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**THE FINAL IMPACT EVALUATION
OF THE
SWAZILAND TEACHER
TRAINING PROJECT**

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EXECUTIVE SUMMARY AND MAJOR RECOMMENDATIONS

The purpose of this evaluation is to document the different areas of impact of the Swaziland Teacher Training Project (STTP). The scope of work designed for this report encompasses three different areas of project impact: pre-service programs; in-service programs; and the management of teacher education. The evaluation team focused upon: a) the impact of identified project outcomes; and b) the sustainability of positive outcomes.

PURPOSE OF THE PROJECT

The Swaziland Teacher Training Project was developed as a result of the Ministry of Education's (MOE) dedication to producing better qualified and highly motivated primary school teachers. This led to a request for technical proposal (RFTP) from USAID/Mbabane for an institutional development approach to teacher training in Swaziland. In March, 1984, the five year, \$5,595,000 contract was awarded to Ohio University. In June, 1988, an amendment to the contract provided an additional \$500,000.

Together, the Government of Swaziland (GOS) and USAID developed the following project objective in Article I of the contract:

"To increase the Government of Swaziland's capacity to produce better-qualified and more highly motivated teachers capable of improving the quality of instruction available to Swazi students through the use of more appropriate curriculum materials and teaching methodologies.

For Swaziland to have a well coordinated teacher training system that will include:

1. an expanded capacity at the University of Swaziland (UNISWA) to train qualified teacher educators for the faculty of teacher training colleges (TTCs);
2. close coordination between the National Curriculum Center (NCC) and the teacher training colleges to assure the introduction of improved primary curricula into the curriculum of the colleges;
3. functioning in-service training programs utilizing the facilities of the Teacher Innovation and Development Centers (TIDCs) and the new curriculum materials developed by the NCC; and
4. an increased capacity within the MOE to effectively supervise and coordinate teacher training activities both for pre-service candidates and in-service teachers."

STATEMENT OF WORK

The project was designed to provide the following:

- a. long-term technical assistance at the MOE, UNISWA, TTCs, in-service unit (ISU), and at the NCC (originally 20.5 person years extended to 24.5 person years);
- b. short-term technical assistance (originally 23 person months extended to 36 person months);
- c. participant training for Swazi educators (total 23 person years in the U.S. plus in-country training);
- d. commodities procurement
 1. books/references/publications for UNISWA, TIDCs, TTCs
 2. audio-visual equipment/instructional aids for UNISWA, TIDCs, and in-service
 3. kits
 4. supplies, maintenance, communications; and
- e. cooperative administration.

Provided services resulted in three major areas of intervention: 1) the upgrading and institutionalization of pre-service programs for primary school educators at TTCs (new curricula for the 3 year diploma course) and at UNISWA (new curricula for the 4 year B.Ed. program); 2) the upgrading and institutionalization of in-service programs (new multiplier effect workshops and spin-off workshops) for practicing primary school educators including the use of TIDCs (newly equipped resource centers); and 3) the management of the teacher education and curriculum development processes at the MOE (the coordination and effective management of project innovations by the newly formed Inspectorate for Teacher Education and Curriculum Development [ITECD]).

SUMMARY OF FINDINGS AND MAJOR RECOMMENDATIONS

The major findings of the team are that the STTP has had a significant initial impact focusing on many areas of the country's primary school education needs, including curriculum revision, the quality of teacher training, the quality of teacher performance, the GOS awareness of the significance of primary school education, and the MOE's initial dedication to the coordination of primary education. Findings suggest that improvements implemented during the Swaziland Teacher Training Project continue to be in place and functioning.

The team found evidence of systemic impacts in all areas of the project. Of particular note is the institutionalization of GOS financial contribution to teacher education which, as a result of this project, is a line item in the GOS yearly budget (MOE Project and Trust Fund). The original E165,000 annual budget for teacher education was increased by 16% this year, as were other GOS line items, to E190,000. The Annual Work Plan, a coordinated financial

yearly schedule for teacher training institutions, was developed for 1990-91 after the termination of technical assistance. The team was most impressed and Curriculum Development, established under this project, continues to be the most vital position for the management and coordination of successful outputs in teacher training.

Other findings suggest that pre-service and in-service programs are currently undergoing revisions to address changing needs. Both the Teacher Training Colleges and the University of Swaziland are producing primary school educators in newly constructed three-and four-year programs, both outcomes of this project.

In service programs, by the end of 1991, will have virtually reached all 504 primary schools by the use of a six year, three cycle, multiplier-effect workshop delivery system. Follow-up meetings of past participants (cycles 1 and 2) as well as new workshops for third cycle teachers, are underway. Some schools visited, even in very rural areas, showed signs of improved development and use of instructional materials in the classroom. In almost all cases, participants related very positive personal gains from the project's in-service programs.

Some of the project's impacts remain fragile, however, due to the questionable sustainability of the system that the project so successfully put in place. In almost all areas, the sustainability of the project impacts will be determined by the MOE's ability to properly manage and coordinate needed program modification and to support areas which have suffered slippage in the past year. Objectives for primary teacher education have not been reviewed or modified this past year due to the lack of needed leadership and coordination by the ITECD.

Overall, the team recommends that the system itself undergo major "in-servicing" for the successful long term institutionalization of project outputs. In addition, if primary teacher education is intended to incorporate future modification, the system for coordination and management must be nurtured to ensure modification and sustainability. Although such a process should be ongoing, the project's original success, based on an extraordinary coordination and management scheme implemented by the contractor, may be in jeopardy due to the current faltering coordination of institutions and staff. The lack of management and strategic planning is negatively affecting the sustainability of project gains.

The major recommendations of this evaluation are summarized below.

Pre-Service Programs

Teacher Training Colleges

- TTC students should be made aware of the current MOE policy for pay and mobility, and of the national need for trained primary school educators.
- Structures developed and/or supported by this project (such as the ISU and ISU workshops, equipment use, the role of TIDCs, the use of TAP kits, annual teacher conferences, the role of the NCC, etc.) should be incorporated into the TTC

curriculum so that newly trained teachers are familiar with project gains and work to sustain them.

- TTCs should develop a structured on-going staff development program including staff training in new equipment utilization and in areas of primary education.
- The ITECD ought to mandate completion of TTC self-studies for TTC maintenance, growth, evaluation, and planning.
- Graduate placement and performance should be planned and tracked to ensure TTC program effectiveness and to determine future TTC curriculum modification.
- Lecturer mobility should be coordinated among TTCs, ITECD, and UNISWA B.Ed. Primary program to strengthen TTC staffing, increase placements within the MOE, improve ISU participation, and monitor lecturer academic upgrades.
- Student intake and output should be determined through structured and coordinated planning by TTC principals, REOs, the TSC, the Ministry of Labor, and the ITECD to ensure future placements and the GOS ability to pay.
- Meetings to coordinate pre-service and in-service programs (TTCs, UNISWA, NCC, and the ISU) should be mandated by the ITECD to ensure improved participation in both in-service and curriculum coordinating meetings.
- Participation in staff development and the in-service program should be incorporated into TTC lecturers' job descriptions.
- An in-service/staff development recognition or certification system should be designed and implemented to reward TTC and other in-service delivery personnel.
- Curriculum changes should be planned and coordinated in a timely manner with the Faculty of Education at UNISWA and subject panel staffs.
- The TTCs and B.Ed. programs should clarify course objectives, and target student intake and prospects for graduate placement.

UNISWA

- Now that TTC lecturing positions have been virtually filled, the purpose of the B.Ed. Primary at UNISWA must be clearly defined. If it is to continue, it must not compete with TTCs but either be equal to (thereby making TTC "campuses" of the faculty) or extensions of TTC courses (i.e., a Master's Degree program for TTC graduates). Such clarity would include redefining the targeted students for the program and the targeted job positions for its graduates.

- Low numbers of staff curtail teaching possibilities within the department, particularly when staff leave for studies abroad. Possibilities for adding UNISWA positions ought to be considered if the program is to be expanded (i.e., if intake is increased or if content areas are taught inside the Faculty of Education).
- The B.Ed. Primary course content objectives are unclear. Objectives should be reviewed and revised so that curriculum can be modified accordingly.
- Education courses taught outside the Faculty of Education should be closely monitored and better coordinated with other faculties.
- The possibilities of other B.Ed. concentrations such as educational administration, training of trainers, instructional leadership, curriculum and materials development, etc., should be explored.
- Monitoring of intake and output of B.Ed. students ought to be systematic, which must entail the coordination with TTCs, the NCC, the TSC, the Ministry of Labor, and the ITECD for graduate placement.
- Coordination is needed with SNAT 0-level preparation course officials to ensure the upgrading of headmasters and inspectors to identify possible candidates for part-time Dip.Ed. and B.Ed. programs.
- An attempt should be made to secure the renewal of Kellogg funds, especially directed for headmaster and primary inspector intake.
- A concentrated effort should be made to more fully utilize the equipment provided by the project, especially ERIC and the language lab, through national utilization proposals, in-service training, TTC, or even international utilization (particularly in the Southern Africa region).
- A concentrated effort should be made to modify the UNISWA mature entrance scheme to attract headmaster and inspector intake.
- The MOE and UNISWA should explore the possibilities and implications of direct 0-level and/or TTC graduate entrance.
- The MOE and the Ministry of Labor should plan for additional level 17 positions according to anticipated graduate numbers and carry through with the creation of a headmaster primary position for B.Ed. Primary graduates to fill.
- Long-term planning for the possibility of the Faculty of Education providing Master's level courses and research opportunities should be initiated.

In-service Programs

The Use of the DIE and LIT Delivery System

- In-service training based on teachers' needs should be strengthened and expanded so that every teacher receives a specified number of in-service days during each school term. Training might include 10-15 days per annum; two or three residential workshops (e.g., the model developed in Botswana) during holiday periods; 1/2 to one day workshops at TIDCs led by DIES, Teacher Leaders, and others; workshops led by LITs and local experts at schools.
- The use of local teachers in the delivery system should be expanded to include:
 - a LIT at every school to coordinate training activities, the use and supplies of teaching aids and other learning supplies and materials; and
 - the use of other teachers with special skills and knowledge (e.g., PTD holders).
- A long range plan for the development of a master teacher position should be explored to build upon the positions now held by LITs.
- The In-Service Unit should develop a series of Training of Trainers (TOT) workshops based on adult and experiential education models for the ongoing development of LITs, DIES, Teacher Leaders, and other resource people used in the delivery of in-service training.
- A system of follow-up supervision should be developed that reinforces the learning process and provides support and advice when teachers are having difficulties. LITs, DIES, headmasters, and in-service staff should all be involved in this effort.
- The individuals providing supervision and follow-up should be given training and the necessary time and authority to provide these services.
- A study of the responsibilities, staffing and resources of regional office staff needs to be conducted to determine their roles in in-service training. Appropriate training and human resources to enable regional offices to carry out those functions should be provided. Such an effort requires improved cooperation between REOs and Teacher Leaders.
- A systematic effort to gain the support and understanding of all headmasters for new and continuing in-service initiatives is strongly recommended. While headmasters would not be directly involved in the delivery of in-service training, their assignment ought to encourage a sense of ownership and ensure ongoing commitment.

The Use and Availability of Materials and Teaching Aids

- An in-depth and systematic review of the NCC materials that seeks input should be initiated not only from pilot schools but from a wide variety of schools, headmasters, and teachers who make use of the materials.
- A strategy for gathering input from NCC material users should be developed that gives teachers an opportunity to discuss and explain their concerns and opinions (teachers do not feel that the use of questionnaires has been an effective way of allowing for meaningful input).
- Communication and cooperation between departments need to be strengthened to guarantee that the NCC curriculum remains an integral part of in-service efforts.
- If cost is not prohibitive, the quality of the construction of student workbooks should be improved.
- A system for timely distribution, which includes delivery of an adequate supply of materials to all schools developed and supported by the MOE, is strongly recommended.
- A system of payment for yearly "rental" of books over a period of four years should be studied and revised to ensure:
 - that books are constructed to last for that period of time; and
 - that payment for books can be collected at the correct cost to parents (1/4 the full price) and at an appropriate time of year when parents have funds to pay; and
 - that headmasters are trained to manage the rental system.
- If the system is to benefit from the availability of TAP kits, the following areas need to be addressed:
 - in-service training that incorporates "hands on" experience with the use of the TAP kits to make specific teaching aids;
 - training that prepares local teachers and headmasters to use TAP kits for repair and maintenance; and
 - the policy which mandates financial responsibility for lost or damaged tools should be reconsidered.

The Roles of TIDCs and PCVs

- The roles and responsibilities of Teacher Leaders should be studied to determine if TIDCs need two full-time staff positions: one to coordinate NCC pilot projects and another to help local schools and teachers with teaching aids and learning materials.
- The MOE should clarify how the roles and responsibilities of Teacher Leaders are to be prioritized, e.g., who has primary responsibility for their supervision? how should conflicts in their roles and responsibilities (with in-service, NCC, REOs) be resolved?
- TIDCs should have the full-time use of at least one vehicle.
- Consideration should be given to the development of mobile TIDCs (a procedure whereby Teacher Leaders travel to alternate distribution centers three or four days a month) and to providing additional TIDCs which are accessible to the Mbabane area and to remote area schools.
- Consideration should be given to allowing practicing teachers to attend TIDCs and Open Day workshops at the regional office nearest them.
- REOs should ensure that all teachers are aware of the Teacher Leaders at TIDCs and the services they provide. REOs should also encourage headmasters to support teachers' use of TIDCs.
- The use of PCVs at TIDCs should be continued and the possibility of using PCVs to supplement the in-service unit be explored.

Other Issues Related to In-service

- The MOE should carry out a study of its transportation capacity and the administrative procedures which affect that capacity, particularly regarding project vehicles. The most cost-effective means of meeting needs should be determined, including the use of low cost transport (i.e., motorcycles, mobilettes) which could be assigned to appropriate institutions or individuals.
- The existing reimbursement system for individuals willing and able to use private or public transportation to reach workshop locations should be expanded to include participants from all cycles.
- Participation by trainers and trainees in in-service programs should be recognized by the MOE and all educational institutions through a system of certification which could then be used as partial criteria for future promotion, admission to academic programs, salary grade increases, etc.

The Management of Teacher Training

- The office of the Chief Inspector is the hub for the successful coordination of teacher education and therefore vital to impact sustainability. The Chief Inspector should be made accountable for the implementation of all coordination efforts between the NCC, TTCs, UNISWA, REOs, TIDCs, and In-service.
- If the responsibilities of Chief Inspector cannot be successfully undertaken by one person alone, an administrative assistant should be assigned to the office.
- If additional status to the inspector's position will help guarantee his/her ability to coordinate and collaborate with the other institutions and inspectorates, the level of the ITECD should be upgraded.
- The ITECD should be made accountable for ensuring monthly joint administrative staff meetings with the NCC, TTCs, UNISWA, In-service, the TSC, and the Planning Department.
- A TSC and a Planning Department official should be added to all other joint planning efforts which affect TTC and B.Ed. student intake and output.
- The ITECD should be made accountable for the successful completion of all TTC self-studies and work together with the Board of Affiliated Institutions (BAI) to ensure prompt verification. Such efforts should be coordinated at joint staff meetings.
- The Director of Education and the ITECD should be made accountable for ensuring the joint planning, coordination and dissemination of the master calendar. All joint staff meeting members must participate in this effort and the Director of Education must mandate that it be honored by all educational institutions.
- The ITECD should be made accountable for the successful joint development and dissemination of each annual work plan, ensuring participation of the NCC, TTCs, UNISWA, and the ISU. The system for withdrawal of funds must be coordinated between participants and the MOE Accounting Office.
- The ITECD should be made accountable for ensuring the participation of the NCC, ISU, UNISWA, TTCs, Teacher Leaders, SNAT, and REOs during the planning and implementation of annual teacher education conferences.

CONCLUSIONS AND FUTURE STRATEGIES

This evaluation documents a system in place and ready for well-planned, coordinated and managed steps to ensure its continuation. Simple steps, mostly centered around communication between and among institutions, must be taken. The major impact of this project has been reaching its objective of strengthening the primary teacher education system.

This system has been functioning since technical assistance terminated. Although in many cases components of the STTP have been institutionalized (e.g., the annual work plan, the three year TTC curriculum, the four year B.Ed. Primary course, in-service workshop cycles, etc.) and are undergoing needed revisions, the future status of these outcomes is tenuous due to lack of proper planning and dissemination.

The team cannot stress strongly enough the need for purposeful nurturing of this young program so that its tremendous impacts can be sustained. Swaziland educators must develop a future strategy for primary education so that longlasting results can be ensured. The development of such a strategy demands immediate leadership and timely coordination in the areas identified in this report.

The EOPS projections not fully achieved are those which stated the number of anticipated TTC and B.Ed. graduates (note: the MOE cut TTC intake by 50% in 1985). A review of project EOPS reveals that the project met or exceeded all other identified objectives. Again, the goal stated in the USAID/GOS contract, was to increase the GOS capacity to produce better-qualified and more highly motivated teachers capable of improving the quality of instruction available to Swazi students through the use of more appropriate curriculum materials and teaching methodologies. This goal was at least attained, if not surpassed, by improvements to TTC and UNISWA curriculum, TIDC utilization, in-service cyclical workshops, equipment procurement, and initial management and coordination.

A look to the future reveals a lack in the project design and outputs for ensuring proper management of the innovations disseminated. How impacts will be evaluated and modified in the future must be urgently addressed to minimize the slippage of gains and maximize both human and physical resources which have been produced. Such an endeavor cannot be brought about easily as it entails systematic planning in all areas addressed in this evaluation. What is of great importance is that the STTP successfully put into place a significantly improved primary teacher training program which must now be purposefully and continually assessed, monitored, and modified.

ACRONYMS AND ABBREVIATIONS

BAI	Board of Affiliated Institutions
B.Ed.	Bachelor of Education Degree (either Primary or Secondary)
Dip. Ed.	Part-time diploma program
DIE	District In-service Education Specialist
EOPS	End-of-project status (statements of anticipated objectives)
ITECD	Inspectorate of Teacher Education and Curriculum Development
GOS	Government of Swaziland
ISU	In-service unit
LIT	Local In-service Teacher
MOE	Ministry of Education
NCC	National Curriculum Center
PCV	Peace Corps Volunteer
PTC	Primary Teaching Certificate (previous two year course)
PTD	Primary Teaching Diploma (new three year course)
REO	Regional Education Officer
SNAT	Swaziland National Association of Teachers
STD	Secondary Teaching Diploma
TAP kit	Teaching Aids Production kit
TIDC	Teacher Innovation and Distribution Center (regional)
TSC	Teaching Service Commission
UNISWA	University of Swaziland

I. INTRODUCTION

This is the final report of the impact evaluation conducted in July and August, 1990, for USAID/Swaziland, by Creative Associates International, Inc. The subject of the report is the Swaziland Teacher Training Project (STTP) implemented between 1984-1990. Details of the project's design, inputs, and outputs can be found in the original project paper, the project's semi-annual reports, the mid-term evaluation conducted in 1987, and the final report submitted by the contractor in 1990.

The scope of work for this comparative evaluation does not take into account measurement of project outputs, contractor performance, pre- and post-comparative analyses of teacher performance, or student achievement. Rather, the purpose of this evaluation is to describe the visible impact the project has had upon completion of the technical assistance effort and to make some informed judgements as to the sustainability of identified impacts.

The scope of work for the evaluation team focused on three major areas of impact: pre-service programs, in-service programs, and the management of teacher education. Project "impact" was defined as an institutionalized, adopted, or utilized project output; and "impact sustainability" was defined as the anticipated future stability of an identified positive outcome. The judgements made in this evaluation were based on the original project EOPS.

REVIEW OF END-OF-PROJECT-STATUS

The goal of the project was to establish a sustainable system of pre-service and in-service primary teacher training in Swaziland. The project included: installation of a common three year teacher training curriculum at the teacher training colleges (TTCs); staff development for TTC faculty members; installation of a four year B.Ed. primary course at the University of Swaziland (UNISWA) and the participant training of faculty members to teach it; a "multiplier effect" system of in-servicing current teachers and headmasters; and a management system whereby these innovations could be coordinated, monitored, and modified. In all areas, commodities and short-and long-term technical assistance were provided to maximize final sustainability of project outputs.

The originally stated objectives were that by the end of the project:

- a. teacher training colleges graduate at least 300 primary school teachers annually (graduates qualified to teach new primary curricula);
- b. UNISWA produces 8-10 primary school educators per annum;
- c. in-service training program is operating (i.e., at least 300 primary school teachers and headmasters per annum trained with school based focus);
- d. library resource centers are staffed, equipped and operating from TTCs and TIDCs;

- e. participants return from long term training and take up respective posts in the Ministry, TTCs, and NCC;
- f. improved instructional materials are in use in TTCs, TIDCs, and in individual primary school; and
- g. workshops, conferences, and evaluation are completed (information recorded and distributed).

METHODOLOGY

The original five week evaluation contract was extended an additional week due to the Ministry of Education's interest in the dissemination of the team's findings. It was decided that the team would provide a one-day "dissemination session" for many of the key primary teacher educators in the country. This took place on August 22 at the Swazi Inn and was attended by 35 teacher educators from TIDCs, NCC, In-service, TTCs, REOs, UNISWA, USAID, and the Ministry of Education.

The evaluation was based upon data obtained by interviewing teachers, teacher educators and administrators; by questionnaire surveys of teachers and teacher educators; and by observations of primary school classrooms, teacher training institutions, and in-service workshops. These data helped the evaluation team members focus on and make judgements about the sustainability of project outcomes.

The evaluation team members' time allocation varied from week to week. The initial week involved reading project documents and being briefed by the former contractor chief of party, the MOE, and USAID. Relevant data were collected. The second week was spent conducting initial interviews with members of the educational institutions involved. A two week agenda was established with the three team members and two enumerators to ensure maximum coverage of identified target participants for observations and interviews. These included REOs, teacher leaders, Peace Corp Volunteers, in-service personnel, MOE officials, UNISWA personnel, TTC principals and/or vice-principals, lecturers and students, and practicing teachers (including but not limited to PTDs, PTCs, and LITS). Weeks three and four were spent in the field conducting interviews and observations. The fifth week debriefing led to an extension for the preparation of the one day dissemination session. Interviews were carried out and a preliminary field report was given to USAID before the team's departure.

II. PRE-SERVICE PROGRAMS

INTRODUCTION

The purpose of this section is to describe and analyze the project impacts on pre-service primary education programs. Data were gathered through interviews, questionnaires, and observations at the three teacher training colleges, UNISWA, and the Ministry of Education.

The TTCs currently offer the project's new three year Primary Teaching Diploma (PTD) which provides post-secondary education to admitted O-level graduates with three credit passes. In comparison, admission to UNISWA requires five credit passes. Due to increased numbers of O-level graduates, some TTC candidates obtained 4 and sometimes 5 credit passes. Principals see this trend as continuing and predict that entry requirements will be raised within the next two years. Upon completion of the new PTD, graduates are required to teach for a minimum of two years before becoming eligible to apply to the B.Ed. program at UNISWA.

The B.Ed. program requires all students to have a PTD or Secondary Teaching Diploma (STD) and teaching experience.

The part-time diploma (Dip.Ed.) is a three to five year program, provided by UNISWA on weekends and during vacation periods, for practicing certified teachers who wish to upgrade and obtain the new primary teaching diploma. O levels must have been passed for entry into the part-time program; the Swaziland National Association of Teachers (SNAT) is currently offering a well-attended O-level preparation course. Countrywide, all new primary school teachers are required to complete the three year course.

Considering the short time which they have been in place (the three year PTD and the B.Ed. programs), both outputs of this project seem to be serving an increasingly large number of students. The PTD program designed to upgrade the standards of primary school teachers at minimal financial and institutional cost to the MOE has achieved its initial goals.

TEACHER TRAINING COLLEGES

The original EOPS regarding TTCs estimated 300 PTD graduates per annum. However, in 1985, by MOE decree, intake of TTCs was reduced by 50% because MOE officials estimated that the number of needed teachers would drop. Teacher training colleges are currently producing between 140-170 graduates a year, depending on college intake (Nazarene is on a rotating 30/60 intake); 1989 graduates numbered 144 (BAI 8/June/89 meeting minutes), and enrollment in the 1990 graduating class is currently 166, according to TTC administrators. It is anticipated that these numbers will remain fairly stable depending on MOE placements in schools, student intake, and TTC expansion. Most PTD graduates serve the Swaziland primary school system while others have found employment in the secondary school system or outside the country.

The part-time Dip.Ed. is administered by the Faculty of Education's in-service department at UNISWA and has graduated a total of 17 students as of 1990, according to the UNISWA

registrar. There are another 8 students currently enrolled. Although UNISWA suspended the part-time diploma in 1989 in order for TTCs to assume responsibility for the program, only one TTC, Ngwane College, is currently ready to take on the part-time diploma. The other two face shortages of both physical space and staff. It is anticipated that UNISWA will continue to administer the part-time diploma through distance education. Proposals for the program are currently being written by UNISWA. When TTCs will be ready to accommodate the administration of the part-time diploma program is still unknown.

The Three Year Diploma Program

The purpose of the new, three year TTC curriculum is to produce better qualified primary school teachers. Presently, there is no doubt that an additional year of study is having a considerable impact on the content knowledge that the students have upon graduation. The major objective of the third year curriculum has been to offer subject specialization. Thus, all students choose one of four areas of concentration (language arts, social studies, math /science or practical arts). The general increase in the number of O-level graduates in the country seems to be pushing standards even higher than the project had originally anticipated. The Ministry of Labor has secured a PTD salary scale by adding 211 primary education posts in 1989-90 and an additional 149 in 1990 solely for PTD holders.

One long-term suggestion has been that the TTCs become campuses of the Faculty of Education at UNISWA. Although no plans are in the works for the implementation of such a plan, the TTCs are working to upgrade entrance requirements and follow UNISWA Faculty of Education curriculum guidelines to ensure the use of the most current Faculty of Education curricula. If the TTCs continue to upgrade entrance requirements and follow B.Ed. curriculum, the precise role of the TTCs and the B.Ed. will need to be more clearly defined. At this time, the three year diploma courses are in progress at all three TTC campuses. The PTD or the completion of the part-time diploma is a prerequisite for entrance into the B.Ed. program at UNISWA. If the B.Ed. is eventually implemented at the TTCs, UNISWA could upgrade its program to a Master's level.

The Part-Time Diploma

The part-time diploma was developed to assist practicing teachers and headmasters to upgrade their academic qualifications over a three to five year period. The need for a well established part-time diploma program is evident since it is the only way in which practicing educators, particularly headmasters, and inspectors can upgrade their academic qualifications. It is particularly important for the integration of headmasters into the new diploma system. In addition, part-time diploma recipients are often good candidates for continuation into the B.Ed. Primary program at UNISWA.

The need for headmasters to have the opportunity to upgrade in a system where new PTD graduates have higher academic qualifications is not insignificant. Whether or not the Ministry will mandate that by a determined time (e.g., 1995), headmasters (e.g., under the age of forty) must have a diploma either through full- or part-time work has not been determined. Such a demand would require coordination between the TSC, TTCs, UNISWA part-time diploma program, and SNAT O-level courses.

The part-time diploma program was intended to be taken over by the three TTCs so that curriculum and staff could be coordinated and better utilized. It was also intended to make the part-time diploma program more accessible by offering it on three campuses as opposed to one. TTC administrators have voiced much interest in administering the part-time diploma, however, due to the lack of space and staff (perhaps due, in part, to the failure to complete self-studies which address such issues), WPC and Nazarene College are not equipped to take on the part-time diploma. UNISWA suspended the part-time diploma program until the MOE and UNISWA could agree on a possible distance education plan. It is anticipated that the part-time diploma program will open again at UNISWA until TTCs are ready to accommodate it. Better coordination is still needed between the TTCs and UNISWA to assure the continuation of the D.Ed. program.

The Self-study

A self-assessment of TTCs was established during the project by the development of the TTC self-study. Based on a US model of institutional self-evaluation, the self-study was designed to help administrators and lecturers assess the quality of TTC education in order to address future needs. Subjects addressed in the self-study include: student characteristics and records; philosophy and objectives; educational programs; student activity; library and media; student services; college facilities; teaching practice; follow-up of graduates; staff; administration; staff development; innovative activities; research; in-service, etc.

The self-study is a self-administered questionnaire that is cumbersome and time-consuming to complete. However, it was developed to help identify some of the areas of need such as those in this evaluation. The self-study was to be completed by each of the three colleges in rotation. To date, it has been completed by only one of the three TTCs, Nazarene College, in 1989.

Upon completion, the ITECD should turn the self-study over to the Board of Affiliated Institutions (BAI) at UNISWA. In turn, the BAI assigns an investigatory commission which includes TTC principals to validate self-study findings. The Nazarene self-study is currently awaiting the formulation of the investigatory committee. The William Pitcher College (WPC) study, which was targetted as the first to be completed, is only 70% completed according to a WPC administrator. Ngwane College is waiting for the ITECD to provide the results of the initial two studies before it undertakes such an effort.

The self-study may uncover such important issues as facility improvement and expansion, and increased places for TTC lecturers. Such an assessment may determine the success or failure of the 3 year program. To date, the ITECD has not been able to provide further information concerning the successful completion of TTC self-studies. The completion of the self-study or another instrument of its type is essential for the continual assessment of the TTCs effectiveness and future needs. Without some sort of assessment, the TTCs are operating ad hoc and using crisis management rather than devising a future strategy.

Recommendations

- The ITECD should mandate completion of the self-studies for TTC maintenance, growth, and planning as well as planning for TTC responsibility for the part-time diploma program.
- Upon its completion, the self-study should be modified to be more effective for institutional use. In addition, the TTC self-study may be a model for other assessments for educational institutions including in-service, Faculty of Education, etc.
- The ITECD should assist the BAI in organizing the investigatory committee to ensure self-study completion.

Intake and Output

Although entry standards have gone up and curriculum modifications are underway, two major areas of concern surfaced:

- a. How is student intake planned?
- b. How are graduates placed?

Student intake at TTCs is determined by the physical space available at each college. Country need is not considered, since outputs are placed based on the yearly requests of Regional Education Officers (REOs) to the Teaching Service Commission (TSC) and the Ministry of Labor. Building of community schools is reported upon completion rather than during construction. According to the MOE Planning Department, the last school mapping took place in 1986 (see Swaziland: School Mapping/Micro-Planning in Education, MOE, 1986). Actual need for PTD holders remains nebulous pending MOE investigation and planning efforts.

According to the TSC, one objective of this project was to determine primary school teacher qualifications which assisted the TSC to identify the number of underqualified teachers in the system. However, TTC enrollment is not currently based on the projected need determined by the TSC count but rather on the availability of space. There is no connection at this time between PTD student intake and MOE teacher placement upon graduation.

The TSC estimates that the current number of underqualified teachers in the system, the loss of teachers to South Africa, the placement of PTD graduates in secondary schools, and the increase of community primary school construction will allow the TTCs to run unmonitored for the next few years with guaranteed placement for graduates. The Planning Department states, however, that there is no mechanism at this time for monitoring the movement of teachers and teacher educators. This is a major area of concern. Is this system successfully providing primary school teachers to serve Swaziland rather than South Africa and the homelands? How can the number of GOS teachers be estimated if community construction goes unmonitored? Should PTD holders be consumed by the secondary school system? And

further, there is no coordination between the possible outputs from the SNAT 0-level preparation course for the DIP. Ed. and PTD or B.Ed admissions. Whether TTCs should expand or not may be determined by obtaining data related to the areas listed above. Such efforts would help identify the anticipated pool for intake and the country's need for output.

TTC students offered some insightful information about future planning for TTC graduates. Although entering a UNISWA B.Ed. program was considered a long term goal of many of the TTC third year students, preference was given to the B.Ed. Secondary rather than the B.Ed. Primary. Reasons given were:

1. Pay is considered to be higher for B.Ed. Secondary graduates (this is not the case, although it is perceived to be so).
2. B.Ed. Secondary graduates can become department heads or headmasters of secondary schools and receive higher pay than primary school headteachers.
3. Secondary school is easier to teach because teachers are responsible for teaching only one subject area.
4. Secondary school is more prestigious.
5. Many primary schools are in rural areas.
6. Teaching lower grades does not utilize new PTD graduates capabilities in subject area specialization.

Recommendations

- TTC students should be made aware of the current MOE policy for pay, mobility, and national need for primary school educators.
- Graduate placement should be planned and performance monitored to evaluate TTC program effectiveness.
- Student intake and output should be planned by structured and coordinated efforts of TTC principals, REOs, the TSC, the Ministry of Labor, UNISWA, and the ITECD to secure the future production of teachers.

Curriculum

The syllabus is already undergoing changes which is a positive sign that the three year program has been initially institutionalized and that teacher educators are monitoring its effectiveness. A system is in place for modification and revision to occur. Besides on-going subject modifications during joint NCC, UNISWA and TTC subject-panel meetings, the major curricular question which has unfolded over the past year is related to the content of the third year specialization. There are two major considerations:

1. Third year specialization has produced better qualified primary school teachers IN THE AREA OF THEIR SPECIALIZATION. TTC lecturers claim that their students could easily teach secondary school in their subject area. Graduate placements suggest that this is true since some TTC graduates have been employed as secondary school teachers. The question which arises is whether this is a desired outcome of the three year primary education program. A further consideration is that the nine year basic education system, if implemented, may require teachers to have a deeper knowledge of subject areas in grades 7-9.
2. A third year specialization might also hinder students from attaining a more widespread body of knowledge. As primary teachers, they need to be qualified to teach all subjects well. Several questions arise: Will students be well equipped in all subjects rather than just in the area of specialization? Will students be able or willing to teach in lower grades, where all subjects are taught by the same teacher? Do students understand the purpose of having a third year specialization?

There is also an historical consideration which became evident to the evaluation team. Students still feel that primary education is not a specialization in and of itself but is rather the first step to teaching in secondary schools. This issue has not been addressed by TTC staff nor is it a part of the new curriculum. The purpose and importance of improved primary education, the catalyst for this project, may not have filtered down to the TTC students. This concern was verified by both TTC lecturers and their students. In one TTC third year class, for example, out of 50 students, only one had ambitions of making primary school teaching a career. The others wished to continue "upward" to become secondary school teachers and did not envision primary education as an area of expertise. This is a major area of concern if the PTD program is to attract students and if PTD holders are to remain in the primary education system.

TTC students stated their confidence in subject area specializations but felt unsure and unequipped to teach the other subjects. TTC lecturers added that education curriculum continues during the third year. However, revisions to the third year curriculum should be made based on the UNISWA Faculty of Education's decision to emphasize or deemphasize subject specialization in primary education courses.

An additional area which was mentioned by lecturers and by Ministry officials was the lack of staff development and coursework in testing and continual assessment. Although an annual teacher education conference was held focusing on evaluation, teachers, and administrators voiced concern about the lack of ongoing training in this area for students and lecturers. The ability of subject panel members, including TTC lecturers and NCC officials, to construct tests related to primary education was questioned. In addition, lecturers' ability to teach TTC students testing procedures for primary school students was unclear. An example of testing inconsistency was the 1989 final standardized TTC exam which had a 100% passing rate. This exam is currently being revised for 1990. NCC officials state that there is currently no plan to implement criterion referenced tests and norm referenced testing will continue to be used until this issue is addressed.

Other curriculum areas including education, math, science, language arts (English, SiSwati, and communication skills), and social studies seem to be well-staffed and using the new curriculum. Practical arts lecturers are less available, partially due to lack of training in agriculture, small business, art, music, physical education, and home economics. There is a need for an expansion of training in these areas. Nonetheless, as a result of the three year curriculum, it is anticipated that by the end of 1990, over 300 new PTD holders will have successfully completed the course and will be better qualified to serve as Swaziland primary school teachers.

Recommendations

- Students should be made aware of the purpose and importance of primary education as an area of expertise.
- Students should be made aware of anticipated practical teaching structures such as the in-service multiplier system, TIDCs, UNISWA, NCC, and become familiar with TAP kits, workshops, annual teacher conferences, the master calendar, and other significant innovations as a part of their TTC curriculum.
- Curriculum changes should be planned and coordinated in a timely manner with the Faculty of Education staff so that careful future planning of UNISWA and TTC curriculum and course objectives can occur.
- Subject panels should not only revise curriculum but insist that content revisions coincide with TTC and UNISWA course objectives.
- Third year curriculum should be revised to ensure that students receive the optimal training experience in primary education. Subject specialization should be emphasized as an area of concentration, rather than as the objective of their primary teacher education process.
- Third year students should practice teach in several subjects and in several grades. Specialization areas might include grade level (lower or upper) in all subjects instead of, or in addition to, subject concentration.

Staff Development

The Ministry of Education mandated that all TTC lecturers must hold university degrees by 1991. The mandate has had a positive impact on upgrading academic qualifications of TTC lecturers and all but a few lack degrees (less than 10, according to TTC administrators). Most lecturers hold B.Ed secondary degrees and are subject specialists in one of the four areas of concentration (there are also 5 B.Ed. Primary graduates teaching at TTCs).

One of the objectives of the project was to provide staff training for TTC lecturers so that the new three year course could be taught by better qualified instructors. The project provided 36 person months of short term technical assistance. Eighteen technicians were brought to Swaziland between 1984-1989 to help achieve project goals. They supplied

assistance in the following areas: special education; math/science; staff development; evaluation and competency instruments; guidance and counseling; physical education; media and library; business; cassette technology; English as a second language; child development; industrial arts; and music education. Short term contracts lasted between 3-14 weeks.

One of the project's in-service objectives was to offer staff development to upgrade TTC staff members. Simultaneously, ongoing in-service programs and the annual teacher education conference were implemented. The intention was to develop the new curriculum for incoming students while providing a forum for upgrading practicing lecturers.

Additionally, the project included training in the US for 22 educators. One of the EOPS stated that participants upon returning from long term training, should take up respective posts in the Ministry, at TTCs or at the NCC. Four with M.Ed.'s from Ohio were placed at UNISWA, while nine M.Ed. graduates and one B.Ed. graduate returned to positions at the TTCs (including one principalship and two vice-principalships). Seven participants completed a six month library and media course to provide technical assistance with newly acquired project commodities. Each TTC had one representative who completed this course along with representatives from each regional TIDC and from the NCC. Each college now has on staff one trained technician who, after completing this course, is capable of operating audio-visual equipment and computers and is able to accommodate library needs. Total US training for Swazi educators number 276 person months, 155 of which were for TTC lecturers, librarians, and administrators.

Currently, the majority of TTC lecturers are B.Ed Secondary graduates. They have been trained to teach in one area of specialization to students of college age. A problem arises as to the ability of those lecturers to properly sustain gains in staff development to teach the TTC curriculum when they have had little or no experience teaching in primary schools and face the following obstacles:

1. intake of new lecturers from the B.Ed. Secondary who have had no primary experience and did not benefit from staff development efforts during the project;
2. loss of TTC lecturers to secondary school positions as heads of department in their area specialty or as headmasters for higher pay and specialized instruction;
3. loss of TTC lecturers to the Republic of South Africa or the homelands due to significant pay increases;
4. TTC lecturers going abroad to upgrade and replacements having no primary school experience;
5. lecturers having no follow-up to the workshops that the project provided;
6. lack of coordination and planning of TTC lecturer intake and mobility to ensure maintenance of gains;
7. no permanent staff development system in place in the three TTCs;

8. no forum for the Ohio trained library/media technicians to disseminate technical knowledge; and
9. no structured opportunities for TTC lecturers to participate in primary school instruction even though they supervise and critique their own students in primary school classrooms.

The staff development impact on the TTCs was initially significant. However, sustainability of the impact at colleges, where staff are somewhat more mobile than had been originally anticipated, is tenuous. TTC administrators also voiced concern about the lack of a structured ongoing staff development program for college lecturers. No coordinated effort to establish such a program has been made to date. All lecturers with whom the team met voiced a willingness to adopt such a program and the need for upgrading their own knowledge base of primary education. In fact, some lecturers suggested that as part of the staff development process, they be required to complete a practice teaching component in primary schools. Some administrators voiced interest in leading such programs.

An example of the inexperience of B.Ed. Secondary lecturers in primary education was related by a TTC administrator. He had been visiting a teaching practicum site and observed a TTC lecturer observing a TTC student teacher. He reported the following: "I was so impressed at this student's performance. The children were actively involved in the lesson and working together to solve problems presented by the student teacher. It was a very dynamic lesson. But when I approached the lecturer (who had a B.Ed. Secondary) about his observation of the student, he reported that the student had done very poorly, since there was little discipline to curtail talking and too much noise and distraction in the room. You see, he had no idea what it's like to handle children and his perception of learning was based on a structured secondary school experience. Unfortunately, the student teacher was told that he had done poorly."

Recommendations

- Lecturer mobility should be monitored and coordinated between TTCs and the UNISWA B.Ed. Primary program to ensure TTC staffing.
- Participation of TTC lecturers in staff development and in the in-service program should be made part of TTC lecturer job description.
- A reward system for the recognition of TTC and other in-service and staff development delivery personnel should be devised to guarantee participation and promote quality control.
- A mandated ongoing staff development program, covering primary education issues, teaching methodologies, child psychology and development, etc., should be designed and implemented at all three TTCs.

In-service and Pre-service Coordination

The TTCs and the in-service department work together on a limited basis and therefore resources of the TTCs and in-service are only minimally shared. The need for the connection between in-service activities and pre-service curriculum is an area which continually surfaced during the evaluation. Many TTC graduates, for example, have never heard of a TIDC, a TAP kit, NCC revision mechanisms, etc. TTC administrators and lecturers voiced a strong interest in becoming more involved in the in-service program so that TTC students and lecturers as well as practicing teachers might be exposed to common areas of interest. In addition, TIDCs and TTC library resources and staff expertise could be utilized more fully.

One possible solution to the lack of TTC involvement with in-service programs has been the recent appointment of a full-time director of the in-service unit. Although housed at WPC, the in-service unit will become an autonomous institution able to work with the TTCs in a more structured manner. The missing linkages between TTCs lecturers, NCC designers and in-service, which would connect pre-service and in-service teacher education, are desperately needed.

Recommendations

- Structured coordination between TTCs, NCC, and ISU pre-service and in-service programs should be mandated by the ITECD to ensure appropriate dissemination of curriculum.
- Coordinated in-service efforts should maximize human and physical resources at TTCs.

Resource Utilization

One of the EOPS stated that library resource centers at TTCs would be well equipped, staffed, and operating. Another stated that improved instructional materials would be in use at the TTCs, TIDCs, and in classrooms. The equipment placed in TTCs is impressive. Utilization of that equipment, however, is limited at best. Due to the lack of issues raised concerning staff development, use of expensive equipment may not be extensive due to lack of ongoing training including a forum for trained personnel to provide seminars or workshops for other staff members to disseminate technical knowledge. In addition, the ability of those trained in Ohio to train others at their colleges seems nebulous. In one case, an Ohio graduate stated that she knew how to use the equipment but she did not feel capable of passing that knowledge on to her fellow teachers in a group situation. There is currently neither ongoing coordinated equipment utilization training for TTC staff nor training of trainers (TOT) available either at individual campuses or as a coordinated TTC effort.

Each of the colleges has journal subscriptions and books which were provided by the project. Libraries are used by students and lecturers. Although equipment was available, there was little evidence of the use of audio-visual equipment. Computers were used by the librarians and a limited number of staff. Film and slide projectors had not been used. Overhead projectors seemed to be the most frequently used item. Although micro-teaching was a part

of the new curriculum, use of video cameras seemed minimal due to limited time of lecturers to film at the TTCs or during student teaching exercises. Video equipment is stored in the Department of Education at Ngwane College and the amount of usage by other departments or by lecturers observing teaching practica is questionable.

Lecturers all stated that although they felt they had not had minimal training for equipment usage, they also had little time to either inquire about its operation or arrange for training. Administrators agreed that this must be a mandated effort in order to be effective. The TTC library resource centers are well-equipped and staffed, however, whether they are working to maximize project outputs is questionable. Although some workshops on equipment utilization were provided during the project, neither an ongoing system to provide hands-on training nor a curriculum to include the use of equipment in the classroom was developed. This has negatively affected the use of equipment and newly developed instructional materials, including TAP kits, at the TTCs.

Recommendations

- TTCs should develop a structured staff development program including training on equipment utilization.
- TTC resources should be better utilized by coordinating technical training with in-service programs.
- Trained technicians should be mandated to disseminate knowledge to all TTC staff members to maximize human and physical resources.

UNISWA

The curriculum for the B.Ed. Primary was developed during the project. It is a four year course which was originally designed for primary school teacher educators and administrators. The program produced its first 3 graduates in 1989 and according to the vice-chancellor, has become part of the yearly course calendar at UNISWA. The B.Ed. Primary continues to operate with the four Ohio trained M.Ed. graduates. The original project EOPS stated that the program would produce 8-10 school educators per annum. There have been 9 B.Ed. Primary graduates to date (3 in 1989 and 6 in 1990). It is anticipated that there will be 10 graduates in 1991. According to current enrollment figures, there should be 3 graduates in 1992, 3 in 1993, and 9 in 1994.

The GOS will provide a one year salary for mature students if the applicant has the required years of teaching experience. The Kellogg Foundation supplies the continuation of salaries for these students. This has made it possible for 18 students to enroll in the B.Ed. degree program. It is anticipated that another 4 students will be funded beginning in 1990. B.Ed. graduates have filled the following positions: 5 TTC lecturers (4 primary and 1 secondary), 2 secondary school principals, and 1 private primary school headmaster. One of the graduates is deceased.

Students currently enrolled are not sure which jobs they shall fill. The B.Ed. Primary graduate will be paid at level 17, the same pay level as the B.Ed. Secondary. The MOE has established degree positions in primary schools to ensure future placement of B.Ed. graduates. To date, 32 posts have been allocated at pay level 17 in primary education. These posts, however, are currently staffed by non-degreed personnel and are all in English medium schools. Once they become available, they will be filled by B.Ed. holders at level 17. Twenty-seven of these posts are in government schools. Of the 32 positions allocated, 14 are in the Hhohho region, 14 in the Manzini region, and 4 in the Shiswelweni region (see appendix 3).

Planning for B.Ed. graduate placement is something that all interviewed educators wish to see improved. B.Ed. Primary graduates are preferred as TTC lecturers and should take the place of B.Ed. Secondary lecturers who might choose to head departments of their subject specialty or become principals in the secondary schools. Although there is currently no administrative position for primary school headmasters (they are head teachers/higher primary at level 15), the MOE has already proposed to the Ministry of Labor that such a position be created. It has yet to be approved.

The long term viability of the B.Ed. primary is dependent on many factors. Institutional support from UNISWA has created a department with four full-time staff. The ITECD is the liaison between the UNISWA B.Ed. Primary Program and the MOE. The vice-chancellor of the university has stated that the B.Ed. primary was "long overdue" and supports its well-planned growth. TTC students see the B.Ed. as a possible future for them to obtain degrees. Part-time diploma students foresee the B.Ed. as a possibility for continuation upon completion of the part-time diploma. B.Ed. lecturers see the B.Ed. program becoming a Master's program in the future.

Intake and Output

Since the intake at the TTCs seems somewhat stable at this time and the part-time diploma is supposed to continue at UNISWA, the number of candidates for the B.Ed. Primary is envisioned as increasing, not decreasing. Some of the major intake problems are:

- a. requirements of at least two years of teaching practice (in many cases, students have as many as 13 or more years of experience due to GOS teaching requirements for guaranteed one year salary payment);
- b. limited or no use of UNISWA mature entrance;
- c. MOE's limited quota of teachers who can be taken out of the system;
- d. financial burden for older students;
- e. financial burden for those still paying GOS loans;
- f. no direct entrance for O-level graduates; and

- g. little coordination effort between the MOE and UNISWA for future placements of B.Ed. graduates.

Besides intake considerations, the second area of concern is the number and placements of B.Ed. graduates. B.Ed. placements have been allocated in the schools, however, these posts are currently held by other, non-degreed teachers. Real space in primary education for level 17 degreed teachers exists only as TTC lecturers. These spaces have now been almost entirely filled by B.Ed. Secondary graduates. No planning for the placement of B.Ed. Primary graduates to accommodate TTC turn over is formally in place.

Although establishing a Department of Primary Education is a major project impact, the sustainability of that impact will be dependent on the planning for intake and output. These areas are foggy at best. The original objectives of the B.Ed. were to train teacher educators. Of the 10 graduates, five have returned as TTC lecturers. Three inspectors are currently students. One headmaster has enrolled. Part of the intake pool was TTC lecturers wishing to upgrade due to the MOE's mandate for degreed college lecturers. That objective has nearly been reached. Since there is no system in place to monitor the intake and mobility of TTC lecturers, there is currently no way of determining the future intake for the B.Ed. targeted for TTC placement.

Headmasters have not been able to access the B.Ed. easily. Those who need to complete O-levels can participate in the SNAT program to obtain a part-time diploma. There is, however, no coordinated monitoring of this system to help identify headmasters as possible B.Ed. candidates after diploma completion or possibly through UNISWA mature entrance.

Mature entrance is when a student who has not completed O-levels can "test out" and be considered for UNISWA admission. To date no student has been allowed mature entrance to the B.Ed. program. According to lecturers at UNISWA, the mature entrance test is inappropriate and extremely difficult. The Faculty of Education is the only faculty which requires work experience prior to entry. Therefore, the question of how mature entrance in education might best be handled, perhaps directly by the Faculty of Education, has not been resolved. Mature entrance is an avenue which needs to be explored to allow headmasters and teachers with years of experience access the B.Ed. program. This would entail coordination between the Registrar's office, the Faculty of Education and the MOE. Currently, no structured effort is being made in this regard.

Since B.Ed. graduate placement outside the TTCs is not yet clear, the implications of increased enrollment need to be analyzed by the MOE. If increased B.Ed. enrollment is desired, one identified avenue would be to eliminate the teaching experience requirement and accept students directly from their O-levels in high school, as do the other faculties. Students would enter with the standard UNISWA requirements of 5 credit passes. The project was unable to secure that possibility and UNISWA has not yet decided whether O-level entrance will be acceptable in the field of education in the future.

There is currently is a pool of eligible students who pass university entrance requirements but are not placed, due to lack of space at UNISWA. The B.Ed. Primary might assist in this regard. Acceptance of O-level graduates would also eliminate the problem of the financial

responsibilities faced by older students with families. Again, the need for such action has not been determined due to the lack of planning. Student intake, implications for pay, and placement of potential graduates need to be considered. This year, twenty nine candidates were admitted by UNISWA to the B.Ed. Primary program. However, due to financial constraints, the inability of the MOE to release many from their current job positions (typically 9-10 are released per annum), and the inability of applicants to repay GOS loans, the faculty estimates an intake of only 9 or 10. These students will make up the graduating class of 1994.

In 1987, a grant from the Kellogg Foundation was obtained through a proposal by the project's Chief-of-party. The objective of having Kellogg monies available was to assist mature students who had families and financial responsibilities to enter the B.Ed. program. As described above, since the Faculty of Education is the only faculty which requires experience prior to entry, the financial constraints for mature students are many. The only solution to this problem of experienced teachers entering into academia and losing salaries has been the Kellogg monies. Students interviewed by the team stated that they would not have been able to leave their jobs and continue with their education if it had not been for the availability of these funds.

Students are screened by a Kellogg committee made up of MOE officials, the Dean of the Faculty of Education, TTC principals, and the MOE principle accountant, who review applications and interview candidates. The Kellogg grant will end in 1994 when it is estimated that slightly over 80 student years will have been supported through Kellogg monies. A renewal of the grant is strongly desired and direly needed and the MOE has plans to request such an extension. If no monies become available, mature students wishing to participate in the B.Ed. program will remain without salary, except for the first year of study, which can be funded by the GOS. The Kellogg monies have been the reason that many candidates have applied to the program. This year, fifty-five potential students applied for the scholarship following an MOE advertisement. Only four scholarships will be awarded. Renewal of the Kellogg grant should be ensured or other grants should be sought.

Although the B.Ed. Primary is producing graduates, its purpose is nebulous and its management and coordination with the TTCs and the MOE are not clearly defined. There is no system of tracking B.Ed. graduates, their placement or mobility, their success or failure. This is a similar problem to that identified with TTC graduates. In addition, the implications of the future 9 year basic education program (should it be implemented) for the need for B.Ed. graduates should be analyzed.

According to the MOE Department of Planning, no system is in place to record the graduates and their placements into GOS schools. Although some TTC and B.Ed. graduates have been placed in secondary schools, numbers are not systematically recorded. Mapping of such movement does not occur. Placement of future B.Ed. Primary graduates does not seem to pose any immediate problem as long as the rate of graduates increases slowly enough for the MOE to both ensure pay and placement either at TTCs, as teachers (currently only at secondary schools at level 17), or as primary school administrators (if the Ministry of Labor approves pay for such positions). Management and coordination of this process remain ad hoc. Future strategies urgently need to be devised.

Recommendations

- Monitoring of intake and output should be systematic, including the coordination and cooperation of the TSC and potential institutions for graduate placement e.g., TTCs, NCC, REOs, MOE, In-service.
- Coordination is needed with SNAT O-level preparation course officials to identify possible candidates for part-time and B.Ed. programs.
- The MOE should secure the renewal of Kellogg funds and direct these funds to headmasters and inspectors.
- A concentrated effort should be made to modify the mature entrance scheme to attract headmasters and inspectors.
- The MOE and UNISWA should follow-up the possibility of direct O-level entrance into year one and PTD graduate and mature entrance into the second or third year of the B.Ed. This would entail the restructuring of the teaching practice requirement for entry.
- The MOE and the Ministry of Labor should plan for additional level 17 positions based on planned placements and carry through with the creation of a headmaster primary position.

Curriculum

There seems to be little question as to the desire for the continuation of the B.Ed. Primarily by UNISWA staff and administration, the MOE, and the TTC staff and students. What is in question, however, is its purpose and curriculum content. The target student body has become somewhat unclear since TTC lecturers are now nearly all degreed and few administrators have enrolled. The staff is considering whether the purpose of the B.Ed. is to train primary school teachers or to train primary school teacher educators/administrators. Both require specific curricula. The possibility for TTCs to administer such courses and for UNISWA to offer graduate courses has not been planned.

The TSC suggests that the purpose of the B.Ed. should be to train headmasters and inspectors. Areas such as educational administration, supervision, TOT, instructional leadership or primary teaching, for example, have not been introduced as area specializations. The program has concentrated on subject specialization which includes only one course on educational administration.

The new curriculum just proposed at the university reduces subject specialization time in the four concentrations in order to increase the number of overall primary education curriculum methods courses. The fourth year does allow for subject research projects and some specialization in one of the four content areas. This suggests that curriculum revisions are ongoing and undergoing changes based on a perceived need for changes in B.Ed. objectives. Such adjustments also suggest that UNISWA envisions a course structured to address the needs of primary school teachers, rather than teacher educators and administrators, which is

a modification of initial project objectives. How this new curriculum will affect the TTC curriculum is unknown since the TTC staff have not yet had an opportunity to fully discuss the new proposal and its implications. No coordination has been made between the MOE, the Ministry of Labor, and UNISWA concerning the proposed headmaster position in primary schools, and implications for B.Ed. course objectives.

Since only four staff positions exist, the Faculty of Education staff teaches education courses and some subject areas called "content courses". However, the major part of the content courses are taught in faculties other than the Faculty of Education. For example, B.Ed. students specializing in math are required to take the same math courses as those students who belong to the Faculty of Math. This has caused significant problems since the level of math knowledge of education and mathematics students is quite different in many cases. Many B.Ed. students fail content courses which puts a strain on the relationships between faculties and lengthens the time it takes students to graduate. This has presented many problems for students and staff both financially and pedagogically. Due to UNISWA's inability to increase staff positions, this practice will continue. It is hoped, however, that the new changes in curriculum will allow students a greater amount of time to study at the Faculty of Education, rather than in other faculties.

Recommendations

- Now that TTC lecturing positions have been filled, the purpose of the B.Ed. Primary at UNISWA must be clearly defined. If it is to continue, it must not compete with TTCs but either be equal to (thereby making TTC "campuses" of the faculty) or different from TTC courses (i.e., offering graduate courses or training administrators). Such clarity would include naming the targeted students for the program and the targeted job positions for its graduates. The TSC, NCC, and MOE should be involved in this process.
- B.Ed. Primary course content objectives are unclear. Objectives should be reviewed and revised to clarify the course's purpose so that curriculum can be modified accordingly. Other areas of specialization, such as educational administration, TOT, instructional leadership, curriculum development, etc., should be considered as originally intended.
- Education courses taught outside the Faculty of Education should be carefully monitored and coordinated with other faculties.

Staffing

As a result of this project, four full-time UNISWA staff positions in primary education have been authorized. The four lecturers are all M.Ed. Ohio graduates with different areas of specialization. They continue to be involved in their own staff development process and two of this group will be leaving for further studies in the US in September, 1990.

There is presently no plan in place for positions to be filled during the current staff's absence (i.e., Fulbright, or other planned international or national replacements). One replacement has

been found from the international community, however. No long-term staffing plan is currently underway. UNISWA sees no immediate justification for an increase in personnel at this time.

Although current numbers may satisfy immediate needs for the limited number of students, it is anticipated that additional positions will be necessary if the program is to proceed in the future with recommended curriculum changes.

Recommendations

- Low numbers of staff curtail teaching possibilities within the department, particularly when lecturers leave for studies abroad. A staffing plan should be developed and possibilities for adding UNISWA positions should be considered if the program is to allow for the absence of Faculty staff due to further training abroad.

Resource Utilization

The equipment purchases from the project were considerable for the B.Ed. Program. The Faculty of Education houses a research center which was equipped with a complete ERIC microfiche system, a/v equipment, a language lab, computers, and a number of journal subscriptions. Equipment sign-outs registered over 900 separate user times of ERIC and computers during the past six months. The 1991 annual research publication will include works completed on ERIC this year.

One reason the equipment has been used to date is that the librarian was trained by the project. However, she may be taking on other responsibilities, therefore, the sustainability of the equipment utilization is tenuous. To date, no structured training is available to UNISWA staff. In addition, no serious effort to extend the use of the ERIC system to other institutions or to scholars in the Southern Africa region has been attempted. The ERIC system could serve as an important resource for the faculty, UNISWA and Swaziland itself. Further uses of the ERIC system need to be developed to justify its extensive costs.

Since UNISWA classes were not in session during the course of the evaluation, the team made no observations of audio-visual equipment in use. The equipment is stored in an A/V room for staff use. The eight-cubicle language lab provided by the project has not been assigned a permanent location and therefore remains unused. This is a great loss to the faculty and to UNISWA in general, since the lab could serve other faculties which are engaged in language instruction. The computer in the dean's office also remains unused. No immediate plans to remedy these problems of equipment use have been developed.

Recommendations

- A concentrated effort should be made to utilize more fully the equipment provided by the project, especially ERIC and the language lab, by the faculty, by other UNISWA Faculties, by the MOE, and by other educational institutions in Southern Africa.

III. IN-SERVICE PROGRAMS

INTRODUCTION

According to research conducted by the World Bank, the most important variables impacting student achievement in developing countries are instructional materials and teacher quality. Of these two, the most important, or the prerequisite, is instructional materials. Teacher training in the use of these materials is also mandatory for their effectiveness.

This evaluation has concluded that Swaziland has made significant progress toward insuring that an adequate supply of learning materials and teaching aids are available to both students and teachers. In addition, the majority of the primary teaching force has at least the minimum skills necessary to make effective use of these resources. The NCC and the TIDCs ensure the quality and relevance of these materials. Such gains are critical and significant and put Swaziland on an important threshold of educational advancement. Among other things, it means that Swaziland is in a position to make sufficient gains in student achievement by upgrading the quality of its primary teaching force.

However, these gains are fragile and tenuous. They will not be sustained unless they have systemic and strategic reinforcement. Data from this research points to three interrelated organizational issues that are of principle importance to the ability of the system to sustain the present outcomes. The first issue is maintaining teachers' morale and enthusiasm for and commitment to new skills and knowledge that is engendered during the actual participation in in-service workshops. The second is the ability of personnel in administrative positions to provide ongoing support and supervision to local teachers and effective management of the system. The third is that the present transportation system is an impediment to: a) the effective delivery of in-service training, supervision, and follow-up; and b) the widespread and timely distribution of learning materials and teaching aids.

Scope of Work and Organization of In-Service Section

This section of the report evaluates the impact of the in-service component of the STTP. The research design was developed specifically to address the following issues: a) the impact of the in-service training on primary teachers; b) the effectiveness of the delivery system used to carry out that training; c) the use and availability of teaching materials and instructional aids as a result of project interventions; d) the impact of the Teacher Innovation and Distribution Centers (TIDCs), including the use of Peace Corps Volunteers at the Centers and; e) the visible improvements in the quality of the teaching force as a result of in-service or pre-service project inputs.

The team was also asked to make recommendations on three related issues concerning ongoing planning in the area of primary in-service teacher education. These issues are: a) the optimum level of in-service training a primary teacher in Swaziland should receive; b) the need and appropriateness of certification for in-service training and; c) the use of Peace Corps Volunteers (PCVs) as teacher trainers. These issues are discussed briefly. This section also discusses the roles of Regional Education Offices, national curriculum materials, and

nvironmental conditions (i.e., crowding, availability of desks and chairs, and other classroom conditions).

Description of the In-Service Component

The in-service component of the STTP was designed as a delivery system which uses a "multiplier effect". The basic principle is to provide in-depth training to a cadre of personnel who can, in turn, provide training for their colleagues at a local level. The principle strength of this approach is that large numbers of participants can be reached quickly and at relatively low cost. The specifics of the delivery system vary in each of the four geographic regions.

In conjunction with the in-service staff, each of the four Regional Offices chose 10 District In-Service Education Specialists (DIEs) from the ranks of inspectors, teacher leaders, and headmasters. These individuals, in turn, chose 20 target schools from which 10 of the best and most qualified teachers were identified. These teachers became Local In-Service Teachers (LITs). The team of DIEs and LITs attended eight workshops per year. Two of the workshops were one-week residential workshops, while the remaining six were one-day follow-ups. Each series of workshops, which included one residential and three follow-ups, was devoted to one subject area (i.e., math and science, language arts, social studies, or practical arts). By the end of the second year training cycle, all four major curriculum areas were covered.

At the end of the first two year training cycle, the project instituted "open day" training sessions for LITs who wished to continue in the in-service program. Open days are held once a month at the TIDCs. LITs from any of the three cycles can attend these half day training sessions conducted by Teacher Leaders and the in-service unit (ISU). They can also pick up supplies and materials for target and sister schools.

Prior to the beginning of a training cycle, each target school was paired with a sister school and each DIE was paired with two LITs. After each residential training, the DIEs and LITs held a one day training session at both the target and sister schools. Half-day training sessions were held at target and sister schools after DIEs and LITs completed each of the one day follow-up workshops. The training sessions at the target and sister schools were known as "spin-off workshops". This system enabled the project to reach 160 schools per two year cycle. By the end of the project, the third cycle of training was well under way and virtually all primary schools in Swaziland had been reached.

The training of DIEs and LITs was conducted by the ISU with assistance from TTC and UNISWA lecturers, and staff members of the NCC. In addition to content training in specified subject areas, DIEs and LITs were provided training in conducting workshops and in teaching methodologies. Subject matter content and many of the teaching methodologies were drawn directly from the latest NCC materials.

The principle goal of the in-service training program was to improve teachers' understanding of curriculum materials, as well as their ability to make and use appropriate teaching and learning aids. During each workshop, participants were instructed in the development of a variety of teaching aids appropriate to the content being studied. At the end of every

workshop, LITs were given the supplies and materials needed to provide both target and sister schools with a set of aids.

The in-service component of the project also included the upgrading of the four Teacher Innovation and Distribution Centers (TIDCs). TIDCs are regional centers that support in-service activities and are distribution centers for learning materials and instructional aids. Teacher Leaders administer TIDC activities. They are also responsible to the NCC for pilot testing new or updated curriculum materials.

The project purchased a variety of supplies and equipment for the TIDCs, helped establish small TIDC libraries, and provided training to the Teacher Leaders. Each TIDC has a Peace Corps Volunteer who is to assist the Teacher Leader in a variety of capacities including developing teaching aids, cataloguing library and other resource materials, and keeping the TIDC open while the Teacher Leader is occupied with other responsibilities in the schools.

Finally, the in-service component of the project called for the development and distribution of Teaching Aids Production (TAP) kits. These kits, however, consisted of the tools and supplies needed for the construction of a variety of teaching aids, as well as classroom repair and maintenance. TAP kits were introduced late in the project.

The In-Service Unit consists of 8 full time staff. Throughout the life of the project, the unit was under the administrative jurisdiction of William Pitcher College (WPC) and headed by an acting director. Prior to the completion of this evaluation, the unit was made an autonomous department of the MOE.

Methodology

Data obtained relating to the in-service component were gathered using: structured, open-ended interviews; classroom observations of teacher performance using a prepared checklist; interactive analysis (the conclusions presented were negotiated among the team members and enumerators and then recycled to a subsample of respondents for their confirmation, corrections and/or elaboration); and project documents.

Project documents provided information related to the degree to which project outputs had been achieved and listed obstacles and successes encountered during the implementation process. The compilation of interviews produced a variety of data: teachers' opinions of in-service successes and failures; strengths and weaknesses of project outputs; and descriptive, historical, and contextual information. The teaching practice checklist confirmed the existence or absence of predetermined, specified behaviors. Classroom observations also served to gather impressions, identify areas of focus that would later be addressed during interviews, and to better understand the context in which the project was implemented.

Data gathered measure three dimensions of impact: 1) the effect of training efforts on the performance and attitudes of the primary teaching force; 2) the system's ability to improve the quality and availability of teaching materials and instructional aids; and 3) the system's ability to sustain achieved positive impacts.

In the absence of any pre-project data concerning teacher performance or the use and development of instructional aids in the classroom, judgements made on performance and instructional materials were based on three areas of observation. The first was the extent to which the intended skills and behaviors promoted during in-service activities were present among the recipient teachers. The second was the extent to which teachers, headmasters, and other personnel attributed certain positive results and/or failures to the in-service program. The third was the survey team's perceptions of visible impacts which were collectively discussed and verified during the entire data gathering process.

The first week was spent reading project documents and interviewing individuals who had been most intimately involved in the delivery of the in-service training program. These included the contractor's Chief-of-party, the acting director of the ISU, regional inspectors who had served as DIES during the project, and Teacher Leaders at the TIDCs. While information concerning overall project operations was also gathered, the primary focus of these interviews was to determine what project participants envisioned as intended in-service outputs which should be apparent in classrooms of in-service recipients.

Initial interviews laid the foundation for the development of the teacher practice checklist. The checklist included items specifically mentioned by the trainers, as well as a number of items which represented second-order and unexpected gains. A set of interviews for teachers and headmasters was also developed which focused on: 1) elicited expression of what in-service recipients felt they had gained as a result of in-service training; and 2) elicited assessment of the strengths and weaknesses of the program. In addition, descriptive and evaluative information about other project outputs was solicited including the use of TIDCs, TAP kits, relationships with regional offices, etc.

The team (including two enumerators) spent two weeks visiting primary schools in order to conduct interviews and observations. Four team members (two groups of two) spent five days visiting identified schools in each of Swaziland's four regions. During this 10 day period, 47 schools were visited and 70 classroom observations conducted. Over 90 individual interviews and over a dozen group interviews were held. When this process was completed, the team developed a list of general recommendations which was then verified by a sub-population of inspectors, headmasters, LITs, and other participants.

TABLE I
NO. OF PARTICIPANTS BY REGION AND CATEGORY

Region

Category	Shiselweni	Manzini	Hhohho	Lubombo	Total
LITs *	3	4	3	4	14
PTDs **	5	3	6	0	14
Others ***	20	9	2	11	42
Totals	28	16	11	15	70

*Local In-Service Teachers

**Primary Teaching Diploma Holders

***Participating teachers who are neither LITs nor PTDs

TABLE II
NO. OF PARTICIPANTS BY TRAINING CYCLE AND REGION

Training Cycle

Region	First	Second	Third	Total
Shiselweni	8	12	8	28
Manzini	4	6	6	16
Hhohho	3	4	4	11
Lubombo	5	6	4	15
Total	20	28	22	70

TABLE III
NO. OF PARTICIPANTS BY SUBJECT AND GRADE

Subject

Grade	Maths	Science	Soc.Studies	Lang. Arts	P. Arts	Total
1st	0	0	0	8	1	9
2nd	4	1	0	7	2	14
3rd	2	2	0	5	0	9
4rd	3	2	1	4	0	10
5th	0	3	3	1	0	7
6th	4	2	0	3	0	9
7th	4	1	3	4	0	12
Total	17	11	7	32	3	70

TABLE IV

NO. OF STUDENTS IN CLASSROOMS
NO. YEARS TEACHING EXPERIENCE

NO. STUDENTS	Mean	Std.Dev.	Min.	Max.
	37.00	13.67	4	72
NO. YEAR TEACHING EXP.	Mean	Std.Dev.	Min.	Max.
	8.67	10.24	1	61

There were some limitations to the gathering of data. First, due to time constraints, neither the interview instrument nor the observation checklist could be field-tested. Second, some instability in information obtained may have occurred due to interviewers' personal interpretations. Third, although an effort was made to seek distribution by geographic region and by urban and rural location, there were difficulties locating some of the remote schools. Also, during the second week of the survey team's work, many schools were holding exams, making accessibility and the need to maximize the number of individuals at a single sight significant factors in the selection process. During the five week period that the evaluation was conducted, over 200 individuals were interviewed and nearly 10% of Swaziland primary schools were visited.

IN-SERVICE TRAINING: THE MULTIPLIER EFFECT AS A DELIVERY SYSTEM

The Impact of In-service Training

In all but 5 of the 47 schools visited, it is possible to say that the STTP has had a positive impact on the primary school teaching force of Swaziland. This conclusion was reached on the basis of data from both interviews and classroom observations. In most cases, individuals report that the in-service training was of great benefit to them as teachers and, in turn, to the students they teach. They attributed the following benefits to their involvement in in-service spin-off workshops:

- improvement in their ability to make and use a wide variety of teaching aids (e.g., maps, posters, charts, clocks, science demonstrations, maths aids, etc.);
- improvement in their understanding of the concepts in the NCC curriculum;
- improvement in their understanding and use of teaching methodologies (e.g., how to begin a lesson, how to organize a lesson, how to present concepts so that students understand them, how to use groups, etc.);

- improvement in their professional attitudes, i.e., we are reawakening their interest in teaching, making them feel positive through teaching again, helping them understand the teaching/learning process, helping them understand how to better use the curriculum they learned at the TTCs;
- improvement in developing and using relevant examples;
- improvement in relationships between teachers by providing them with the opportunity to share with and learn from other teachers in the following ways:
 - they are no longer afraid others will find them incompetent if they ask for help;
 - they realize that their colleagues have expertise from which they can benefit; and
 - established new networks within the teaching profession.
- increased confidence and self-assurance that has helped overcome their feelings of incompetence and their feelings that others view them as incompetent; and
- changes in their relationships with students and their attitude toward their responsibilities as teachers in the following ways:
 - they are concerned with the achievement of all children; and
 - they more often will ascribe student failure to the system (i.e., class size, availability of teaching materials or their own inability to reach the student) than to the failure of the child.

Classroom observations confirmed that:

- teachers are using teaching aids:
 - they are available and on display in the classrooms; and
 - appropriate aids are used during lessons.
- teachers are using a variety of appropriate teaching methodologies (i.e., small groups, science demonstrations, etc.);
- teachers' lessons are structured and presented in such a way as to allow for sufficient time on task; and

- teachers seem less likely to punish children for wrong answers if they feel the child is trying (this observation was based on the Swazi enumerators' comparison with their own primary school education).

To a lesser extent, but still evident:

- childrens' work is on display;
- teaching aids are drawn from the local community and environment;
- teachers use appropriate questioning techniques;
- useful feedback is given;
- teachers use relevant examples for clarification and relate the lessons to real life situations; and
- teachers monitor student progress.

On a number of occasions, this information was shared for the purpose of verifying findings and conclusions. Participants asked how the team knew that these results could be attributed to the STTP, as opposed to either the NCC materials or the training teachers had received at the TTC. The survey team concluded that the project impacts could not be separated from the fact that teachers had and were making use of NCC materials. The two programs, intentionally or unintentionally, have worked hand-in-hand and have therefore reinforced each other. However, this was an opinion reached by the survey team, not one presented by the teachers and headmasters being interviewed. Both teachers and headmasters specifically attributed the benefits to the workshops. Even when asked if these skills and techniques could be attributed to their TTC training programs, teachers insisted that the project had "revived" what they had learned in their certification programs. The following anecdotes will serve to illustrate this point.

One female teacher was praising the spin-off workshops for the help trainers had provided in teaching her how to use teaching aids. She had a 2-year certificate from a TTC, and had been teaching for three years. When asked if she had not learned about teaching aids in college she replied, "Oh yes, I learned about them at college, but now I understand them."

Teachers often credited the workshops for providing skills and insight that facilitated student learning. One male science teacher with 12 years of experience had received his certification as a teacher through a previous UNESCO in-service program. He was enthusiastic about how the spin-off workshops had helped him be able to develop and use examples that were relevant to his students' lives. He was also enthusiastic about how this in turn helped his students to learn. When encouraged to give an example of this, he told of how for years he had

taught about "modes of transportation" by discussing airplanes and trains. "Can you imagine," he said, "I, myself, have never even seen a train or an airplane." He went on to explain and enact how he now tells his students that when they go into the woods and shoot a buck and then build a sling from tree limbs and rope to carry it back to their village, they are using a mode of transportation. "Can you imagine how that opened my own eyes?" he remarked.

Additional findings based on both observations and interviews which are relevant to a number of the conclusions and recommendations are listed below.

- Although there is evidence of the use of teaching and learning aids and teachers' convictions about how these aids have improved students' ability to learn, the team was left with a strong impression that teachers' grasp of many of the methodologies (e.g., small groups, science demonstrations, etc.) is superficial. Teachers may not be able to make effective use of new methodologies.
- Teachers' understanding of both the concepts and the subject content is sometimes poor and this, in turn, is affecting not only their ability to make full use of their new skills, but also their use of NCC materials.
- Positive outcomes are more often visible in lower grades than in upper grades when content is more difficult.
- Teachers almost never teach to higher order learning objectives. This seems related to the level of the teachers' academic preparation.
- Students are not frequently encouraged to ask questions.

The degree to which the above impacts from in-service training are present is contingent on a number of interrelated variables. They are, in order of their importance:

1. the cycle in which the teacher was trained, i.e., the amount of time which had elapsed since the teacher last attended a spin-off workshop with other teachers (This was verified by observation sheet items related to the use of teaching aids [see appendix two]);
2. the support and understanding of the headmaster;
3. the remoteness of the school;
4. the amount of financial support available to the school;
5. whether the school was a target school or a sister school; and
6. the capabilities of the LIT (i.e., the attitude, skills and knowledge).

Following are some illustrations of how these factors interact.

- In most cases, schools from the first cycle show diminished impact on the observation items when compared to both second and third cycle schools, and teachers reported that they have "slipped away from" or "lost" some of their gains.
- Many cases, third cycle teachers were rated higher on observation items.
- The schools which showed the most impact within a cycle always had supportive headmasters.
- Impact was always more evident in target schools than in sister schools. Most sister schools reported that they had received little or no benefits from the open day being held at the TIDCs for first and second cycle LITs.
- The remoteness of a school and its access to financial resources seemed to be positively related.
- The impact was severely diminished or almost non-existent in first and second cycle schools if the headmaster had not continued his/her support and commitment to the project after the training cycle had ended.

In one case, a very remote school from the second training cycle had a headmaster who was very supportive of the program and reimbursed his LIT for travel to the TIDCs. He also encouraged her to continue to provide training to the other teachers. However, LITs with supportive headmasters but with few or no means of providing the supplies and materials needed for teaching aids were discouraged. They expressed concern about their ability to continue to make use of their training.

One second cycle school, where little impact was observed, was in very good condition. There was evidence of an abundance of supplies (e.g., paper, crayons). However, the headmaster, who was also the LIT, was not supportive of the program and had done little or nothing to share the training he had received with the teachers at his school. Another second cycle school where little impact was observed also rated negatively on these same variables.

Another, a very remote school, was observed where both the school and the teachers had been without water for a number of weeks. The teachers were bitter about this condition. They had participated in the second cycle and had a very supportive headmaster. The positive impact of the in-service program was still evident in observations and the teachers' verbal assessments despite the physical drawbacks.

Four other factors affecting the continued impact of the program are:

1. The lack of transportation to and from workshops and TIDCs is negatively affecting both the quality of the initial outcomes and the sustainability of the outcomes. For example: LITs reported that if they relied on public transportation, they often arrived late at follow-up workshops and/or were forced to leave early; difficulty

with transportation was the reason most often cited for target schools' failures to fully involve their sister schools in spin-off workshops; supportive headmasters who had the resources reimbursed teachers for travel to TIDCs, however, non-supportive headmasters expected teachers to pay for their own transportation; in remote areas where the schools had no external source of support, even if the headmaster was supportive, both transportation and the money needed for supplies and materials created critical problems.

2. While there are notable exceptions, the majority of headmasters did not continue their support of the project after the training cycle was completed. This was primarily due to their lack of commitment to the project.
3. Both DIEs and LITs report that the lack of input from DIEs, especially in the third cycle, negatively affected the quality of training.
4. In approximately one third of the 47 schools visited, a number of environmental conditions that were not conducive to learning, especially in the lower grades, were evident. For example, large numbers of students (45 or more) would be forced to sit on the floor or share a chair, a desk, and learning materials with another student. Headmasters reported that had this evaluation been conducted earlier in the school year, even more unfavorable conditions would have been observed.

THE EFFECTIVENESS OF THE DIE AND LIT DELIVERY SYSTEM

The effectiveness of the system as a means for the delivery of an in-service project is evident from the impacts reported above. In the opinion of Regional Education Officers (REOs) and teachers who participated in the spin-off workshops, the system is sustainable. The major proof of the systems' sustainability is that the third cycle workshops are being carried out on schedule and with observable impact after the termination of technical assistance. The continuation of the third cycle is mainly due to the efforts of LITs and the ISU. DIEs seem to have little or no impact on the effectiveness of the delivery system during the third cycle (the degree to which this is true varies slightly from region to region).

The lack of involvement in third cycle training efforts was something that DIEs themselves identified as a concern. They gave two reasons for this. First, upon termination of the project's technical assistance, they no longer had access to transportation. Second, the coordination and communication between regional offices and the ISU had been inadequate to allow for the necessary planning needed to take part in spin-offs.

Historically, the school inspectorate system has focused on the enforcement of rules and regulations. Interviews with primary school inspectors who have served as DIEs reveal that they had made a major shift, at least in attitude, away from this approach. In their own words, they now think of themselves as "helpers" rather than "policemen". This change in attitude and perception is a significant step toward an educational system whose basic concern is supporting and nurturing the innovations and improvement it is seeking to promote.

While DIES were proud of this new image, they repeatedly expressed the opinion that they had neither the academic background nor the professional skills needed to carry out these new roles and responsibilities. A corresponding change in the perception that teachers and headmasters have of the inspectorate has not yet occurred. Headmasters, because of their level of academic training and lack of management and administrative skills, are one of the weakest links in the primary education system. The benefits of an enthusiastic and well-trained teaching force are severely diminished if those responsible for their support and guidance, and the management of the system in which they work, are not capable of carrying out those responsibilities.

DIEs tended to be very positive about the project's in-service training initiatives. They had enjoyed their roles as DIEs and felt very strongly their participation in workshops has had a positive effect on their relationship with teachers. They identified one of the benefits of the in-service program as helping them better understand teachers and their problems. While this change in their perceptions is a very important one, classroom teachers had not yet perceived this change in either the roles or the attitudes of inspectors who were DIEs.

The scope of the role and responsibilities of DIES is difficult to determine. It appears that much of their time is spent attending to short-term or immediate needs (i.e., crisis management). According to data gathered while visiting schools, inspectors do not make regular visits to most primary schools.

The system as it now stands, even without the use of DIEs, has a number of strengths which should be preserved. It also has some limitations which call for modification.

Strengths:

- This delivery system is both an effective and inexpensive way to reach a large number of teachers.
- Teachers report that it is important to have a direct connection to the in-service program (i.e., a colleague they can consult, someone responsible for coordination of training, teaching aids, and other supplies and materials).
- The use of a local teacher in the delivery process has contributed to teachers' willingness to seek help from each other and to the breakdown of fears of asking for assistance or information.
- The slippage in the transfer of learning, while present, is not severe enough to prevent a significant positive impact.
- LITs tend to be dedicated and willing to participate fully in the in-service program.
- The delivery system develops leadership and is good training for future headmasters, inspectors, and in-service staff.

- The delivery system provides both the LIT and other teachers with a sense of pride in their profession and makes them feel that they are appreciated.
- LITs have direct, immediate, and relevant information about needs, interests, and concerns of the teachers they serve.

Limitations:

- Target schools benefit more than sister schools.
- LITs do not feel that they are in a position to provide much needed follow-up supervision because:
 - they lack confidence in themselves as supervisors; and
 - they do not feel they have the authority to carry out this kind of responsibility.
- LITs are often not able to provide the depth of information that teachers need (i.e., they can't go beyond the information presented in the workshops).
- If the headmaster does not support the LIT, it is difficult for the LIT to carry out her/his responsibilities properly.

The observation checklists reveal that LITs scored consistently higher on items related to the use of teaching aids, new curriculum, and new methodologies. It is interesting to note that although third cycle LITs and other participants scored higher on these items, teaching experience might influence scores on items regarded as secondary gains (i.e., communication skills and classroom management). Cycle two teachers averaged 9.1 years of experience, cycle three 7.5, and cycle one 7.8. Cycle two teachers scored highest on these items [see appendix two]). Other findings related to the effectiveness of the delivery system include:

- The quality of the LIT made a difference in the effectiveness of the spin-off workshop:
 - if they were not fully committed to the project; and
 - if their knowledge of certain subject areas was weak and/or they were not confident about their ability to teach a particular subject area.
- Most headmasters did not make good LITs since:
 - they tended to be the least academically qualified; and
 - they had reservations about and did not fully support the philosophy behind the program; and/or they did not fully

understand the program; and/or they had not been sufficiently involved and therefore did not display any commitment to the program.

- A number of teachers felt that the workshops did not fully meet their needs because:
 - workshops did not deal specifically address the grade that they taught; and
 - workshops were too general and did not address the specific needs in which they needed help.
- A few of the teachers questioned the quality and preparation of the resource people who delivered both follow-up and spin-off workshops.

Conclusions

- While the project has made a significant impact, this impact is fragile and tenuous at this point in the development of the Swaziland educational system. There are a number of interventions which must occur if the impact of the project is to be maintained and used as a building block for other educational innovations.
- The multiplier approach, as a delivery system for in-service training, has been effective. With proper support, this approach is sustainable. However, the weaknesses in the system are of sufficient magnitude to warrant consideration of a number of modifications for future in-service initiatives.
- In general, the primary teaching force in Swaziland is performing at the peak of its ability. That is to say, teachers are using the methodological skills, teaching materials, and instructional aids available to them at the optimal level of their academic training.
- Headmasters are the weakest link in the system in terms of the academic and professional preparation for the responsibilities of supporting in-service and other initiatives.
- The project did not significantly impact the MOE's capacity to effectively supervise and provide support to in-service teachers. Primary school inspectors, specifically those who served as DIEs, have, for the most part, developed a positive attitude about their roles as supervisors. However, a number of obstacles, including problems with transportation, skills training, and their definitions of roles and responsibilities are preventing them from serving in effective resource and support roles.

Recommendations

- In-service training, based on teachers' needs, should be strengthened and expanded so that every teacher receives a specified number of in-service days during each school term.
- The use of local teachers in the delivery system should be expanded to include:
 - a LIT at every school to coordinate training activities and the use of teaching aids and other learning supplies and materials; and
 - the use of other teachers with special skills and knowledge (e.g., PTD holders).
- A long range plan for the development of a master teacher position to build on the position held by LITs should be considered.
- The In-Service Unit should develop a series of TOT workshops, based on adult and experiential education models, for the ongoing development of LITs, DIEs, Teacher Leaders, and other resource people used in the delivery of in-service training.
- There should be a system of follow-up supervision that reinforces the learning process and provides support and advice when teachers are having difficulties. LITs, DIEs, headmasters, and in-service staff should all be involved in this effort.
- The individuals used to provide supervision and follow-up should be given training and the necessary time and authority to supply these services.
- A study of the responsibilities, staffing, and resources of regional office staff should be conducted in order to determine what roles they should and can play in in-service training. Appropriate training and human resources to enable them to carry out those roles and responsibilities should then be provided.
- A systematic effort to gain the support and understanding of all headmasters for new and continuing in-service initiatives should be made. While headmasters should not be used to any large extent in the direct delivery of in-service training, they should be given roles and responsibilities to foster a sense of ownership and ensure their ongoing commitment.

THE USE AND AVAILABILITY OF TEACHING MATERIALS AND INSTRUCTIONAL AIDS

In all but a few of the schools visited, teaching materials and instructional aids were available and effectively used. Examples of teaching aids on classrooms walls were observed

consistently. Less consistent, but still present, was the use of instructional aids during the lessons observed.

Children had NCC workbooks and sufficient paper and pencils to do their work. In the majority of cases, children had their own materials and did not have to share books and materials with other children (however, as stated earlier, headmasters reported that their numbers were drastically reduced by the end of the year and that different conditions concerning overcrowding and sufficient supplies and materials would have been apparent earlier in the school year). Chalkboards, except in remote school, were in good condition. Most teachers observed had excellent chalkboard skills.

A number of headmasters reported that, while LITs had been able to supply both their own schools and their sister schools with teaching aids during the training process, knowledge about how to construct aids was often not transferred to other teachers. In some cases, the supplies and materials needed to make these aids were no longer available. Target schools tended to have more aids than sister schools. Some materials and teaching aids that should have been distributed to schools were found unused at the TIDCs. Some supplies and materials were only available to a limited number of teachers, specifically LITs and/or their target schools. In one very remote third cycle school, teachers were observed making use of a variety of aids that had been constructed from "odds and ends" available from the environment; a positive outcome. However, they had no paper on which to construct maps or other illustrations.

While all the variables discussed in the previous section need to be considered in order to fully explain the use and availability of materials, the most significant variables affecting materials usage and distribution were: a) the inadequacy of the transportation and distribution system; b) the remoteness of the school; and c) the training cycle in which the school participated.

Following is a compilation of observations made:

- All third cycle schools were utilizing teaching aids.
- Usage of teaching aids was evident in both second and first cycle schools but at a diminished level.
- Most, but not all, urban schools had supplies. The extent to which teachers were making use of these supplies was affected more by the cycle in which they were trained than by the availability of supplies.
- First cycle schools, especially those in rural areas, had few supplies and these were old and worn.

NCC Materials

The development of national curriculum materials was not a part of this project, and an evaluation of the use and distribution of these materials was not included in the scope of

work. However, the In-Service Unit had utilized the NCC materials as a basis for their training programs, and teacher and headmaster concerns about the materials surfaced in interviews so often that some of the findings are discussed below.

All schools now have and are making use of the new NCC materials. However, teachers and headmasters report a number of problems and concerns. All but a few urban schools report that they had difficulty obtaining the books in a timely manner.

- Many headmasters said they had difficulty collecting school fees from parents at the beginning of the school year. If they waited until the school fees were paid to buy the books, they often did not receive books until late in the school year.
- Lack of the materials was also a concern. Many headmasters reported that books were either not available, or not available in sufficient quantity. Some headmasters were given pick-up dates by the regional offices that were well after the beginning of the school year.
- Transportation caused many problems for schools not located near bus routes. One headmaster reported that he hired a pickup truck to deliver the books to his school due to lack of public transportation. On the way home it rained and many of the books were damaged.
- There were reports from several regions that headmasters were not being allowed to use the 4 year rental system as a basis for the payment of materials.

Teachers also reported a number of concerns over the content and organization of the curriculum. In their opinion:

- Some books cover too much material and teachers do not have enough time for review. This becomes an even greater problem when the books do not arrive until the school year is well underway.
- The concepts in the books in some cases are too difficult for the age level. This was attributed to:
 - whether or not books had been designed by Swazis; and/or
 - the books were designed for urban children and were not applicable to rural children (for example, rural children, who have perhaps not used a pencil, are expected to write their names on the first day of school).
- If teachers present concepts to a child who had not been introduced to the necessary concepts the previous year (because NCC materials were unavailable at that time), it is difficult to achieve the course objectives in the time allocated.

- In some cases, the concepts to be covered are not well distributed throughout the grades. There may be too much material to cover in the lower grades and too little in the upper grades.
- In some cases, student workbooks are not constructed to last for the entire four year rental scheme.

The concerns listed above were reported by teachers and headmasters. There is another dimension that should be considered when evaluating such remarks. As mentioned above, the survey team concluded that teachers are teaching at the maximum level that their academic preparation will support. However, some teachers are struggling to keep up with the NCC materials. Many of their comments may be colored by the fact that the materials are not only a challenge to their students, but a challenge to themselves as well.

- Teachers use materials in a very structured manner and follow NCC guidelines without deviation. They seem to feel that they are expected or required by the system to adhere exclusively to the lesson plans and curriculum content provided. Little evidence of creative teaching was observed due to the strict adherence to the curriculum materials.
- Teachers' own understanding of the concepts and content being taught may be too weak and they may have neither the confidence nor the knowledge to use the material creatively.
- Teachers in rural areas have few resources with which they can supplement NCC materials because of: 1) the lack of transportation; 2) the limited operating hours of the TIDCs; and 3) the lack of the teacher's awareness of the existence and purpose of the TIDCs.

In subsequent interviews with NCC staff, a number of issues concerning communication, involvement and cooperation were raised as having plagued the relationship between in-service and the NCC. These misunderstandings have prevented the type of mutually beneficial relationship that could and should exist between the two programs. In some cases it may be resulting in the duplication of services between training initiatives carried out by the In-Service Units and infusion workshops offered by NCC staff.

TAP Kits

Of the 47 schools visited, only 6 schools were making effective use of TAP kits. The rest were making minimal or no use of the kits. The reasons given for failure to use the kits were:

- regulations require teachers to replace broken or stolen items;
- some schools do not offer training;
- the training teachers receive is not sufficient;

- there is a lack of secure storage space on school property (headmasters often keep the TAP kit in their home making use of the kit inconvenient for the teaching staff);
- most primary teachers are females and have no knowledge of carpentry;
- many teachers say they do not have materials such as lumber, nails, etc., to make effective use of the kits;
- in all cases where the TAP kit is being used effectively, someone at the school had some knowledge of carpentry.

There were a number of administrative delays in the development and distribution of the TAP kits over which the project had no control. As a result, the kits were not delivered to the schools until almost the end of the project. This would explain some of the problems related to the lack of orientation and training.

Conclusions

- Swaziland, as a result of this project and previous projects, has made great strides in developing and supplying relevant teaching materials to most of their schools. However, there are a number of problems related to the distribution and maintenance of these materials which must be solved if the gains are to be sustained and have a long term impact on student achievement.
- While the TAP Kits are benefiting a few schools, additional training and support will have to be made available if they are to have any impact on the system as a whole.

Recommendations

- An in-depth and systematic review of the NCC materials that seeks input not only from pilot schools, but from a wide variety of schools, headmasters and teachers who make use of the materials, should be developed.
- The strategy for gathering teachers' input concerning NCC materials should be one that provides teachers an opportunity to fully discuss their concerns and opinions (some teachers feel questionnaires are not effective).
- To ensure that the NCC curriculum remains an integral part of in-service training, communication and cooperation between departments should be strengthened.
- If cost is not prohibitive, the quality of the construction of the student workbooks should be improved.

- A system for timely distribution which includes delivery of an adequate supply of materials should be developed and supported by the MOE.
- The system of payment for the "renting" of books for a period of four years should be studied and improved.
- If the system is to benefit from the availability of TAP kits, the following areas should be considered:
 - in-service training that incorporates "hands on" experience to make specific teaching aids;
 - training that prepares local teachers and headmasters to use TAP kits for repair and maintenance; and ..
 - the policy making teachers financially responsible for lost or damaged tools should be revised.

TIDCs AND THE USE OF PCVs

TIDCs

The equipment at the TIDCs is in good condition and is being used. Teacher Leaders seem committed to their roles. They are active and interested in what they are doing. The equipment includes, but is not limited to: PC computers with a variety of software; a printer and other supplies; four drawer filing cabinets; a dry press laminator; storage cupboards; equipment and supplies for preparing meals; sewing machines; books; films; and a variety of teaching aids.

TIDCs are used for follow-up workshops and, in some cases, for spin-off workshops. However, only a few teachers, mostly LITs and some teachers from schools close to the TIDCs, are getting any measurable benefit from the TIDCs. Only one TIDC has operating hours outside the normal 8:00-17:00, Monday through Friday schedule. This makes it very difficult for teachers who do not have private transportation or live near by to use TIDCs effectively. Equipment is therefore not being fully utilized.

A number of the teachers interviewed either did not know that the TIDCs existed or reported that they were unable to reach them during their normal operating hours. Some teachers and headmasters complained about having to travel to the TIDC assigned to their region even though an alternate TIDC was much closer to their school.

There are some problems concerning the job descriptions of the Teacher Leaders. This is related to how their roles and responsibilities are shared with the REO, the NCC, and In-service. Some Teacher Leaders feel that they cannot adequately respond to all the demands that are made on them by all the individuals and institutions to whom they must answer.

Both the In-service Director and the NCC Director believe that the teacher leaders are members of their staff and under their direct supervision.

PCVs

PCVs are effectively serving a number of important functions at the TIDCs. Their presence allows the Teacher Leader to supervise spin-off workshops and the piloting of NCC materials without closing down the TIDCs. Depending on their skills, which vary from person to person, PCVs are also providing training in the development and use of teaching aids, and in categorizing and organizing the resource materials available at the TIDCs.

PCVs report some concern about the orientation they receive and the clarity of their job descriptions. They feel that their skills could be more fully utilized by the TIDCs. There is also a lack of clarity about who is responsible for their supervision and the development of their job descriptions.

Conclusions

- While TIDCs have not had a substantial impact on the system to date, they have a great deal of potential, and will be critical to the ability of the system to maintain the project gains.
- PCVs are playing an important role at the TIDCs and their continued presence is needed.

Recommendations

- The roles and responsibilities of Teacher Leaders should be studied to determine if TIDCs need two full-time staff positions: one to coordinate NCC pilot projects; and another to help local schools and teachers with teaching aids and learning materials.
- The MOE should clarify how the roles and responsibilities of Teacher Leaders are to be prioritized e.g., who has primary responsibility for their supervision? how should conflicts in their roles and responsibilities be resolved?
- TIDCs should have the full-time use of at least one vehicle.
- Consideration should be given to either the development of mobile TIDCs (a procedure whereby Teacher Leaders travel to alternate distribution centers three or four days a month) and to providing additional TIDCs which are accessible to the Mbabane area and to remote area schools.
- Consideration should be given to allowing participating teachers to attend TIDCs and Open Day workshops at the regional office nearest them.

- Efforts should be undertaken by REOs to insure that all teachers are aware of the services that Teacher Leaders at local TIDCs provide. REOs should also encourage headmasters to support teachers' use of TIDCs.
- The use of PCVs at TIDCs should be continued and the possibility of using PCVs to supplement the ISU should be explored. The job description of the PCV should be developed with input from the Teacher Leader, the NCC, and the ISU.

QUALITY OF PRIMARY TEACHER DIPLOMA (PTD) HOLDERS

While 30 to 35 PTD holders were targeted as potential interviewees, only 14 were observed and an additional 5 interviewed. There were two reasons for this: 1) information about the teaching locations of PTD holders was often incorrect; and 2) during the second week of observation, many schools were in the middle of exams and some classroom observations were not made.

The quality of PTD holder performance was compared, in many cases, to teachers of 5 to 10 years experience. Therefore, even if additional observations had been made, comparisons of teaching performance would have been difficult to make. Nonetheless, of the 14 observed, demonstrated skills were favorably impressive. Observations revealed that their grasp of most subject areas is greater than that of their colleagues who do not hold the 3-year diploma. Interviews revealed the following.

- The first groups of students felt that their program was substantially impaired because of the lack of organization and the constant change in lecturers. However, they were still very supportive of the program.
- They reported that they had little chance to make use of their area specialization, but would welcome the opportunity to help other teachers in their field of specialization.
- They were divided on whether third year TTC students should be required to study an area specialization or a more generalized curriculum.
- Many of them felt they were prepared to teach secondary school and expressed dissatisfaction with their placement in primary schools.
- A number of accounts reveal that many of the PTD holders were, in fact, either teaching in secondary schools in Swaziland or had been recruited to teach primary schools in South Africa.

Conclusion

- On the basis of limited observation, there is reason to believe that PTD holders are better prepared academically than their colleagues, and that if they stay in the

primary teaching force, they will eventually make a significant impact on the quality of teaching and the achievement of students due to their grasp on areas of specialization.

ISSUES RELATED TO IN-SERVICE

Further Academic Upgrading

Many teachers are struggling with their responsibilities, just barely able to keep ahead of their students and the NCC materials. In some cases, they make only limited use of the methodologies and concepts presented in those materials. Many of the concerns voiced were either about workshops not addressing specific grades and subject areas, about the NCC materials, or about not getting needed help from Inspectors. This may be related to the fact that teachers recognize their limitations and are eager to advance. If the present gains in the availability and use of instructional materials and teaching aids can be maintained, the system can reap significant benefits in student achievement through investment in the upgrading of teacher academic qualifications.

The best approach to improving teachers' academic qualifications (i.e., upgrading academic qualifications of existing teachers or improving pre-service training and/or admission standards) can only be determined by an analysis of the cost effectiveness of alternative approaches. One of the principle determinants, however, is the relationship between the stability of the present teaching force and the system's ability to absorb new, more highly trained and/or qualified teachers.

Recommendations

- The MOE should initiate further studies to determine the composition of the primary teaching force in Swaziland over the next 10 to 15 years.
- On the basis of that study, general/liberal arts education should be strengthened and/or expanded for teachers and other professional personnel currently in the primary school system. The program should utilize a variety of methods such as distance education/correspondence courses, part-time diplomas, a mature entry scheme. This recommendation distinguishes between teacher education and training; and a liberal arts education geared toward the enhancement of overall academic and intellectual development.

Transportation

The lack of transportation had a negative impact at all levels of the in-service component of this project. The lack of public transportation impaired local schools' participation. An insufficient number of vehicles, and/or their inefficient use, hindered staff at both the regional offices and the in-service units. These same problems continue to negatively affect the sustainability of the project impacts of the in-service program.

Transportation proved to be a problem in all phases of the project from the initial training of DIEs and LITs to follow-up and spin-off workshops. DIEs gave transportation as the primary reason they were unable to participate in third cycle training and/or provide needed follow-up services. LITs and other teachers reported problems with transportation as the primary reason they failed to carry out and/or attend spin-off workshops. Headmasters reported the difficulty with public transportation and/or the money needed to reimburse LITs for transportation as the main reason they did not support continued spin-offs and visits to the TIDCs.

According to officials, regional offices may have between 4 and 5 vehicles. One of these vehicles is designated as the emergency vehicle which means that it is kept in reserve so that it is always available should the REO or other staff be called to the ministry. A second vehicle is used almost exclusively by the building inspector. A third vehicle is used by other services, such as health services, within the regional office. Often, one vehicle is out of service, therefore one vehicle is left for the remaining members of the inspectorate.

Recommendations

- The MOE should initiate a study to determine its transportation capacity and the most cost-effective means of meeting the transportation needs of its in-service programs.
- The MOE should designate a specified number of vehicles to be used exclusively for in-service activities and follow-up activities for DIEs and LITs.
- The MOE should develop an administrative and management system for the use of these vehicles that facilitates flexibility as well as efficiency.
- A reimbursement system for individuals willing and able to use private transportation should be developed.
- The use of low cost vehicles such as motorcycles and mobilettes that can be assigned to both MOE personnel and local school staff should be investigated.

Certification for In-Service Training

It is perhaps not necessary for in-service participants to receive credit that would count toward academic certification for in-service training. While this issue was brought up by MOE personnel, it did not seem to be important to teachers. A major obstacle to such a scheme is that it is difficult to maintain quality control over individual achievement in in-service training activities.

Strongly recommended, however, is the recognition of in-service training in the form of certificates and other public records (e.g., personnel files). This recognition should be given to both participants and service providers such as LITs, DIEs, and lecturers who are responsible for the delivery of in-service workshops. Furthermore, this recognition should

be used as part of the criteria that determines promotions, salary increases, and admission to academic programs via the mature entry scheme.

IV. THE MANAGEMENT OF TEACHER EDUCATION

INTRODUCTION

The STTP's most impressive contributions were its innovations in the area of coordination and cooperation of educators from the many institutions under the MOE. These efforts were undertaken by the Inspectorate for Teacher Education and Curriculum Development (ITECD). Educators stated repeatedly that participation of educators and careful, prompt decision making by the Inspectorate were keys to the positive impact on management. Since the termination of technical assistance, however, the transition within the MOE to effectively manage teacher training has not been smooth. One of the keys to the project's success, effective management from the leadership within the Inspectorate, is faltering. Since the Inspectorate has jurisdiction over all teacher training institutions, little can be done by educators in those institutions if they are not fully supported by the ITECD. The lack of ITECD support, collaboration, coordination, and management of educators in teacher training institutions is seriously weakening the ability of the MOE to sustain project gains.

THE OFFICE OF THE CHIEF INSPECTOR TEACHER TRAINING/CURRICULUM DEVELOPMENT

The Chief Inspector of Teacher Education and Curriculum Development is directly responsible for the coordination and management of all aspects of pre-service and in-service programs as well as curriculum development for primary and secondary schools. The sustainability of project outputs largely depends upon the leadership and management skills of the Chief Inspector.

The project contractor set up and used an extraordinary management and coordination scheme which was one major reason for the project's success. The team was able to identify four major areas of impacts. They are: 1) the coordination efforts which took place at joint administrative staff meetings; 2) the development and institutionalization of the annual work plan; 3) the delivery of annual teacher education conferences; and 4) the use of an MOE master calendar.

Since the termination of technical assistance, the office of Chief Inspector has not been able to meet its many responsibilities. The four major areas of impact listed above are being neither monitored nor developed further effectively. This lack of leadership seriously jeopardizes sustainability in these areas. The team cannot sufficiently stress how urgently management is needed if the many positive impacts, including the design of this Inspectorate, are to be sustained.

Recommendations

- The office of the Chief Inspector is the hub for the successful coordination of teacher education and therefore vital to impact sustainability. The Chief Inspector should be made accountable for the implementation of all coordination efforts

between the TSC, MOE Department of Planning, MOE Department of Testing, NCC, TTCs, UNISWA, REOs, TIDCs, and In-service.

- If the responsibilities of Chief Inspector cannot be successfully undertaken by one individual, an assistant administrator should be assigned to the office.
- If additional status to the inspector's position would help guarantee his/her ability to coordinate and collaborate with the other institutions and inspectorates, the level of the ITECD should be upgraded in the MOE's organizational plan.

JOINT ADMINISTRATIVE STAFF MEETINGS

Of the myriad meetings which occur, the ones which officials from the NCC, UNISWA, TTCs, ISU, and MOE have described as most important to teacher education were the joint administrative staff meetings which immediately followed the MOE's monthly meetings. Present were TTC principals, an NCC official, a UNISWA representative, an in-service representative and the Chief Inspector. Minutes from these meetings reveal an extraordinary amount of coordination and planning among all of the institutions' representatives including discussions concerning: the annual work plan and the master calendar; in-service workshops; teacher training overseas; number of anticipated B.Ed. graduates; curriculum revisions; the completion of the self-study; graduate placement; and annual teacher education conferences.

The joint administrative staff meetings offered the needed forum for all institutions to collaborate, coordinate, and plan. It has been reported that these meetings have not occurred since the termination of the project's technical assistance. The toll on the system is apparent everywhere since each institution is currently operating somewhat independently of the others. Basic needs addressed at these meetings, such as those listed above, now go unanswered.

Without exception, administrators (particularly NCC officials and TTC principals) stated that the most important impact of this project was the knowledge dissemination provided by the coordination scheme. If that scheme no longer functions appropriately, sustainability of effective management of teacher education is hanging in the balance. The position of Chief Inspector must ensure that such collaboration continues. A commitment to joint administrative meetings is direly needed, and anxiously awaited for, by officials at the TTCs, NCC, UNISWA, and the In-service unit. Joint administrative meetings are the responsibility of the ITECD.

Recommendations

- The ITECD should be made accountable for ensuring monthly joint administrative staff meetings with the NCC, TTCs, UNISWA, In-service, and the MOE.
- A TSC and a Planning Department official should be added to all joint planning efforts which affect TTC and B.Ed. student intake and output.

- The ITECD should be made accountable for the resolution of common problems of teacher education such as the successful completion of all TTC self-studies, work with the BAI, annual conferences, student need and placement, etc. at well-planned monthly joint staff meetings.

THE MASTER CALENDAR

The Master Calendar is another output from the project which was originally maintained by the project's Chief-of-party. It has since been taken over by the Director of Education. The purpose of the calendar is to ensure that the MOE has a coordinated plan to carry out teacher education activities. The calendar has been honored by all educators at each educational institution. Workshops, meetings, and other events have been planned around calendar openings. All administrators interviewed stated that the maintenance of the calendar is vital for the following reasons:

1. It provides for coordination of the MOE with educational institutions, in-service with schools, in-service with pre-service, and the NCC with in-service.
2. It justifies workshop commitments and other activities to headteachers and other officials by demonstrating MOE support.
3. It validates in-service as an essential part of teacher education supported by the MOE.
4. It provides teachers the opportunity to participate in all activities such as EEC, Australian, Canadian, SNAT, UNESCO, instead of having to choose among competing donors and time slots.
5. It gives institutions a chance to plan the yearly events together instead of imposing ongoing work from one institution to another.
6. If fully honored, the master calendar makes the MOE responsible for the process of teacher education and regards participation in that process as essential to its success.

At this time, institutions do not have a current master calendar and there is none planned for the upcoming year. TTC principals and NCC officials feel that the master calendar is no longer honored by educators in all institutions, and the planning and dissemination has not been properly maintained. As a result, educators are torn between conflicting commitments and are confused as to their own allegiances and responsibilities toward calendar events. The master calendar also offered a long-term perspective of what the year would and would not provide so that a 3-5 year plan could be outlined for teacher education continuity and coherence. ISU officials and UNISWA staff report that such practices have not continued satisfactorily since the termination of the project's technical assistance. One TTC principal attributed the failure to have an annual teacher education conference to the lack of a master calendar.

Recommendations

- The Director of Education and the ITECD should be made accountable for the joint planning, coordination, and dissemination of the master calendar and mandate that it be honored by all educational institutions.

THE ANNUAL WORK PLAN

The Annual Work Plan has become a line item in the GOS annual budget and was increased by 16% last year with all the other line items in the budget. The 1990-1991 plan was developed in the Chief Inspector's office. Allocated monies are distributed through the principle accountant's office at the MOE. There is currently E190,000 in the teacher education program. Each of the institutions involved in teacher education identify financial need in the yearly plan to provide appropriate line item amounts to the MOE. The amounts are then made available to the institutions upon request. This is not insignificant, since the GOS not only met but increased its financial commitment to teacher education.

Although a 1990-1991 work plan was completed, institution officials had little or no role in its final production. Appropriate means to withdraw the funds allocated to their institution remain unclear. A withdrawal request form exists which is turned into the Chief Inspector and the Director of Education for approval. Amounts are paid directly by the MOE accounting office. Access to this process, however, has become limited. This year, In-service has been the only institution which has drawn upon allocated funds. Other institutions were not even aware that the annual work plan had been completed for 1990-1991, since their participation had not been requested.

TTC principals, vice-principals and lecturers, NCC and ISU officials, and practicing lecturers wish to support wholeheartedly the annual work plan, as it eliminates any confusion or competition for funding. Officials from each of the educational institutions voice their strongest desire to be involved in its yearly development, identify needed modifications, and be supplied with the final document to facilitate financial support. Historically, planning and development of the annual work plan has taken place at joint staff meetings. Some administrators remain unsure of its current status and are dissatisfied with the management of the plan's development. The ITECD is responsible for the annual work plan.

Recommendations

- The ITECD should be made accountable for the successful joint development and dissemination of each annual work plan.

ANNUAL TEACHER EDUCATION CONFERENCES

The project provided annual teacher education conferences which had yearly themes. These themes were identified and conferences planned at joint staff meetings. Typically, short term consultants were brought in to assist with the content and delivery.

1990 will be the first year since the project began that no teacher education conference has been planned. Administrators suggest two reasons for this:

1. The lack of coordination of the ITECD to hold joint staff meetings or other plenary sessions to ensure conference planning and successful implementation.
2. The limited number of Swazis with the necessary experience due to lack of previous involvement.

All administrators and lecturers voiced the desire for the continuation of the conference either annually, or at least, every two years. They also voiced enthusiasm for participating in the planning and implementation of the conference. The coordination of such efforts is the responsibility of the ITECD.

Recommendations

- The ITECD should be made accountable for ensuring the coordinated and cooperative planning and implementation of annual teacher education conference.

APPENDIX I
SCOPE OF WORK

ATTACHMENT I

STATEMENT OF WORK

BACKGROUND:

The grant agreement for the Teacher Training Project was signed on July 24, 1983, authorizing \$5,595,000 to be spent over five years. This project, USAID's second bilateral effort in the education sector, was designed to improve and expand the capacity of Swaziland's teacher training system to support pre-service and in-service training for primary school teachers. Ohio University was selected as the prime contractor to implement the project. The Ohio University Chief-of-Party arrived in Swaziland in March, 1985. The bulk of the technical assistance concluded in June 1989. An acting project manager and an administrative assistant continued to manage the purchase and distribution of commodities and other project initiated activities through January 1990.

Creative Associates conducted a mid-term evaluation in March 1987. In 1988 the project paper and grant agreement were amended to extend the PACD from August 31, 1989 to August 31, 1991, to increase the LOP by \$600,000 to \$6,195,000, and to reprogram funds for commodity purchases and support to Fundza, an indigenous education Private Voluntary Organization (PVO).

II. Description of Planned Activity:

The purpose of this evaluation is to assess the impact of the Teacher Training Project on education in Swaziland. The evaluation shall document the qualitative and quantitative changes in: 1) the system for in-service teacher training, and 2) pre-service teacher training that can be attributed to the project.

ARTICLE I. Title

Swaziland Teacher Training Project
(645-0214)
Impact Evaluation

ARTICLE II. Objective

To assess the impact of project-initiated and/or supported changes made to the teacher training system on education in Swaziland in a quantifiable and participatory manner

ARTICLE III. Scope of Work

The team shall determine the extent to which the Ministry of Education, University of Swaziland, and the teacher training colleges have improved the quality of the teaching force and the training system's ability to produce more capable teachers. To as great an extent as possible, impact indicators should be reported in quantifiable terms.

The evaluators shall report findings on two levels. On the first level, the evaluation will describe the changes made over the life of project to the system for training teachers. This will not require a great deal of analysis. This section will provide the context for reporting impact findings and may identify areas of notable interest, for example, areas where outputs/activities fell short of or exceeded expectations.

On the second level the evaluators shall assess the impact on primary education in Swaziland of project-initiated changes to the teacher training system. Questions/issues to be addressed include the:

- * quality and effectiveness of in-service training provided to teachers. This shall include an assessment of the degree to which the inservice scheme meets the needs of teachers, the effectiveness of the district in-service education specialists (DIES) and the local in-service teachers (LITs) in improving teacher performance, and the demand for services from the Teacher Innovation Development Centres (TIDCs).
- * quality of teachers produced by the TTCs. The evaluation will be expected to determine whether changes in entry requirements, changes to the organization and curriculum of the Teacher Training Colleges, and the length of time teachers are trained has produced visible improvements in the quality of the teaching force and resulted in increased learning in the schools.
- * effectiveness and long-term viability of project interventions on the Bachelor of Education (primary) program at UNISWA; Evaluators will specifically examine the issue of the demand for the program (i.e: the supply of students) and the demand for graduates from the program.
- * financial and cost implications on the teacher training system including documenting the GOS's contribution to the project;

The evaluation report shall also include pertinent recommendations for the resolution of problems identified, and on other future actions that should be considered by the MOE with regard to teacher training, especially inservice training.

Elements of the Evaluation Design

The evaluation design will incorporate the comparison of the pre- and post-project primary education system using Government, Mission and Project records, interviews with staff in the institutions that participated in the project, and a structured survey of Regional Education Officers, school inspectors, Headteachers, and teachers. Annex I provides an illustrative summary of areas of expected impact, some probable quantifiable impact indicators, and potential sources of information.

The Survey

A structured survey will be conducted to help determine the project's impact on the quality of teachers produced by the Teacher Training Colleges, the effectiveness of inservice training, especially the use of district in-service education specialists (DIES) and local in-service teachers (LITs), and the demand for and satisfaction with the services of the Teacher Innovation Distribution Centers. The survey will entail the: (1) development and testing of a survey instrument(s), (2) training of enumerators in administering the instrument, (3) administration of the instrument to Regional Education Officers and selected school inspectors, Headteachers, and teachers and (4) analysis and interpretation of data. The sample population shall include Headteachers and teachers at schools where recently graduated teachers are working and where DIES and LITs have been active in providing inservice training, and Headteachers and teachers at an equivalent number of control schools. The number of respondents is estimated at 300 - 400.

Prior to the team's departure from the U.S. the team leader will contact Dr. Don Knox at Ohio University, the former Chief of Party of the project, to obtain background information, clarify any points of confusion, and identify useful resources.

Qualifications of Evaluation Team Members

Two evaluation team members are to be provided under this contract:

1. Education Evaluation Specialist
2. Teacher Education Specialist

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A locally recruited Teacher Education Specialist shall complete the evaluation team. S/he shall assist primarily in the design and management of the survey including the recruitment of four research enumerators. In addition, the USAID Swaziland Human Resources/General Development Officer, an FSN education specialist, and the Evaluation Officer shall be available as resource persons on a limited basis.

1. Educational Program Evaluation Specialist (Team Leader)

The team leader shall be responsible for the general description of project initiated reforms and activities. S/he shall assess the long-term viability of project activities. As team leader s/he shall be responsible for ensuring the quality and validity of the evaluation design and submitting a final document in conformance with the specifications in his statement of work. Also, s/he shall assess the project component dealing with the B.Ed (primary) program at UNISWA. S/he should have a doctoral degree in education with a specialization in teacher education and be experienced in designing and conducting field research. This team member should be skilled in conducting evaluations of development projects.

2. Teacher Education Specialist (Primary Education):

This team member will have primary responsibility for carrying out the evaluation survey to determine changes in quality of instruction as a result of changes in the teacher training and support system. This will include the management of a team of locally hired enumerators. S/he should have an advanced degree in education with specialty in teacher education and have extensive field research experience. Background in development education is desirable.

3. Local Education Specialist

USAID/Swaziland shall recruit this team member under a separate PIO/T. The job description is included here for informational purposes only. S/he shall be a Swazi with experience teaching in Swaziland and knowledgeable of the history and development of teacher education and certification in the country. S/he shall assist the teacher education specialist in assessing the impact of project activities on the Teacher Training Colleges and the quality of the teaching force. S/he shall have primary responsibility for identifying enumerators for the survey and will assist in all stages of survey preparation and administration. S/he shall also act as a resource to other team members on education in Swaziland.

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ARTICLE IV. Reports

The contractor shall produce an evaluation report of the impact of the Teacher Training Project on primary education in Swaziland in accordance with this statement of work. A draft evaluation, including preliminary survey results, shall be submitted to USAID three days prior to the ~~departure of the evaluation team leader.~~ Prior to its departure, the team will hold a joint briefing with the GOS and USAID to present preliminary findings and ensure that the draft contains no errors of fact or omission. The team leader will carry the survey data to the U.S. and have it processed and analyzed and then incorporate the findings into a final draft which will be mailed by DHL courier to USAID/Swaziland. 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. Project Evaluation Summary format. Twenty copies of the final evaluation report shall be mailed to USAID/Swaziland by DHL courier within 14 days of the contractor's receipt of USAID/Swaziland's final comments on the draft evaluation.

Below is an illustrative schedule for planning purposes:

- August 6 - 10 - Identify survey enumerators (this will be done by a local hire team member)
- August 9 - U.S. team members depart U.S..
- August 11 - U.S. team members arrive Swaziland
- August 13 - 18 - Orientation and introductions, outline descriptive section of evaluation, design survey instruments, draw survey sample,
- August 20 - 25 - Pretest and refine survey instrument(s), finalize sample, train enumerators conduct interviews with MOE, TTC, and UNISWA personnel.
- August 27 - 31 - Administer survey, continue interviews, begin drafting descriptive sections of evaluation
- Sept. 3 - 8 - Continue as in previous week, begin drafting findings and recommendations

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- Sept. 10 - 12 - Draft preliminary findings, complete draft of descriptive section, collect all survey data
- Sept. 13 - 14 - Present findings to USAID, MOE and UNISWA
- Sept. 15 - U.S. team members depart Swaziland
- Sept. 17 - - Survey results electronically tabulated
Oct. 6 and sorted
- Oct. 8 - 19 - Final report drafted incorporating survey findings
- Oct. 22 - Draft DHL'd to Swaziland
- Oct. 29 - - USAID/S reviews report and faxes or DHL's
Nov. 9 comments to contractor
- Nov. 13 - 22 - Report put in final and DHL'd to Swaziland

ARTICLE V. Relationships and Responsibilities

The evaluation team shall work under the supervision of the USAID Human Resource/General Development Officer and be assisted by the FSN Education Specialist, and by the Evaluation Officer in the USAID Program and Project Development Office.

ARTICLE VI. Terms of Performance

Work shall commence on or about August 8, 1990 and be completed by November 30, 1990.

ARTICLE VII. Work Days Ordered

A six day work week is authorized.

ARTICLE VIII.

A. Duty Post: Swaziland

B. Language: English

C. Logistical Support: USAID/S will make available all pertinent documents related to the Teacher Training 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

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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 GOS and project personnel.

APPENDIX II
CLASSROOM OBSERVATION CHECKLIST AND DATA GATHERED

Handwritten mark or signature.

Observation Worksheet

date:

school:

time:

region:

grade:

academic subject:

length of observation:

teacher's pseudonym:

observed by:

Descriptive Information

number of students in classroom:

condition of classroom: (chalkboard, chairs, windows, etc.)

Number of years experience of teacher:

Is the teacher a LIT?

During which cycle was the teacher trained?

Did the teacher obtain a PTD?

D. Classroom management skills

1. Directions are clear?
2. Children are able to move quickly from one learning activity to another?
3. Number of minutes students are engaged in a single learning activity?
4. Percentage of class period students are engaged in primary learning activity?
5. Teacher monitors comprehension level of students?
6. Is the noise level appropriate to the learning activity?

E. Teacher's understanding of curriculum content and methods

1. Is the lesson well organized?
2. Does the lesson engage students' interest?
3. Is information presented accurately?

Describe inaccuracies

4. Does the teacher teach to higher order learning skills?

Describe

F. Personal reflections

1. Comments on the learning environment
2. Comments on the teacher's effect on the learning environment
3. Comments on the students' response to the learning environment

SCORES ON OBSERVATION ITEMS BY CATEGORY OF PARTICIPANT

The following observation items (A1 through B1 and E1, 2, 4) represent the behaviors and skills most often cited as the desired outcome of the in-service training program. All items were rated on a 3 point scale, with 3 being the best possible score. Two scores are given: the average of all rating 1-3 per item/per category of participants; the percentage of all participants scoring 3 per item/per category. Since all items were not relevant in all classroom situations, some items are not scored in every classroom.

A. TEACHING AIDS

1. The teacher is using teaching aids (they are visible in the classroom).

	Average	% of 3s
LITs	2.4	70
PTDs	2.3	50
Others	2.6	37

2. The teacher uses teaching aids during the lesson being observed.

	Average	% of 3s
LITs	2.7	80
PTDs	2.2	60
Others	1.9	41

3. Children's own work is displayed in the classroom.

	Average	% of 3s
LITs	1.6	30
PTDs	2.0	47
Others	1.8	30

4. Children and teachers are using teaching aids drawn from the local community and environment.

	Average	% of 3s
LITs	1.1	20
PTDs	2.0	40
Others	1.8	30

B. USE OF CURRICULUM AND OTHER RESOURCE MATERIALS

1. Children have access to the new NCC curriculum materials (text books, work-books).

	Average	% of 3s
LITs	3	100
PTDs	3	100
Others	2.9	98

E. TEACHER'S UNDERSTANDING OF THE CURRICULUM CONTENT AND METHODOLOGICAL SKILLS

1. The lesson is well organized and appropriate for the majority of the class.

	Average	% of 3s
LITs	2.5	50
PTDs	2.5	60
Others	2.6	64

2. The lesson is presented in a manner that engaged students' interest.

	Average	% of 3s
LITs	2.4	40
PTDs	2.5	66
Others	2.5	62

4. The teacher teaches to higher order thinking skills through materials and information presented and/or the use of questioning skills.

	Average	% of 3s
LITs	1.2	10
PTDs	1.8	30
Others	1.5	12

Cumulative Averages:

	Average	% of 3s
LITs	2.1	56
PTDs	2.2	56
Others	2.2	46

SCORES ON OBSERVATION ITEMS BY CYCLE

The following observation items (A1 through B1 and E1, 2, 4) represent the behaviors and skills most often cited as the outcomes that the in-service training program hoped to achieve. Two scores are given - the average of all ratings per item/per cycle and the percentage of all participants scoring 3, per item/per cycle.

A: TEACHING AIDS

1. The teacher is using teaching aids (they are available and on display in the classroom).

	Average	% of 3s
Cycle 1	2.0	30
Cycle 2	2.5	71
Cycle 3	2.6	73

2. The teacher uses teaching aids during the lesson being observed.

	Average	% of 3s
Cycle 1	2.1	40
Cycle 2	2.2	50
Cycle 3	2.2	60

3. Children's own work is displayed in the classroom.

	Average	% of 3s
Cycle 1	1.3	10
Cycle 2	1.8	26
Cycle 3	2.0	47

4. Children and teachers are using teaching aids drawn from the local community and environment.

	Average	% of 3s
Cycle 1	1.5	12
Cycle 2	1.8	41
Cycle 3	2.1	40

B. USE OF CURRICULUM AND OTHER RESOURCE MATERIALS

1. Children have access to the new NCC curriculum materials, i.e., text books, work-books, etc.

	Average	% of 3s
Cycle 1	2.8	88
Cycle 2	2.8	88
Cycle 3	3.0	100

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E. TEACHER'S UNDERSTANDING OF THE CURRICULUM CONTENT AND METHODOLOGICAL SKILLS

1. The lesson is well organized and appropriate to the majority of the class.

	Average	% of 3s
Cycle 1	2.4	40
Cycle 2	2.8	85
Cycle 3	2.8	81

2. The lesson is presented in a manner that engaged students' interest.

	Average	% of 3s
Cycle 1	2.6	60
Cycle 2	2.4	52
Cycle 3	2.7	71

4. The teacher is teaching to higher order thinking skills through materials and information presented and/or the use of questioning skills.

	Average	% of 3s
Cycle 1	1.1	0
Cycle 2	1.5	70
Cycle 3	1.6	80

Cumulative Averages:

	Average	% of 3s
Cycle 1	1.9	35
Cycle 2	2.2	60
Cycle 3	2.3	68

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SCORES ON OBSERVATION ITEMS BY CATEGORY OF PARTICIPANT

The following observation items (C1-7 through D1, 2, 5, 6) represent the behaviors and skills which one would hope to find present in the classroom. They were not outcomes the project had specifically addressed in its training objectives. All items were rated on a 3 point scale, with 3 being the best possible score. Two scores are given - the average of all rating 1-3 per item/per category of participant; and, the percentage of all participants scoring 3 per item/per category.

C. USE OF COMMUNICATIONS SKILLS AND STUDENT CENTERED METHODOLOGIES

1. The teacher asks appropriate questions.

	Average	% of 3s
LITs	2.7	70
PTDs	2.6	66
Others	2.9	98

2. Students are encouraged to ask questions.

	Average	% of 3s
LITs	1.7	22
PTDs	1.9	30
Others	2.7	72

3. The teacher answers students questions providing relevant information.

	Average	% of 3s
LITs	1.8	40
PTDs	2.0	39
Others	1.5	13

4. The teacher relates the lesson to real life situations.

	Average	% of 3s
LITs	2.4	60
PTDs	2.4	66
Others	2.3	49

5. The teacher uses examples to explain the lesson.

	Average	% of 3s
LITs	2.2	50
PTDs	2.3	55
Others	2.3	49

6. The teacher uses appropriate language for the grade level being taught.

	Average	% of 3s
LITs	2.9	80
PTDs	2.9	90
Others	2.9	92

7. The teacher uses a variety of teaching methods (e.g. small groups, work books, etc.).

	Average	% of 3s
LITs	2.5	62
PTDs	2.2	57
Others	2.0	34

8. The teacher gives students appropriate feedback (reinforcement, correction, non-threatening).

	Average	% of 3s
LITs	2.2	50
PTDs	2.5	55
Others	2.3	45

D. CLASSROOM MANAGEMENT SKILLS

1. Directions are clear.

	Average	% of 3s
LITs	2.6	70
PTDs	2.9	90
Others	2.8	82

2. Children are able to understand directions and move quickly into learning activity.

	Average	% of 3s
LITs	2.8	70
PTDs	2.8	80
Others	2.7	72

5. The teacher monitors for student progress.

	Average	% of 3s
LITs	2.5	44
PTDs	2.5	55
Others	2.7	69

6. The classroom noise level is appropriate to the learning activity.

	Average	% of 3s
LITs	2.8	70
PTDs	2.9	90
Others	2.9	90

Cumulative Averages:

	Average	% of 3s
LITs	2.4	57
PTDs	2.4	64
Others	2.5	59

SCORES ON OBSERVATION ITEMS BY CYCLE

The following observation items (C1-7 through D1, 2, 5, 6) represent the behaviors and skills which one would hope to find present in the classroom. They were not outcomes the project had specifically addressed in its training objectives. Two scores are given - the average of all rating item/per cycle; and, the percentage of all participants scoring 3 per item/per cycle.

C. USE OF COMMUNICATIONS SKILLS AND STUDENT CENTERED METHODOLOGIES.

1. The teacher asks appropriate questions.

	Average	% of 3s
Cycle 1	2.4	55
Cycle 2	2.8	83
Cycle 3	2.6	66

2. Students are encouraged to ask questions.

	Average	% of 3s
Cycle 1	1.0	0
Cycle 2	1.6	30
Cycle 3	1.1	0

3. The teacher answers students' questions providing relevant information.

	Average	% of 3s
Cycle 1	1.6	10
Cycle 2	2.8	87
Cycle 3	2.2	46

4. The teacher relates the lesson to real life situations.

	Average	% of 3s
Cycle 1	1.6	10
Cycle 2	2.8	87
Cycle 3	2.2	46

5. The teacher uses examples to help explain the lesson.

	Average	% of 3s
Cycle 1	1.6	0
Cycle 2	2.4	70
Cycle 3	2.1	40

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6. The teacher uses appropriate language for the grade level being taught.

	Average	% of 3s
Cycle 1	3.0	100
Cycle 2	3.0	100
Cycle 3	2.7	73

7. The teacher uses a variety of teaching methods (e.g. small groups, workbooks, etc.).

	Average	% of 3s
Cycle 1	1.8	22
Cycle 2	2.2	40
Cycle 3	2.3	53

8. The teacher gives students appropriate feedback (reinforcement, correction, non-threatening).

	Average	% of 3s
Cycle 1	2.4	44
Cycle 2	2.2	50
Cycle 3	2.2	50

D. CLASSROOM MANAGEMENT SKILLS.

1. Directions are clear.

	Average	% of 3s
Cycle 1	2.7	75
Cycle 2	2.8	87
Cycle 3	2.6	66

2. Children are able to understand directions and move quickly into learning activities.

	Average	% of 3s
Cycle 1	2.8	87
Cycle 2	2.8	80
Cycle 3	2.6	60

5. The teacher monitors for student progress.

	Average	% of 3s
Cycle 1	2.4	44
Cycle 2	2.7	76
Cycle 3	2.6	66

6. The classroom noise level is appropriate to the learning activity.

	Average	% of 3s
Cycle 1	2.8	85
Cycle 2	2.8	81
Cycle 3	2.4	40

Cumulative Averages:

	Average	% of 3s
Cycle 1	2.1	44
Cycle 2	2.5	72
Cycle 3	2.3	50

APPENDIX III
1990-1991 GOS ESTABLISHMENT REGISTAR FOR PRIMARY EDUCATION

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ACTIVITY 3020 - Primary Education

RESPONSIBILITY CENTRE 1111 - District Education Officer - Lubombo

POST CODE	DESCRIPTION	GRADE	01.04.89	01.04.90
EDN022	District Education officer	22	1	1
EDN031	Inspector of Schools	18	4	4
EDN043	Leader Teacher	15	1	1
ACC008	Assistant Accountant	12/14	1	1
ANC030	Driver	7/9	1	1
SEC005	Typist II/I	7/9	1	1
ADM070	Junior Clerical Officer	6	1	1
ANC057	Telephone Operator	4	1	1
ANC070	Messenger	3	1	1

RESPONSIBILITY CENTRE 1112 - Teaching Service Commission

POST CODE	DESCRIPTION	GRADE	01.04.89	01.04.90
EDN050	Secretary T.S.C.	22	1	1
EDN074	Secondary Teacher I (Maternity Leave)	17	8	8
EDN077	Secondary Teacher I (Study Leave)	17	17	17
ADM043	Personnel Officer	16	2	2
ACC008	Assistant Accountant	12/14	1	1
ADM053	Assistant Personnel Officer	14	2	2
EDN075	Secondary Teacher IV (Maternity Leave)	14	9	9
EDN078	Secondary Teacher IV (Study Leave)	14	17	17
EDN076	Primary Teacher II/III (Maternity Leave)	10/11	12	12
ACC010	Accounts Officer	10	4	4
ADM065	Senior Clerical Officer	10	2	2
ADM069	Clerical Officer	8	3	3
ADM070	Junior Clerical Officer	6	2	2

ACTIVITY 3020 - Primary Education

RESPONSIBILITY CENTRE 2001 - Hhohho Government Primary Schools

POST CODE	DESCRIPTION	GRADE	01.04.89	01.04.90
EDN051	TEACHER DEGREED	17	14	14
EDN042	Head Teacher - Higher Primary	15	19	19
EDN045	Deputy Head Teacher - Higher Primary	14	13	13
EDN046	Head Teacher - Lower Primary	14	4	4
EDN069	Primary Teacher	14	21	21
EDN047	Deputy Head Teacher - Lower Primary	13	1	1
EDN048	Primary Teacher I	12	39	39
EDN049	Primary Teacher II/III	10/11	161	161

RESPONSIBILITY CENTRE 2002 - Hhohho Aided Primary Schools

POST CODE	DESCRIPTION	GRADE	01.04.89	01.04.90
EDN042	Head Teacher - Higher Primary	15	90	90
EDN045	Deputy Head Teacher - Higher Primary	14	39	39
EDN046	Head Teacher - Lower Primary	14	13	13
EDN069	Primary Teacher	14	32	32
EDN048	Primary Teacher I	12	55	55
EDN049	Primary Teacher II/III	10/11	722	722

RESPONSIBILITY CENTRE 2003 - Manzini Government Primary Schools

POST CODE	DESCRIPTION	GRADE	01.04.89	01.04.90
EDN051	TEACHER DEGREED	17	9	9
EDN042	Head Teacher - Higher Primary	15	19	19
EDN045	Deputy Head Teacher - Higher Primary	14	16	16
EDN046	Head Teacher - Lower Primary	14	2	2
EDN069	Primary Teacher	14	30	30
EDN048	Primary Teacher I	12	49	49
EDN049	Primary Teacher II/III	10/11	163	163

RESPONSIBILITY CENTRE 2004 - Manzini Aided Primary Schools

POST CODE	DESCRIPTION	GRADE	01.04.89	01.04.90
EDN051	TEACHER DEGREED	17	5	5
EDN042	Head Teacher - Higher Primary	15	91	91
EDN045	Deputy Head Teacher - Higher Primary	14	56	56
EDN046	Head Teacher - Lower Primary	14	32	32
EDN069	Primary Teacher	14	62	62
EDN047	Deputy Head Teacher - Lower Primary	13	1	1
EDN048	Primary Teacher I	12	87	87
EDN049	Primary Teacher II/III	10/11	939	939

RESPONSIBILITY CENTRE 2005 - Shiselweni Government Primary Schools

POST CODE	DESCRIPTION	GRADE	01.04.89	01.04.90
EDN051	TEACHER DEGREED	17	4	4
EDN042	Head Teacher - Higher Primary	15	19	19
EDN045	Deputy Head Teacher - Higher Primary	14	13	13
EDN046	Head Teacher - Lower Primary	14	1	1
EDN069	Primary Teacher	14	5	5
EDN047	Deputy Head Teacher - Lower Primary	13	1	1
EDN048	Primary Teacher I	12	27	27
EDN049	Primary Teacher II/III	10/11	198	198

ACTIVITY 3020 - Primary Education

RESPONSIBILITY CENTRE 2006 - Shiselweni Aided Primary Schools

POST CODE	DESCRIPTION	GRADE	01.04.89	01.04.90
EDN042	Head Teacher - Higher Primary	15	88	88
EDN045	Deputy Head Teacher - Higher Primary	14	38	38
EDN046	Head Teacher - Lower Primary	14	12	12
EDN069	Primary Teacher	14	24	24
EDN048	Primary Teacher I	12	84	84
EDN049	Primary Teacher II/III	10/11	721	721

RESPONSIBILITY CENTRE 2007 - Lubombo Government Primary Schools

POST CODE	DESCRIPTION	GRADE	01.04.89	01.04.90
EDN042	Head Teacher - Higher Primary	15	11	11
EDN045	Deputy Head Teacher - Higher Primary	14	9	9
EDN069	Primary Teacher	14	1	1
EDN048	Primary Teacher I	12	25	25
EDN049	Primary Teacher II/III	10/11	116	116

RESPONSIBILITY CENTRE 2008 - Lubombo Aided Primary Schools

POST CODE	DESCRIPTION	GRADE	01.04.89	01.04.90
EDN042	Head Teacher - Higher Primary	15	67	67
EDN045	Deputy Head Teacher - Higher Primary	14	38	38
EDN046	Head Teacher - Lower Primary	14	9	9
EDN069	Primary Teacher	14	32	32
EDN048	Primary Teacher I	12	59	59
EDN049	Primary Teacher II/III	10/11	591	591

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EXPOSITION OF THE RULES GOVERNING RECOGNITION OF QUALIFICATIONS1. GENERAL

In terms of the Job Evaluation Scheme, a qualification weighting factor of 12.5% was agreed along with another 9 factors used in determining the grade of a job. Qualifications are therefore a major factor in determining the grade and entry requirements in the Public Service.

Academic and professional qualifications, are used in the following areas to determine entry levels in the recruitment process:

- *All new graduate entrants will enter the service at Grade 16 unless otherwise specified.*
- *Those with Honours Degree will enter at notch 3 of Grade 16.*
- *Holdings of Masters Degrees and Post graduate diplomas will enter at Grade 18.*
- *(The only exceptions to this are Doctors, Dentists and Vets (as detailed in paragraph 6), Pupil Crown Counsels, Cadet Engineers and certain Teachers (who enter at Grade 17)).*
- *Full-time two year Matric Diploma holders may enter at Grade 14.*
- *Full-time one year Post J.C. or Matric Certificate holders may enter at Grade 10 or 12 depending on the discipline.*
- *Those with 'O' Level Certificates enter at Grade 8 and Junior Certificates at Grade 6.*

2. TEACHING PROFESSION

All teaching posts in the Public Service are qualification based, that is, qualification form the major single factor used to determine a job entry level. Such an arrangement is common in most countries in the Southern African Region and is well understood by the Teachers.

Teachers are recruited as follows:

- | | |
|--|-------------------|
| <i>Unqualified with Junior Certificates</i> | <i>- Grade 6</i> |
| <i>Unqualified with 'O' Level</i> | <i>- Grade 8</i> |
| <i>Primary Lower Certificates without Junior Certificate</i> | <i>- Grade 10</i> |

Primary Higher Certificate, or Primary Lower Certificate plus Diploma or Primary Lower Certificate plus J.C.	- Grade 11
Higher Certificate or Primary Lower Certificate plus 'O' Levels	- Grade 12
Diploma in Primary Education plus 'O' Level	- Grade 14
Degree in Primary Education	- Grade 17

It should be noted that upgradings are in progress with a view to phase out unqualified teachers so that in the future no unqualified teachers will be recruited.

Qualified Primary School Teachers with an aptitude and good work record may be promoted to Deputy Heads at Grade 14 and subsequently Heads of Primary Schools at Grade 15.

SECONDARY/HIGH SCHOOLS

Secondary Teacher's Certificate (STC)	- Grade 14
Home Economics (Diploma)	- Grade 14
Diploma in Agriculture Education	- Grade 14
Degree with CDC	- Grade 17
Degree without CDC	- Grade 16

Teachers can be promoted to Heads of Departments, Grade 18 and higher levels as follows:

Deputy Head of Junior Secondary Schools	- Grade 19
Head of Junior Secondary School	- Grade 20
Deputy Head of Senior Secondary or High School	- Grade 20
Head of Senior Secondary or High School	- Grade 21

NURSING CADRE

Nursing Assistant

Academic Education Junior Certificate. The period of training is two years and should also pass the examination that is conducted by the Swaziland Nursing Council.

State Enrolled Nurse (S.E.N.) - Grade 13

This level is being phased out with upgrading of their qualifications. Academic Education Form III. The training period was for three years plus one additional year set aside for special training in Midwifery.

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APPENDIX IV
GOS 1988 STATISTICS FOR PRIMARY EDUCATION

SECTION I GENERAL TABLES

NUMBER OF PUPILS AND TEACHERS IN PRIMARY SCHOOLS 1978 - 1988.

TABLE 1.

YEAR	NO OF SCHOOLS	NO OF PUPILS	NO OF TEACHERS.
1978	436	100700	2853
1979	440	105607	3016
1980	450	112019	3278
1981	470	119913	3586
1982	468	125303	3769
1983	468	129767	3922
1984	467	134528	4039
1985	466	139345	4107
1986	471	142206	4290
1987	477	147743	4462
1988	481	152895	4665

NUMBER OF STUDENTS UNDERGOING TEACHER TRAINING IN SWAZILAND 1978 - 1988.

TABLE 4.

YEAR	SECONDARY TEACHERS CERTIFICATE/ DIPLOMA	TECHNICAL TEACHERS CERTIFICATE	PRIMARY TEACHERS DIPLOMA	PRIMARY TEACHERS CERTIFICATE	UPGRADING COURSES	HOME ECONOMICS	TOTAL
1978	115	-	-	250	100	10	475
1979	111	36	-	255	103	10	515
1980	115	53	-	273	120	10	571
1981	132	66	-	276	120	10	604
1982	162	53	-	297	360	10	882
1983	155	42	-	713	-	10	920
1984	187	46	-	709	-	10	952
1985	156	13	-	791	-	10	970
1986	262	10	-	653	-	10	935
1987	124	42	149	251	-	10	576
1988	164	45	282	-	-	10	501

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ANALYSIS OF TEACHER TRAINING - 1988.

TABLE 5.

COURSE	1 YEAR	2 YEARS	TOTAL
SECONDARY TEACHERS DIPLOMA	93	71	164
TECHNICAL TEACHERS CERTIFICATE	24	21	45
PRIMARY TEACHERS DIPLOMA	158	124	282
PRIMARY TEACHERS CERTIFICATE	-	-	0
HOME ECONOMICS	10	-	10
TOTAL	285	216	501

TEACHER TRAINING EXAMINATION RESULTS - 1987/1988.

TABLE 6.

COURSES	TOTAL SITTING	PASSES	SUPPLEMENTARY	% PASSES
SECONDARY TEACHERS DIPLOMA	20	17	3	85
TECHNICAL TEACHERS CERTIFICATE	10	7	-	70
PRIMARY TEACHERS DIPLOMA	59	59	-	100
PRIMARY TEACHERS CERTIFICATE	119	109	-	92
HOME ECONOMICS	10	10	-	100
TOTAL	218	202	3	93

NOTES:

SECONDARY TEACHERS DIPLOMA REQUIRES THREE YEARS TRAINING AFTER MATRIC, DONE AT WILLIAM PITCHER TEACHER TRAINING COLLEGE.

TECHNICAL//COMMERCIAL TEACHER TRAINING IS DONE AT SWAZILAND COLLEGE OF TECHNOLOGY.

SECTION II PRIMARY EDUCATION AS OF 31ST MARCH 1988

PRIMARY EDUCATION AS ON THE 31ST MARCH, 1988.

PRIMARY SCHOOL ENROLMENT BY SEX OF PUPIL AND TYPE OF SCHOOL.

TABLE 7

TYPE OF SCHOOL	NO. OF SCHOOLS	ENROLMENT		TOTAL
		BOYS	GIRLS	
GOVERNMENT	69	14770	14978	29748
AIDED	387	60293	59413	119706
PRIVATE	25	1752	1689	3441
TOTAL	481	76815	76080	152895

PRIMARY SCHOOLS | TEACHING STAFF BY GRADE AND CITIZENSHIP OF TEACHER - 1988.

TABLE 8.

CITIZEN OF TEACHER AND TYPE OF SCHOOL	GRADE OF TEACHER							
	TOTAL TEACHERS	GRADUATES	POST MATRIC WITH TRAINING	PRE-MATRIC WITH TRAINING			UNCERTI- FICATED	
				PTC	PHC	PLC	PLU	
GOVT SCHOOLS								
SWAZI CITIZENS	875	5	16	261	372	176	90	-
NON CITIZENS	35	8	22	-	4	-	-	1
TOTAL	910	13	38	261	376	176	90	1
AIDED SCHOOLS								
SWAZI CITIZENS	3609	8	91	930	1213	808	550	9
NON CITIZENS	12	1	5	-	5	1	-	-
TOTAL	3621	9	96	930	1218	809	550	9
PRIVATE SCHOOLS								
SWAZI CITIZENS	125	2	2	30	30	43	13	5
NON CITIZENS	9	3	1	-	1	4	-	-
TOTAL	134	5	3	30	31	47	13	5
ALL SCHOOLS								
SWAZI CITIZENS	4609	15	109	1221	1570	1027	653	14
NON CITIZENS	56	12	28	-	10	5	-	1
GRAND TOTAL	4665	27	137	1221	1580	1032	653	15

TABLE 9.

STATUS OF TEACHER	TOTAL TEACHERS	QUALIFICATION OF TEACHER						
		GRADUATE POST-MATRIC WITH TRAINING		PRE-MATRIC WITH TRAINING			UNCERTI- FICATED	
				PTC	PHC	PLC	PLU	
UNMARRIED MEN	259	2	14	107	116	15	4	1
MARRIED MEN	662	5	33	169	270	122	62	1
UNMARRIED WOMEN	938	6	36	309	354	140	89	5
MARRIED WOMEN	2806	14	54	636	840	755	499	8
TOTAL	4665	27	137	1221	1580	1032	653	15

NOTES:

1. POST MATRIC WITH TRAINING INCLUDES TEACHER WITH SECONDARY TEACHER CERTIFICATE OR OTHER - POST-MATRIC 2 TO 3 YEARS COURSES.

2. PRE-MATRIC WITH TRAINING INCLUDES TEACHERS WITH PRIMARY TEACHERS, PRIMARY HIGHER, PRIMARY LOWER CERTIFICATE AND A PRIMARY LOWER-UP-GRADING CERTIFICATE.

PUPILS IN PRIMARY SCHOOLS, RATIO OF PUPILS PER TEACHER, CLASSES AND SEPARATE TEACHING ROOMS.

TABLE 10.

	GOVERNMENT	GRANT-AIDED	PRIVATE	TOTAL
NO. OF PUPILS	29748	119706	3441	152895
NO. OF TEACHERS	910	3621	134	4665
NO. OF QUALIFIED TEACHERS	909	3612	129	4650
NO. OF PUPILS PER TEACHER	33	33	26	33
NO. OF PUPILS PER QUALIFIED TEACHER	33	33	27	32
NO. OF CLASSES	746	3309	148	4203
NO. OF PUPILS PER CLASS	40	36	23	36
NO. OF SEPARATE TEACHING ROOMS	772	3010	99	3881
NO. OF PUPILS PER TEACHING ROOM	39	40	35	114

NOTE:

A QUALIFIED TEACHER HAS A MINIMUM QUALIFICATION OF PRIMARY-LOWER-UP-GRADING CERTIFICATES.

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SEX AND GRADE 1988.

TABLE 11.

AGE AT LAST BIRTHDAY	GRADE OF PUPIL							TOTAL
	GRADE I	GRADE II	GRADE III	GRADE IV	GRADE V	GRADE VI	GRADE VII	
BOYS								
UNDER 6 YRS	1267	15	-	-	-	-	-	1282
6 "	5400	631	5	-	-	-	-	6036
7 "	4985	3399	482	15	-	-	-	8881
8 "	2567	4279	2552	475	105	-	-	9978
9 "	909	2728	3265	1828	716	28	-	9474
10 "	390	1398	2540	2358	1565	318	30	8599
11 "	178	668	1622	2160	1969	1287	262	8146
12 "	115	351	916	1515	1850	1780	1072	7599
13 "	43	149	472	981	1328	1689	1549	6211
14 "	12	67	192	472	800	1322	1484	4349
15 "	8	37	91	252	449	861	1298	2996
16 "	4	9	40	127	199	375	797	1551
17 "	-	6	16	44	112	277	542	997
18 "	-	2	4	21	34	126	267	454
19 "	-	-	-	5	11	41	127	184
20 "	-	-	2	2	3	14	38	59
21 "	-	-	-	-	-	1	10	11
OVER 21 "	-	-	-	-	1	3	4	8
BOYS'TOTAL	15878	13739	12199	10255	9142	8122	7480	76815
AVERAGE AGE	7,5	8,9	10,2	11,5	12,3	13,6	14,8	10,6
GIRLS								
UNDER 6 YRS	1425	24	-	-	-	-	-	1449
6 "	5708	916	38	-	-	-	-	6662
7 "	4408	4002	709	17	-	-	-	9136
8 "	2045	3975	3418	721	53	-	-	10212
9 "	704	2098	3294	2671	577	215	-	9559
10 "	275	907	2113	2856	1865	1106	54	9176
11 "	113	380	1062	2107	2286	2106	523	8577
12 "	56	183	554	1167	2015	2155	1693	7823
13 "	25	77	267	636	1431	1690	2143	6269
14 "	15	30	96	246	756	949	1634	3726
15 "	5	16	54	112	288	481	1091	2047
16 "	-	6	16	55	103	219	506	905
17 "	-	4	4	21	46	74	228	377
18 "	1	1	1	2	9	28	82	124
19 "	-	1	2	-	3	3	22	31
20 "	-	-	-	-	-	2	3	5
21 "	-	-	-	-	-	-	1	1
OVER 21 "	-	-	-	-	-	-	1	1
GIRLS'TOTAL	14780	12620	11628	10611	9432	9028	7981	76080
AVERAGE AGE	7,3	8,6	9,8	10,9	12,1	12,7	14,0	10,3
TOTAL ALL PUPILS	30658	26359	23827	20866	18574	17150	15461	152895

REPETITION, RESTARTERS, CONTINUATION AND DROP-OUT RATES IN PRIMARY AND SECONDARY SCHOOLS 31ST MARCH, 1988.

NUMBER OF REPEATERS IN ALL PRIMARY SCHOOLS BY AGE, SEX AND GRADE.

TABLE 21.

AGE AT LAST BIRTHDAY	GRADE OF PUPIL							TOTAL
	GRADE I	GRADE II	GRADE III	GRADE IV	GRADE V	GRADE VI	GRADE VII	
BOYS								
UNDER 6 YRS	59	7	-	-	-	-	-	66
6 "	445	51	-	-	-	-	-	496
7 "	1308	328	13	-	-	-	-	1649
8 "	872	766	144	8	1	-	-	1791
9 "	263	692	510	73	8	1	-	1547
10 "	88	419	638	251	56	3	-	1455
11 "	33	202	547	419	187	28	7	1423
12 "	12	85	305	386	305	138	39	1270
13 "	6	45	154	296	314	197	113	1125
14 "	-	15	60	141	237	235	202	890
15 "	2	9	24	71	125	190	237	658
16 "	3	5	15	40	60	70	171	364
17 "	-	1	8	13	35	63	124	244
18 "	-	-	1	3	8	32	64	108
19 "	-	-	-	1	5	7	35	48
20 "	-	-	-	-	-	4	11	15
21 "	-	-	-	-	-	1	3	4
OVER 21 "	-	-	-	-	-	-	2	2
TOTAL REPEATERS	3091	2625	2419	1702	1341	969	1006	13153
TOTAL IN GRADE	15877	13739	12199	10255	9142	8122	7480	76814
% REPEATERS	19,5	19,1	19,8	16,6	14,7	11,9	13,4	17,1
GIRLS								
UNDER 6 YRS	44	-	-	-	-	-	-	44
6 "	379	17	-	-	-	-	-	396
7 "	972	172	18	-	-	-	-	1162
8 "	635	549	157	17	-	-	-	1358
9 "	208	454	440	98	5	-	-	1205
10 "	54	227	479	276	88	5	-	1129
11 "	17	100	267	329	271	57	3	1044
12 "	7	51	150	232	316	191	48	995
13 "	5	14	76	157	275	294	185	1006
14 "	4	7	27	51	164	234	260	747
15 "	-	1	8	33	76	111	220	449
16 "	-	1	3	10	26	58	122	220
17 "	-	1	-	3	11	25	60	100
18 "	-	-	-	-	-	-	-	-
19 "	-	1	-	2	1	5	30	39
20 "	-	-	1	-	-	1	5	7
21 "	-	-	-	-	-	1	1	2
OVER 21 "	-	-	-	-	-	-	1	1
TOTAL REPEATERS	2325	1595	1626	1208	1233	982	935	9904
TOTAL IN GRADE	14780	12620	11628	10611	9432	9028	7981	76080
% REPEATERS	15,7	12,6	14,0	11,4	13,1	10,9	11,7	13,0
ALL PRIMARY REP.	5416	4220	4045	2910	2574	1951	1943	23059
% TOTAL REPEATERS	17,7	16,0	17,0	13,9	13,9	11,4	12,6	15,1

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AGE DISTRIBUTION OF ALL TEACHERS BY QUALIFICATION, SEX, EXPERIENCE AND WHETHER PAID BY GOVERNMENT OR NOT AS AT 31ST MARCH 1988.

TABLE 61.

AGE GROUP	TYPE OF PAY AND EXPERIENCE IN YEARS										TOTAL
	PAID BY GOVT					NOT PAID BY GOVT.					
	LESS 1	1 - 4	5 - 9	10 - 19	20+	LESS 1	1 - 4	5 - 9	10 - 19	20+	
15-19 YRS	-	-	-	-	-	-	-	-	-	-	0
20-24 "	52	197	12	1	-	-	4	-	-	-	266
25-29 "	57	663	405	45	1	1	4	3	1	1	1181
30-34 "	16	263	609	380	2	-	1	6	1	-	1278
35-39 "	2	60	176	496	14	-	-	2	5	-	755
40-44 "	-	9	45	302	99	-	-	4	3	1	463
45-49 "	-	6	19	115	189	-	-	-	1	1	331
50-54 "	-	1	5	55	167	-	-	1	-	2	231
55-59 "	-	-	3	24	107	1	-	-	-	-	135
60+ "	-	1	-	5	17	-	-	-	-	2	25
TOTAL	127	1200	1274	1423	596	2	9	16	11	7	4665

PRIMARY SCHOOL TEACHER' QUALIFICATION BY TYPE OF PAY AND EXPERIENCE IN EDUCATIONAL PROFESSION - 1988.

TABLE 62.

QUALIFICATION OF TEACHER	TYPE OF PAY AND EXPERIENCE IN YEARS										TOTAL
	PAID BY GOVT					NOT PAID BY GOVT.					
	LESS 1	1 - 4	5 - 9	10 - 19	20+	LESS 1	1 - 4	5 - 9	10 - 19	20+	
GRADUATE	-	1	10	6	3	1	-	4	1	1	27
POST MATRIC WITH TRAINING	7	48	19	29	17	-	1	8	6	2	137
PTC	62	526	348	242	42	-	-	1	-	-	1221
PHC	54	515	374	460	174	-	1	1	-	1	1580
PLC	3	73	245	425	274	-	4	2	4	2	1032
PLU	1	32	276	261	83	-	-	-	-	-	653
UNCERTIFICATED	-	5	2	-	3	1	3	-	-	1	15
TOTAL	127	1200	1274	1423	596	2	9	16	11	7	4665

TABLE 63. TEACHERS DISTRIBUTED BY AGE GROUP, SEX AND QUALIFICATION.

AGE GROUP	SEX	UNCERTI- FICATED	PRIMARY LOWER UP-GRADING CERTIFICATE	PRIMARY LOWER CERTIFICATE	PRIMARY HIGHER CERTIFICATE	PRIMARY TEACHERS' CERTIFICATE	POST MATRIC WITH TRAINING	GRADUATE	TOTAL
15-19 YRS	M	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0
20-24 "	M	1	0	1	15	11	2	0	30
	F	1	1	7	106	109	10	2	236
25-29 "	M	1	2	8	97	76	11	0	195
	F	6	78	129	360	387	23	3	986
30-34 "	M	0	20	20	102	98	13	5	258
	F	4	220	173	299	290	30	4	1020
35-39 "	M	0	18	16	59	60	10	0	163
	F	1	101	174	220	87	5	4	592
40-44 "	M	0	15	20	42	13	4	1	95
	F	0	68	147	103	39	8	3	368
45-49 "	M	0	5	35	27	8	1	1	77
	F	1	53	117	62	14	6	1	254
50-54 "	M	0	3	24	25	8	3	0	63
	F	0	33	91	25	13	4	2	168
55-59 "	M	0	2	12	18	1	3	0	36
	F	0	23	52	17	4	3	0	99
60+	M	0	1	1	1	1	0	0	4
	F	0	10	5	2	2	1	1	21
SUB TOTAL	M	2	66	137	386	276	47	7	921
	F	13	587	895	1194	945	90	20	3744
GRAND TOTAL		15	653	1032	1580	1221	137	27	4665

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**APPENDIX V
KELLOGG FOUNDATION MONIES**

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NARRATIVE REPORT

to the

W. K. KELLOGG FOUNDATION

Third Annual Report

February, 1990

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REPORT OF PROGRESS

This report concerns progress achieved by the third year of the Kellogg Foundation's support to the Swaziland Teacher Education Programme which began on February 26, 1987 with a total grant of \$540,000 awarded at that time. This grant provides for eighty (80) years of training for Swazi educators who are targeted for service in the teacher training colleges and other areas in the educational sector.

We confirm the priorities for the awarding of Kellogg bursaries remain unchanged, e.g.:

1. In order to be eligible for a Kellogg Foundation bursary, the individual applying must first be admitted to the University of Swaziland.
2. Following admission, the first priority will be give to teacher college lecturers presently in service within the colleges.
3. Next in priority are (a) inspectors, (b) prospective teacher educators, and (c) primary school headmasters. In the case of (b) and (c) above, should either category be considered for Kellogg Bursaries, they would be subjected to an interview process in order to determine final selection.

This year, the third year of the project, we were again above to provide for bursaries over and above the numbers anticipated.

The position compared with the original plan is as follows:

	<u>Number of Bursaries</u>							
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Total</u>
Plan	5	10	15	20	15	10	5	80
Actual	7	14	18					39

Of the seven Kellogg Scholars selected for year one of the programme two have successfully completed the programme and re-entered the Teaching System as heads of schools and four have progressed to the final year of study.

<u>Name</u>	<u>Programme year</u>	<u>Assignment</u>
Constance Khumalo	IV	Ngwane College
Sarah Masuku	IV	Ngwane College
Happiness Luhlanga*	IV	Nazarene College
Isiah Mthethwa	IV	William Pitcher College
Mary Ginindza**	III	William Pitcher College
Amos Mahlalela	Completed	Eric Rosenburg School
Hope Dlamini	Completed	S.O.S. Primary School

*Withdrew for health reasons last year but has since been readmitted to the programme.

**repeater.

In the second year of the project a further seven scholars were admitted to the programme. They all have all done well successfully moving on a programme year with one completing his studies and taking up a post as Headmaster.

The scholars are as follows:

<u>Name</u>	<u>Programme Year</u>	<u>Assignment</u>
Bridget Dlamini	III	Prospective Teacher Educator
Gwebu Nqobile Colisile	III	" " "
Amos Ndzinisa	III	" " "
Dumisile Zwane	III	" " "
Alpheus Masuku	IV	William Pitcher College
Ellen Dlamini	IV	Prospective Teacher Educator
Philemon Ngwenya	Completed	Headmaster

For the third year of the project we have been able to draw a further seven bursaries out of the funding and the names of the scholars selected are as under:

<u>Name</u>	<u>Programme Year</u>	<u>Assignment</u>
Daniel Mayisela	II	Inspector
Veronica Mngomezulu	III	Prospective Teacher Educator
David Moloi	IV	" " "
Queeneth Nsibande	III	" " "
Gwendolyne Simelane	IV	" " "
Dominic Tembe	III	Inspector
Lungile Simelane	II	Prospective Teacher Educator

The interviews of individuals for the fourth year of the Kellogg project is planned for July 1990. We have advertised the opportunities available this year in the local press and we are hoping to identify a group of promising scholars from amongst the applicants.

The Ministry of Education and the Government of Swaziland is most appreciative of the success of this project and is pleased and grateful to the W.K. Kellogg Foundation for Providing the funds to make this achievement possible.

Respectfully submitted

M J Nsibande
Principal Secretary

Enc. Financial Report to W.K. Kellogg Foundation
Project Number & PD Initials: AKCE0001/NAB

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Project: Ministry of Education, Swaziland

FOREIGN GRANTEE
FINANCIAL REPORT TO W. K. KELLOGG FOUNDATION
Page 1

Project Number
& PD Initials: AKCED0001S/SAB

EXPENSE STATEMENT FOR PERIOD ENDING: February 28, 1990

I Approved Budget Line items per Commitment Letter, original, or approved revision	II Approved Budget US Dollars	III Actual Cash Expenditures in US Dollars	IV Actual Cash Expenditures in Local Currency	NEXT PERIOD'S BUDGET	
				V Previously Approved US Dollars	VI Proposed (if different from V) US Dollars
Bursaries	\$141,193	Nil	209427	\$135,000	EXCHANGE RATE <u>2.580</u> DATE <u>1 March 1990</u>

ALS

\$141,193

Nil

209427

\$135,000

I hereby certify the above expense statement and resulting cash balance to be correct. I further certify that this organization continues to conduct its operations exclusively as a nonprofit organization, and is organized and operated for educational and charitable purposes, with no part of its revenues or earnings inuring to the benefit of any private individual, with no substantial part of its activities involving carrying on propaganda or otherwise attempting to influence legislation, and with no participation in political campaigns on behalf of any candidates for public office.

R T A Laube Financial Controller
(Please type) Chief Financial Officer Name and Title

R. Laube.
Chief Financial Officer (signature)

20 May 1990
(Date)

M J Nsibande Principal Secretary
(Please type) Project Director Name and Title

Project Director (signature)

20 May 1990
(Date)

SS-1 10/13/87

RETURN BOTH PAGES WITH ORIGINAL SIGNATURES TO THE KELLOGG FOUNDATION (PHOTO COPIES NOT ACCEPTABLE)
NUMBERS IN PARENTHESES CONSTITUTE NEGATIVE NUMBERS

FINANCIAL REPORT TO W. K. KELLOGG FOUNDATION
 Page 2 - "Summary of Cash"
 Period Ending February 28, 1990

	<u>US DOLLARS</u>	<u>LOCAL CURRENCY</u>
Beginning Balances of the amounts you had on hand from budget in U.S. or local currency from prior year, plus;	\$ 39,943	99,857
Payment amounts you received from the Foundation for the current year.	+ 101,250	256,669
	<u>\$141,193</u>	<u>356,526</u>

List ALL Dates & Amounts of US Dollars converted to Local Currency (space provided for up to 4 possible conversions, attach separate list if necessary with signature):

<u>Dates:</u>	<u>Rate</u>		
a. 1 March 1989	2.500	(39943)	99857
b. 11 April 1989	2.535	(101250)	256669
c.		()	_____
d.		()	_____
Less Expenses in US Dollars (Col III):		(Nil)	
US Dollars On Hand:		Nil	
Less Exp in Local Currency (Col IV):			(209427)
Local Currency On Hand: 28 February 1990			* <u>147099</u>

For Kellogg Foundation's use to calculate payment amount:

7. Local Currency Remaining: (Same as Line 6) _____
8. Current Exchange Rate Date: _____
9. US Dollar Equiv of Local Currency: (Divide Line 7 by Line 3) _____
10. Proposed Budget from Col VI: _____
11. Less: US Dollars On Hand: (Same as Line 4) (_____)
12. Less: US Dollar equivalent of Local Currency on hand: (Same as Line 9) (_____)
13. Proposed WKKF Payment: in US Dollars _____

* Please Note: of the local currency remaining at 28 February 1990 E60697 is payable as bursaries by 31 August for the present academic year.

I hereby certify the above expense statement and resulting cash balance to be correct. I further certify that this organization continues to conduct its operations exclusively as a nonprofit organization with no material changes in organization or operation, and is organized and operated for educational and charitable purposes, with no part of its revenues or earnings inuring to the benefit of any private individual, with no substantial part of its activities being carrying on propaganda or otherwise attempting to influence legislation, and with no participation in political campaigns on behalf of any candidates for public office.

R T A Laube Financial Controller
 (Please type) Chief Financial Officer Name and Title
M J Nsibande Principal Secretary
 (Please type) Project Director Name and Title

R. Laube.
 Chief Financial Officer (signature)

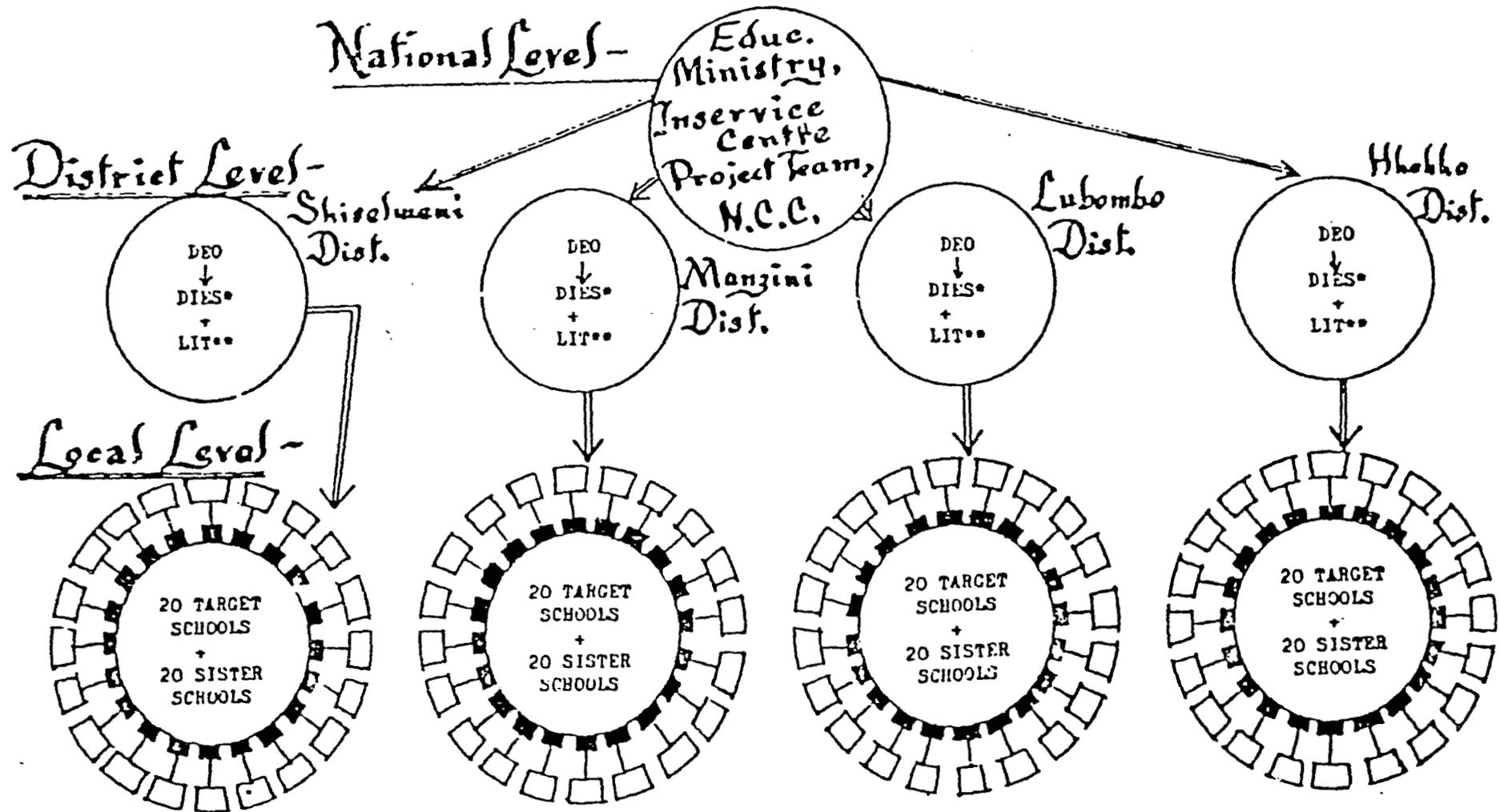
 Project Director (signature)

20 May 1990
 (Date)
20 May 1990
 (Date)

APPENDIX VI
PROJECT'S IN-SERVICE SCHEMATIC

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FIGURE 1
In-Service Distribution Plan



*DIES = District In-Service Education Specialists

**LIT = Local In-Service Teachers

APPENDIX VII
PUBLISHED UNICEF PRIMARY EDUCATION STATISTICS

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Table 7.14 Expansion of Primary and Secondary Education
1968-1988

Year	Primary Education		Secondary Education*	
	No. of schools	Enrolment	No. of schools	Enrolment
1968	358	62 082	31	6 246
1969	366	64 411	42	6 911
1970	351	69 055	54	8 027
1971	366	71 455	54	9 001
1972	392	78 343	62	10 681
1973	395	81 694	64	12 459
1974	403	86 110	66	14 301
1975	412	89 528	67	16 227
1976	420	92 721	67	17 396
1977	438	96 835	70	19 359
1978	436	100 700	76	20 584
1979	440	105 607	81	22 091
1980	450	112 019	82	23 198
1981	470	119 913	86	24 828
1982	463	125 303	86	26 469
1983	468	129 767	89	27 801
1984	467	134 628	89	28 883
1985	466	139 346	90	29 914
1986	471	142 206	100	30 489
1987	477	147 743	113	32 942
1988	481	152 896	125	35 278
% Increase since 1968	134	246	403	564

* Includes both Secondary and High schools.

Source: African Development Bank, 1988, CSO, 1983, CSO, 1987.

Table 7.15 Average and Expected Age^{*} of Pupils, 1988

Primary Education				Secondary Education ^{**}			
Grade	Av. Age		Expt. Age	Form	Av. Age		Expt. Age
	M	F			M	F	
1	7.5	7.3	6	1	15.5	14.8	13
2	8.9	8.8	7	2	16.8	15.8	14
3	9.2	9.8	8	3	17.4	18.5	15
4	1.8	10.9	9	4	18.2	17.4	16
5	2.3	12.1	10	5	18.9	18.2	17
6	3.6	12.7	11				
7	14.3	14.0	12				

* The expected age is calculated from a pupil who progresses without repetition through the system, starting grade 1 at age 6.

** Includes both Secondary and High schools.
Source: CSO(1988).

Table 7.16 Dropout Rates in the School System, 1988

Year of course	Primary	Secondary(G1=100%)	Sec.(F1=100%)
1	100	36.9	100
2	86.0	31.2	84.5
3	77.7	21.4	57.9
4	68.1	15.7	42.4
5	60.5	9.3	25.2
6	55.9		
7	50.4		

Source: Calculated from CSO, 1988.

Table 7.17 Primary School Teachers by Qualification and Sex

Sex	Graduate	Post-matric + Training	Pre-matric + Training PTC*	Uncert. PLC**	Total
Male	7	47	662	303	921
Female	20	90	2139	1482	3744
Total	27	137	2801	1785	4665

* PTC includes all Primary teachers certificate and Primary Higher certificate.

** PLC includes all Primary lower certificate and Primary Lower upgrading certificate.

Source: CSO, 1988.

Table 7.20 Pupils, Schools and Teachers by District

District	Enrolment		No. of Schools		No. of teachers	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Hhohho	39952(26.1%)	10280(29.1%)	122(25.4%)	30(24.0%)	1132(24.3%)	540(28.7%)
Lubombo	28453(18.6%)	5380(15.2%)	95(19.7%)	25(20.0%)	907(19.4%)	315(16.5%)
Manzini	46932(30.7%)	11111(31.5%)	143(29.7%)	34(27.2%)	1460(31.3%)	573(30.0%)
Shiselweni	37558(24.6%)	8507(24.1%)	121(25.1%)	36(28.8%)	1166(25.0%)	470(24.7%)
Total	152895(100%)	35278(100%)	481(100%)	125(100%)	4665(100%)	1906(100%)

Source CSO, 1988.

Percent Increase in Schools since 1968

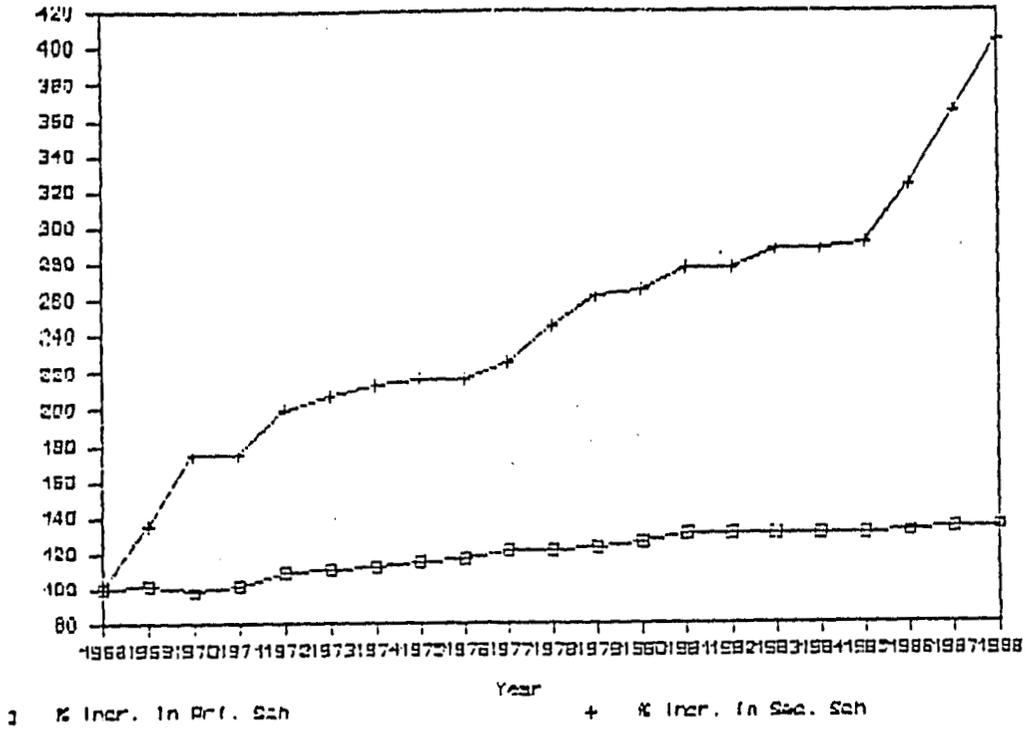
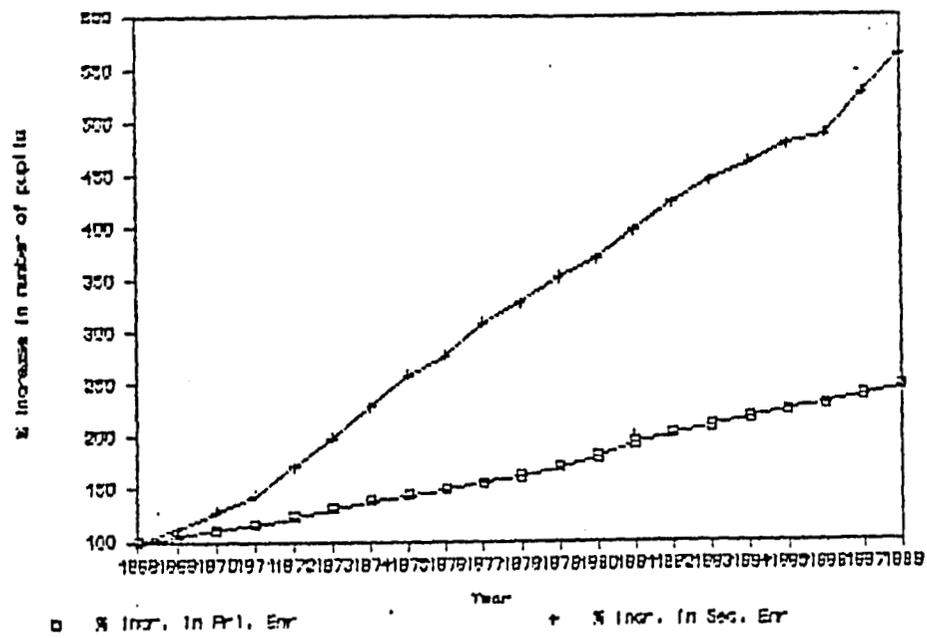


Figure 7.5 Percent Increase in Enrolment since 1968



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