evaluators will advise the MOE and USAID whether progress to date, the schedule of implementation and the obstacles to be overcome are likely to lead to the achievement of the project purpose by the project assistance completion date (PACD) of August 14, 1996.

The evaluators will give special attention to the capability of the MOE and its various Units to carry out and sustain the systems and programs initiated by the technical advisors and make recommendations for corrections where sustainability appears to be a problem. Special emphasis will be directed to the recurrent budget requirements and prospects for meeting these needs.

## EVALUATION TEAM

The Contractor shall recruit a two person team consisting of an Education Management Specialist and a Continuous Assessment/Testing/Guidance Specialist. The Contractor is encouraged to find qualified consultants in Swaziland or Southern Africa. Should consultants be selected from the U.S. they shall consult with the IIR Principal Investigator, Dr. Paul Spector, prior to coming to Swaziland. Consultants from the Region shall consult with IIR field representative.

## EDUCATION MANAGEMENT SPECIALIST (TEAM LEADER)

Qualifications: A graduate degree in education management or related field is required. The team leader should be an experienced educator who has provided leadership in school management, education policy development/implementation, instructional leadership at senior levels. S/he should have experience leading evaluations of donor funded projects. The leader must be knowledgeable of educational quality and efficiency issues. Knowledge of Southern or Eastern African educational systems is desirable.

Duties and Responsibilities: The team leader shall have overall responsibility for producing an evaluation report in conformance with this scope of work. S/he shall be responsible for delivering the evaluation report to USAID/S in accordance with the schedule specified herein. Specifically s/he shall:

Provide a descriptive analysis of the project's achievements and current status of project-initiated changes, and identify problems or shortcomings;

Assess the long term viability of the project components and make recommendations for future implementation;

Review the head teacher training program, training materials and training aids. Assess its viability. Identify problems and make recommendations;

Assess ability of INSET staff to continue with the head teacher training program, identify problems and make recommendations.

Assess the use of the management information system by the MOE personnel and its long term sustainability.

Review and assess the utility of policy studies made for the organizational development and advise on future recommendations.

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Oversee and ensure the validity of all project evaluation instruments;

Brief the USAID project and evaluation officers at least once a week;

Coordinate and supervise the work and writing of other team member;

Incorporate findings and any necessary changes into final report and submit to USAID prior to departure from Swaziland.

#### CONTINUOUS ASSESSMENT/TESTING/GUIDANCE SPECIALIST

Qualifications: A graduate degree in education or related field. Expertise in in-service teacher training. S/he should demonstrate experience and knowledge in working with continuous assessment programs including criterion referenced testing. S/he must be experienced in educational development programs, knowledge of mastery learning, instructional systems design and research in a developing country context. Experience in conducting project evaluations. Knowledge of Southern or Eastern African educational systems is desirable.

Duties and Responsibilities: This specialist shall be responsible for evaluating the implementation, progress and viability of the continuous assessment and the career guidance components, and make recommendations for mid-course corrections. Specifically s/he shall:

Assess the degree to which Continuous Assessment staff apply their skills in implementation. Assess the long term viability of the continuous assessment program.

Review the progress of developing and training of Swazis in criterion reference testing methods and remediation materials and techniques.

Review the development of pilot test materials for teacher workshops and review the appropriateness and effectiveness of these materials for testing unit.

Assess the effectiveness of training for the continuous assessment personnel, identify any shortfalls and make recommendations for mid-course correction.

Assess the development of testing and guidance materials and their infusion into schools, identify problems and make recommendations.

Assess the linkages and sustainability of career guidance among industries, the MOE and schools. Identify any problems and make recommendations.

Review job reference materials and the resource people of the MOE

#### ARTICLE IV. Reports

The Contractor shall produce a mid-term evaluation report of the Educational Policy, Management and Technology Project in accordance with this scope of work. A final evaluation report shall be submitted to USAID prior to the departure of the evaluation team leader.

One week prior to its departure, the team will hold a joint briefing with the Government of Swaziland (GOS) and USAID to present its findings and ensure that the draft contains no errors of fact or omission. USAID will review this draft, and if necessary, provide additional comments to the Contractor. The Contractor will use these comments in completing the final evaluation report. The final report shall include an executive summary and a summary of evaluation findings, conclusions and recommendations in conformance with A.I.D.'s Project Evaluation Summary format. Twenty copies of the final evaluation report shall be submitted to USAID/Swaziland.

Below is an illustrative schedule for planning purposes:

05/20	U.S. team member/s consult with IIR;
05/21	U.S. team member/s depart U.S.;
05/22	U.S. team member/s arrive Swaziland;
05/24 - 29	Orientation and introductions, outline descriptive section of evaluation, draw survey sample;
05/31-06/05	Pretest and refine survey instrument(s), finalize sample, and conduct interviews with MOE personnel from its appropriate units;
06/07-06/12	Administer limited survey, continue interviews, begin drafting descriptive sections of evaluation;
06/14-06/19	Complete draft of descriptive sections, collect all survey data; report should include substantive recommendations for changes, if found to be appropriate;

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- 06/21-06/26 Finalize draft report and present findings to GOS and USAID;
- 06/28-07/02 Incorporate any comments or changes made by GOS and USAID into final report and submit 20 copies to USAID;
- 07/04 U.S. team member(s) depart Swaziland.

**ARTICLE V. Relationships and Responsibilities**

The evaluation team shall work under the supervision of the USAID Human Resources/Education Officer and be assisted by the PSN Project Manager, and by the Evaluation Officer in the USAID Program Office.

**ARTICLE VI. Terms of Performance**

Work shall commence on or about May 24, 1993 and be completed by July 03, 1993.

**ARTICLE VII. Work Days Ordered**

A total of 36 working days in Swaziland is authorized for a six day work week.

**ARTICLE VIII**

- A. Duty Post: Swaziland
- B. Language: English
- C. Logistical Support: USAID/Swaziland will make available all pertinent documents related to the EPMT project as well as other past USAID projects in the education sector and technical reports on file at USAID. USAID will also provide office space and will assist the Contractor in securing hotel accommodation, renting cars and office equipment, and securing secretarial services if requested to do so. We recommend that consultants bring their own computers because of the difficulty in renting them in Swaziland. USAID will assist the Contractor in making preliminary appointments with relevant Government of Swaziland (GOS) and project personnel.

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