

UNCLASSIFIED

PRIMARY CURRICULUM DEVELOPMENT
PROJECT PAPER

July, 1979

UNCLASSIFIED

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER FACESHEET

1. TRANSACTION CODE
 A ADD
 C CHANGE
 D DELETE

PP

2. DOCUMENT CODE
3

3. COUNTRY/ENTITY
SWAZILAND

4. DOCUMENT REVISION NUMBER
1

5. PROJECT NUMBER (7 DIGITS)
645-0009

6. BUREAU OFFICE
 A. SYMBOL: AFR
 B. CODE: 06

7. PROJECT TITLE (Maximum 40 characters)
PRIMARY CURRICULUM DEVELOPMENT

8. ESTIMATED FY OF PROJECT COMPLETION
FY 83

9. ESTIMATED DATE OF OBLIGATION
 A. INITIAL FY: 79
 B. QUARTER: 3
 C. FINAL FY: 83 (Enter 1, 2, 3, or 4)

10. ESTIMATED COSTS (\$000 OR EQUIVALENT \$) -

A. FUNDING SOURCE	FIRST FY			LIFE OF PROJECT		
	B. FR	C. L/C	D. TOTAL	E. FR	F. L/C	G. TOTAL
AID APPROPRIATED TOTAL	630	70	700	3763	70	3833
(GRANT)	630	70	700	3763	70	3833
(LOAN)						
OTHER						
U.S.						
HOST COUNTRY		309	309	12	1187	1199
OTHER DONOR(S)		209	209		497	497
TOTALS	630	588	1218	3775	1754	5529

11. PROPOSED BUDGET APPROPRIATED FUNDS (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. 1ST FY 79		H. 2ND FY 80		K. 3RD FY 81	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	I. GRANT	J. LOAN	L. GRANT	M. LOAN
(1) EH	624	620		700					
(2) ESF						656		1464	
(3)									
(4)									
TOTALS				700		656		1464	

A. APPROPRIATION	N. 4TH FY 82		Q. 5TH FY 83		LIFE OF PROJECT		12. IN-DEPTH EVALUATION SCHEDULED
	O. GRANT	P. LOAN	R. GRANT	S. LOAN	T. GRANT	U. LOAN	
(1) ESF	717		296		3833		1984 <input type="checkbox"/> 0 <input type="checkbox"/> 5 <input type="checkbox"/> 8 <input type="checkbox"/> 1
(2)							
(3)							
(4)							
TOTALS	717		296		3833		

13. DATA CHANGE INDICATOR - WERE CHANGES MADE IN THE PID FACESHEET DATA, BLOCKS 12, 13, 14, OR 15 OR IN PREVIOUS SHEET DATA, BLOCK 12? IF YES, ATTACH CHANGED PID FACESHEET.

1 NO
 2 YES

14. ORIGINATING OFFICE CLEARANCE

SIGNATURE: *Julius E. Coles*
 JULIUS E. COLES

15. DATE DOCUMENT RECEIVED IN AID W. OR FOR AID W. DOCUMENTS, DATE OF DISTRIBUTION

DATE SIGNED: MM DD YY
 04 05 74

DIRECTOR, USAID/SWAZILAND

11
Jul 9 5 02 PM '79

JUL 05 1979

EXECUTIVE SECRETARIAT

ACTION MEMORANDUM FOR THE ACTING ADMINISTRATOR

THRU: ES *KS*

THRU: Acting AA/PPC, Charles *CBH* Paolo *Pa*

FROM: AA/AFR, Goler T. Butcher *GS*

Problem: Your approval is requested to increase the authorized life of project grant funding for the Swaziland Primary Curriculum Development Project (645-0009) from \$2,152,000 to \$5,985,000, to extend the project completion date through FY 1983 and to execute a Project Agreement amendment with the Government of Swaziland obligating \$700,000 from Fiscal Year 1979 funds. Funds for the Project Agreement amendment will be drawn from FAA Section 105.

Background: The Swaziland Primary Curriculum Development Project was approved by Mr. John Murphy, DA/AID, on December 23, 1974. His approval allowed for funding of up to \$2,152,000 to be obligated prior to the end of FY 1978.

At that time, the Africa Bureau had supported a larger and longer project, requesting funding of \$3,239,000 to run through Fiscal Year 1982, but Mr. Murphy set the limits noted above because at that time, there was a firm AID policy to cut back on lengthy projects.

The Deputy Administrator allowed for the Africa Bureau's argument that the Project would be a long term effort by including the following language in the PROP approval, "Continuation of this project activity beyond FY 1978 requires the Administrator's approval".

The original Project grew out of the urgent need felt by the GOS for a broadly based education system fitting the country's needs. The Government (GOS) felt that it was of particular importance to reach as many Swazi youth as possible with a relevant education. Curriculum at the primary levels compatible with the country's goals, needs and aspirations was required.

In 1972, AID supplied a curriculum advisor to the Government's Ministry of Education (MOE). This advisor helped the MCE develop the basic framework of a primary curriculum and helped the MCE understand the complex and lengthy procedures needed to develop a primary curriculum, not the least of which is to build a domestic capacity to develop curricula.

Subsequently, in late 1974, working from the growing interest and knowledge about curriculum development in Swaziland, AID and the GOS prepared the Swaziland Primary Curriculum Development Project, which, as noted, was authorized at the \$2,152,000 level on December 23, 1974.

AID signed a contract to implement this Project with Eastern Michigan University (EMU) in August 1975. EMU's main task was to help the GOS establish an institutional capacity for developing a primary curriculum reflecting Swaziland's national goals for education. To do this, EMU was required to assist the MOE's fledgling Primary Curriculum Unit (PCU) to design primary curricula, evaluate their worth and revise curricula as required.

There were, concurrently, other activities working to improve Swaziland's educational system. One important effort still underway has been supported by UNESCO. It is a project to improve in-service and pre-service teacher training.

An effective primary school curriculum is the keystone of an educational system. The curriculum would be sterile without reliable and proven methods of teaching and less than useful, if only a small percentage of school-aged children were attending school. Fortunately, not only has Swaziland been able to reach, over the past several years, a continually higher percentage of school-aged children with primary education, but it has also increased and improved its teacher corps.

The Project's purpose remains the establishment of a national capacity for developing a primary curriculum reflective of Swaziland's national goals for education; it can accomplish this as part of the larger overall education strategy in Swaziland which is concentrating on improvements in curricula, improvements in teachers and increasing the number of pupils at the primary level.

AID's basic Education/Human Resources (EHR) sector strategy for Swaziland is emphasizing manpower development and skills training. Continued AID support for this Project will result in the primary curriculum needed as the foundation for mid-level and advanced skills and leadership training in Swaziland. It will also serve as a foundation for a population able to deal successfully with the development process. The Project is the lynchpin to AID's EHR sector strategy in Swaziland.

The Project beneficiaries will be the estimated 100,000 pupils now attending primary schools and, more importantly, the 140,000 or so pupils expected in primary schools in 1985 when the new curriculum will be fully operational.

AID's proposed financial contributions for Period Two of the Project are shown below:

(\$000 omitted)

	<u>First Year</u>	<u>Total Period Two</u>
Technical Assistance	\$400	\$2,730
Participant Training	50	368
Construction	150	339
Equipment and Commodities	70	70
Other Costs	10	143
Contingencies	20	183
	-----	-----
TOTAL	\$700	\$3,833

A summary of Period One, Period Two and Total Project funding by contributor is noted below:

(\$000 omitted)

	<u>Period One</u>	<u>Period Two</u>	<u>Totals</u>
AID	\$2,152	\$3,833	\$5,985
GOS	1,164	1,199	2,363
IBRD	241	497	738
	-----	-----	-----
TOTAL	\$3,557	\$5,529	\$9,086

AID's total funding, including the \$3,833,000 requested, will amount to \$5,985,000 of the total Period One and Period Two costs of \$9,086,000. *

The GOS total estimated contribution of \$2,363,000 amounts to about 26% of the total Project cost. The IBRD's contribution amounts to about 8%. AID expects to fund about 66% of the total Project.

This Project, which consists almost entirely of technical assistance, participant training and the purchase of educational materials and supplies, has been found to be technically sound. The Initial Environ-

* This Project is set forth in the Fiscal Year 1979 Congressional Presentation, Annex A, at page 218, showing an intended FY 1979 obligation in the amount of \$700,000. No further Congressional Notification action is required.

mental Examination resulted in a recommendation for a Negative Determination with no further environmental analysis being necessary. There are no adverse human rights implications with respect to Swaziland or the Primary Curriculum Development Project.

There are several covenants contained in the PAF II. These proposed covenants were worked out during the design of Period Two of the Project and have been fully discussed with the concerned GOS officials and are designed to strengthen, not to delay this activity. We fully support these covenants.

Project implementation responsibilities rest with the Primary Curriculum Unit (PCU) of the Ministry of Education (MOE) in Swaziland. This Unit now has about fifteen competent professionals and is expected to have a professional staff of about thirty when this Project terminates. The success of the Project hinges on the PCU maturing, integrating well into the activities of the MOE and retaining a qualified and motivated professional staff. USAID/Swaziland feels that, with about half the Project completed, the PCU is better than halfway along in becoming fully effective. There is little doubt that the PCU will mature into a fully functioning and effective unit over the next three to four years.

Ross Thomas, USAID/Swaziland's EHR officer, has field responsibility for this Project. William D. Jones, AFR/DF/SA, backstops the Project in AID/W.

Recommendation:

That you sign the attached PAF II and thereby authorize the proposed Project Amendment and the requested waivers.

Attachments:

1. PAF II
2. Project Paper - held in ES

Clearances:

GC:MEall *MR by SID*
DAA/AFR:WHNorth *WJ*
PPC/PDPR:BSidman *JR for BS*

AFR/DR/SA:GThompson:bks:06/25/79:X29200

PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS

Part II

Name of Country: Swaziland
Name of Project: Primary Curriculum Development
Number of Project: 645-0009

Pursuant to Part I, chapter 1, section 105 of the Foreign Assistance Act of 1961, as amended, I hereby authorize a grant to Swaziland (the "Cooperating Country") of not to exceed seven hundred thousand United States dollars (\$700,000) (the "Authorized Amount") to help in financing certain foreign exchange and local currency costs of goods and services required for the project as described in the following paragraph.

The Project is the second phase of a two-phased activity to assist the Government of Swaziland (the "Grantee") in efforts to accelerate development of Swaziland's human resources through institutionalization of a capacity to develop, produce and effectively disseminate primary curriculum reflective of Swaziland's educational needs. To this end, AID assistance will be utilized to finance technical, construction and other services, commodity procurement, participant training, and other costs.

I approve the total level of AID appropriated funding planned for this Project of not to exceed three million eight hundred thirty-three thousand United States dollars (\$3,833,000) (the "Grant"), including the funding authorized above, during the period FY 1979 through FY 1983. I approve further increments during that period of grant funding up to \$3,133,000, to be drawn from the Economic Support Fund or such other funds as may be appropriated for this purpose, subject to the availability of funds in accordance with AID allotment procedures. The amount authorized and approved herein is in addition to the \$2,152,000 authorized on December 23, 1974.

I hereby authorize the initiation of negotiation and execution of the Project Agreement by the officer to whom such authority has been delegated in accordance with AID regulations and Delegations of Authority subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as AID may deem appropriate:

A. Source and Origin of Goods and Services

Goods and services, except for ocean shipping, financed by AID under the Project shall have their source and origin in the Cooperating Country or in the United States, except as AID may otherwise agree in writing, and except as stated in paragraph D below. Ocean shipping financed under the Grant shall be procured in the United States except as AID may otherwise agree in writing.

B. Condition Precedent

The Project Agreement shall contain a condition precedent providing in substance as follows:

Prior to the disbursement, or the issuance of any commitment documents by which disbursements are made, the Grantee will furnish in form and substance satisfactory to AID, evidence that other donor support for the Project will be forthcoming in an adequate amount and on a timely basis.

C. Covenants

The Project Agreement shall contain covenants substantially as follows:

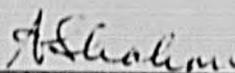
1. Grantee agrees to provide all required professional support personnel on a timely basis.
2. Grantee agrees to establish positions within the Primary Curriculum Unit for professional and support personnel in accordance with a schedule to be included in the amplified description of the Project contained in the Project Agreement, except as AID may otherwise agree in writing.
3. Grantee agrees to establish a curriculum materials approval procedure acceptable to AID to expedite the materials approval process and to submit periodic reports indicating, generally, the nature of the procedures being developed and the progress being made toward their establishment.
4. Grantee agrees to establish a fund or take such other actions as may be necessary to assure that vehicles will be made available to the PCU to replace vehicles financed by other donors.
5. Grantee agrees to make available on a timely basis qualified personnel to undertake participant training. Upon

their return from training outside Swaziland, participants will be returned to positions with the PCU, or such other positions as AID may agree to, which are commensurate with the nature and level of training received. Unless otherwise agreed to by AID, the Grantee's normal bonding requirements for persons receiving training outside Swaziland will be applicable.

C. The following waivers to AID policy and requirements are hereby approved:

1. The policy set forth in Handbook 1, Supplement B, in favor of competitive procurement is waived to allow contract negotiation, without solicitation of competitive proposals, with Eastern Michigan University for technical services, as concurred in by the Non-Competitive Procurement Review Board during a formal submission of this request on May 9, 1979.

2. The requirement set forth in Handbook 1, Supplement B that commodities procured with Grant funds have their source and origin in the U.S. is waived to permit procurement of approximately \$35,000 of construction materials and \$314,000 of project commodities which have their source and origin in countries included in AID Geographic Code 935 (Special Free World). Exclusion of procurement of these materials and commodities from free world countries other than the Cooperating Country and countries included in Geographic Code 941 would seriously impede attainment of U.S. foreign policy objectives and objectives of the foreign assistance program.



Alexander Shakow
Deputy Administrator (Acting)

7/16/79

Date

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I. PROJECT RECOMMENDATIONS AND SUMMARY

A. Summary

The Project Paper presents the second four-year period of the Primary Curriculum Development Project (645-0009). The first four years have established the necessary functioning institutions and the second four years will fill out its staffing and provide the practical experience necessary by producing most of the remaining primary curriculum materials needed. Thereafter it will be self-sufficient in upgrading materials as necessary.

Problems during the first period (described in para I.C. Project Description) resulted largely from weaknesses in original design, now corrected in practice and in this PP, and the growth pains of new responsibilities and demands on people and organizations. A cooperative advisory arrangement is now working between Swazi writers and U.S. contract staff and both the GOS Ministry of Education and the contractor have made significant improvements in administrative matters. The project is now solidly on track.

To correct the overly optimistic scheduling of the original design an increase in project assistance from 2 million dollars to 3.8 million dollars is provided for period two. The major new elements are for three subject specialists to reinforce additional Swazi personnel, addition subject specialist training for Swazi participants and the equipping of the four dispersed Teacher Innovation and Dissemination Centers and the one Curriculum Resource Center.

With the additional contribution from the GOS in form of 12 new staff and an IBRD contribution, essentially for construction and printing support, all curriculum materials for the seven grades are projected to be in final test or distributed and in use by all 430 Swazi primary schools by the end of the project.

B. Problem

In its Third National Development Plan*(1978-1982) the Government of Swaziland (GOS) recognizes the right of every Swazi child to education. The Plan reaffirms the commitment of the GOS to the goal of nation wide primary education by 1985 (presently, approximately 70 percent of the 6-12 age group are enrolled in primary school).

However, increasing the population's access to primary education must be accompanied by a restructuring of content in order to reorient the curriculum to enable primary school

*Now in draft, see Annex I

leavers to move more rapidly into employment opportunities and to raise the quality of primary school education in general. The present curriculum prepared in 1965, has been determined insufficiently relevant to the national development goals of the nation by the GOS. Insufficient emphasis is placed on self-learning skills and the lack of relevance to the Swazi socio-economic context makes it difficult for students to transfer what they learn in the classroom to real-life situations. Furthermore, the present curriculum is not based on most effective or appropriate teaching strategies and has not been supported with adequate student activity material, nor have teachers been trained properly in its use.

While recognizing the importance of access to primary education and the need to make it more relevant to the social and economic realities of the country, the GOS did not have the institutional capability to undertake a task of this magnitude when the Project was begun in 1975. The Project was originally designed to overcome this institutional constraint and, while progress has been made in building the institutional base, the proposed continuation of the Project will complete the institution building process while placing greater emphasis on production, distribution and nationwide use of the new curriculum materials.

C. Project Description

The Primary Curriculum Development Project is an integral component of the GOS's overall strategy in the education sector. In order to assist the GOS in its efforts to accelerate the development of Swaziland's human resources within the framework of national development goals, this Project will establish an institutionalized capacity for developing primary curriculum reflective of Swaziland's education needs. Although the purpose remains the same as that of the original project approved in 1975, more emphasis will be placed on the production of materials for nationwide distribution as an indicator of accomplishing this purpose during the remaining four years of this approved eight-year project.

During the years and activities prior to this revision, significant progress has been made toward achieving the Project's purpose, most notably in the establishment of a Primary Curriculum Unit and its organizational framework and working relationships. Staff have been trained, primary school "outcomes" written for Grades 1-7, curriculum materials have been drafted for some subjects, and teachers' guides and students' workbooks have been pilot tested for Grade 1 in Science and siSwati. During the first four years of the Project, actual materials production and dissemination lagged be

hind schedule due to a number of factors. The original PROP's mix of inputs and the functional roles assigned to PCU staff and technical assistants were insufficient and ill-designed to meet the required production schedule. In order to accelerate the materials production and distribution process it is now proposed that AID provide more technical assistance of a specialized nature and more participant training. Additionally the role of the AID-provided technical assistance team will shift from a purely advisory one to one placing more emphasis on actual production in concert with PCU counterparts. This approach will not only speed up the development and production process but will provide valuable on-the-job training for the PCU counterparts. When U.S. assistance is terminated in August, 1983, the Primary Curriculum Unit will be a fully-staffed and functioning organization capable of continuing the on-going process of curriculum development, and materials will have been distributed nationwide in most subjects through Grade 6 and designed for all subjects through Grade 7.

The Project will be supported by both AID and the IBRD. Donor and GOS inputs for the remaining four years of the Project are summarized as follows:

<u>U.S.AID (Grant)</u>	<u>\$3,833,000</u>
Technical Assistance	(\$2,730,000)
Participant Training	(\$ 368,000)
Construction	(\$ 70,000)
Equipment and Commodities	(\$ 339,000)
Other Costs	(\$ 143,000)
Contingency	(\$ 183,000)
 <u>GOS</u>	 <u>\$1,199,000</u>
Recurrent Budget	(\$ 828,000)
Capital Budget	(\$ 314,000)
Contingency	(\$ 57,000)
 <u>IBRD</u>	 <u>\$ 497,000</u>
Equipment and Commodities	(\$ 90,000)
Construction	(\$ 119,000)
Other Costs	(\$ 288,000)

D. Summary of Findings

It has been concluded from the analyses included in this project Paper that:

- 1) The technical approach to revising the primary school curriculum is sound;
- 2) The revision of the primary school curriculum is an effective means of enhancing Swaziland's human resource po-

tential;

3) There are significant cost efficiencies that will accrue to the GOS by virtue of a more relevant and effectively used primary school curriculum;

4) The Primary Curriculum Unit is capable of implementing the Project;

5) The GOS is capable of the required budgetary support required to implement the Project;

6) The technical design and cost estimates are reasonable and adequately planned pursuant to FAA Section 611(a);

7) The timing and funding of the Project activities are appropriately scheduled;

8) Sufficient evaluation plans have been developed for the Project; and

9) Statutory criteria have been met.

On the basis of these findings, the GOS and USAID/Swaziland conclude that the Project, as presented in this revision, should be continued.

E. Recommendations

Authorization of a grant of \$3,833,000 is recommended, subject to the following waivers and approvals:

1. A procurement source and origin waiver, to permit the procurement of construction materials estimated at \$35,000 from countries included in AID Geographic Code 935;

2. A procurement source and origin waiver to permit the procurement of commodities and supplies estimated at \$314,000 from countries included in AID Geographic Code 935; and

3. Waiver of the policy set forth in Handbook 1 Supplement B in favor of competitive procurement to allow negotiation, without solicitation of competitive proposals, with Eastern Michigan University (EMU) for technical services.

II. BACKGROUND AND PROJECT DESCRIPTION

A. Background

In its Third National Development Plan (1978-1982), in draft, the Government of Swaziland (GOS) recognizes the right of every Swazi child to education. The Plan reaffirms the commitment of the GOS to the goal of nationwide primary education by 1985 which was originally envisioned when the GOS accepted the report of the National Education Commission in 1976.

The Third Plan specifies that the GOS will be guided by the principle of social demand in its efforts to provide nationwide access to primary education. Together with the expansion of primary school enrollment, the GOS hopes to re-

structure the content of primary school education in order:

- to reorient the curricula at the primary level to counteract the current non-technological bias and enable school leavers to move more rapidly into employment opportunities which are open to them, and
- to raise the quality of school education, improving performance at all levels and reducing the high incidence of repetition and dropout.

The GOS's concern with the revision of primary education to make it more responsive to national goals and Swazi culture came with national independence in 1968. Substantial efforts were begun during the period covered by the Second National Development Plan (1973-1977). The revision of primary education was required in order to address the needs of the majority of Swazi children who were obliged to begin earning a living after primary school without any more formal schooling.

In pursuit of these educational objectives, the GOS is undertaking a program of curriculum development. This involves efforts at both the primary and secondary levels - the latter activity receiving UNESCO assistance. The program includes the preparation of curricula and related instructional materials and implementing a scheme for the training of primary and secondary school teachers. The GOS's curriculum development activities are interrelated and have been assisted by a number of external agencies, including AID, UNESCO, ODM, SIDA, World Bank, and the British Council. The coordination of the curriculum development process has become even more necessary with the GOS's plans, following attainment of nationwide primary education in 1985, to restructure primary and junior secondary education to provide a ten-year cycle of basic education for the Swazi children. The three-year post-primary course that is foreseen is to continue the practical orientation of primary education which is preparing children to take up available employment opportunities.

AID's assistance, which began in 1973, has been directed toward curriculum development at the primary school level. Assistance was provided to the Swaziland Ministry of Education (MOE) through an amended contract signed in February 1973 between AID and the American Institute for Research. The contract provided for the services of a curriculum advisor who was assigned to the GOS for a two-year period (1973/74). During this period a number of important steps were taken to establish a base for carrying out curriculum development. Major accomplishments included the establishment of a set of preliminary primary school "outcomes" (i.e., observable behaviors), early steps toward the establishment of the Primary Curriculum Unit (PCU) which became operational in 1974, and the completion

of a draft National Primary School Curriculum Plan (see Annex A). The latter presented specific plans for policy making; preparation, production and distribution of teaching/learning materials; pre-service/in-service teacher training; progress reporting; and training of PCU staff. The Plan also presented detailed estimates of the personnel and fiscal requirements of the program. The GOS requested AID and the World Bank to assist in carrying out the Plan.

AID's continued assistance was provided through an eight-year Primary Curriculum Development Project (1975-83) to be undertaken in collaboration with the GOS (see PROP, Annex B). A Project Agreement was signed in January 1975 by AID and the GOS and was aimed at completing preliminary steps toward developing and implementing a program of primary curriculum development (see Annex C). In July 1975, AID signed a contract with Eastern Michigan University (EMU) to implement its technical assistance and the first advisor arrived in Swaziland in August 1975 (see Annex D).

In April 1978 an external evaluation was undertaken to provide data for a decision whether AID should fund the second period of the Project (see Annex E). (Henceforth, Period

One will refer to the years and activities prior to this revision and Period Two as that which is proposed in this paper). The insights gained from that evaluation are incorporated into this PROP revision which is a plan for Period Two (1979-83) of the approved eight-year project.

B. Project Description

The goal of AID/S's human resources development sector, to which this project contributes, is to accelerate the development of Swaziland's human resources within the framework of primary education and by reorienting the content of primary education toward the needs and circumstances of the Swazi environment.

The purpose of the Project is to establish an institutionalized national capacity for developing primary curriculum reflective of Swaziland's national goals for education. This purpose, as originally conceived in the PROP, will not change during Period Two of the Project. However, increased importance will be placed on the production of curriculum materials for nationwide distribution use as an indicator of accomplishing this purpose.

During Period One, significant progress has been made toward achieving this purpose. A Primary Curriculum Unit has been established; facilities have been built and furnished;

the Project has been staffed by 15 professional and 15 support personnel from the Ministry of Education and aided by a maximum of 6 U.S. technical advisors; and the PCU is a recognized and integral component of the MOE with linkages to related institutions. In the curriculum development process, primary school "outcomes" have been written and approved for the first seven years of school (Grades 1 and 2, and Standards 1-5). Measurable instructional objectives have been written and curriculum materials drafted for grades 1 and 2 to various stages of completion in science, siSwati and math, and grade 3 in social studies (social studies begins with grade 3). Materials, consisting of teachers' guides and students' workbooks, have been pilot tested and are ready for publication in Grade 1 science and siSwati. On the participant training side, six Swazi staff members are in or have completed a BA or MA degree program at Eastern Michigan University. In terms of the original PROP, the development of "an institutionalized national capacity for developing primary curriculum" is underway. During Period Two this development will continue but with equal emphasis placed on curriculum materials production and nationwide distribution and use.

The Project is behind the original schedule in four aspects: materials design and preparation, materials publication and distribution, evaluation and teacher education. These delays have been due primarily to an over-ambitious PROP, understaffing, and insufficient initiative and direction on all fronts -- the PCU, MOE, and AID/S.

The original PROP is based on the estimation of 2 years as the required amount of time for production and nationwide distribution of materials for 11 subjects for one grade level. Careful calculations, based on the experience of the past four years, show that a minimum of two and a half years are required to produce and distribute materials nationwide for one grade level for each subject. The following clearly presents the cycle of design, preparation and distribution of curriculum materials as a two and a half year cycle.

Assumptions

1. Two Swazi curriculum designers and one advisor will be working on each subject.
2. Each subject area concurrently carries on three major enterprises (each one involving several crucial tasks:
 - a. initial design/preparation of year 3 (Standard 1) materials
 - b. revision/redesign of year 2 (Grade 2) materials (based on information gained

from piloting and testing

- c. year 1 (Grade 1) materials finalized in a form acceptable to the MOE and commercial publishers.

3. Sufficient support and professional staff is maintained to do the pilot-test printing, typing, evaluation, teacher education and other tasks.

4. Leadership of MOE/PCU will plan, organize, supervise and direct the work of staff members to increase the efficiency and production of curriculum materials in order to reduce total time needed for nationwide distribution and use of primary curriculum materials.

5. Leadership of MOE/PCU will take the initiative to secure the resources planned for (and agreed to) by the parties to the Project Agreement.

6. Recognition that at least one half year is needed for the commercial publication and distribution processes. (It takes a half year after PCU completes the materials design and testing periods).

Based on the above assumptions, it is feasible for PCU to produce a single grade level of materials within a two and a half year cycle. The major tasks and needed time for this projected cycle is as follows:

<u>Tasks</u>	<u>Time Needed</u>
1. Preparation/writing of syllabus and grade level objectives and their review and approval by appropriate panels, etc. <u>Also</u> , creating few sample lessons based on the suggested syllabus and objectives which are "tried out" in a neighboring school.	6 months
2. Design/review/printing of trial modules, teacher guides, pupil workbooks, etc.	6 months
3. Trail/testing of materials in pilot schools <u>including</u> revision/finallization of materials in readiness for MOE approval and commercial publication.	1 year

4. Commercial printing (4 months) and distribution to schools (2 months)

6 months

TOTAL TIME :

2.5 years

Consequently, the Project outputs are modified and the minimum expected levels of nationwide distribution and use of grade materials will be as follows:

CURRICULUM MATERIALS IN USE NATIONWIDE

SUBJECT	Jan. 1980	Jan. 1981	Jan. 1982	Jan. 1983	End of Project Aug. 1983 ⁺	
Science	1	2	3	4	5	6 piloted and revised and 7 in draft
siSwati	1	2	3	4	5	6 piloted and revised and 7 in draft.
Maths		1	2	3&4	5	6 piloted and revised and 7 in draft.
Social studies		3	4	5	6	7 piloted and revised.
English		1	2&3	4&5	6&7	
Music, domestic science, agriculture, religious knowledge, & physical education			1&2	3&4	5&6	7 piloted and revised.
Arts and crafts		1&2	3&4	5&6	7	

In the beginning of Period Two, the PCU and MOE will be working toward attaining a proper mix of internal curriculum design and curriculum adaptation and adoption which could enable the MOE to have all subjects for grades 1 and through 7 nationally distributed and in use in the primary school by 1983/84. Therefore, while the chart above indicates the minimum levels of subject and grade level distribution ex-

+ These materials being printed and will be in use Jan. 1984.

pected at the end of Period Two, it is believed that distribution of all subjects for all grades can be attained in the year following the termination of U.S. technical assistance.

Publication and distribution activities have been delayed primarily because the materials have not been ready for publication. Teacher education activities, though working smoothly in regard to pilot school teachers, have not worked out satisfactorily nationwide as a result of both materials production delays and the lack of collaboration with in-service teacher training activities at the Teacher Training Colleges. Evaluation activities have fallen behind because of understaffing on both the GOS and U.S. sides as well as delays in materials production, upon which evaluation is contingent.

During the past year (1978) this situation has been remedied by a change in personnel at the PCU, including both a new acting Director and U.S. Chief of Party and by moving the PCU organizationally from under the William Pitcher Teacher Training College, the adjacent teacher training school, to the office of the Chief Inspector Primary who reports directly to the Director of Education and Permanent Secretary of the Ministry of Education. Communication between the PCU and MOE has improved noticeably. In addition, the Project is in a better position to work equally with each teacher training college and the UBS Faculty of Education by reporting to the MOE rather than to one of the existing colleges. It is also anticipated that access to the pre-service and in-service staffs of those colleges will be enhanced because of the support and direction of the MOE. Consequently, the collaborative action between PCU and the MOE, with increased support from AID/S, has given the Project impetus to move toward and achieve its purpose.

The current stock-taking and revision of planned inputs, based on the lessons of experience, is timely. During Period One of the Project, a solid PCU organizational foundation was laid, institutional development was begun, and feasible design and production rates were determined.

During Period Two, with more reasonable planned inputs and outputs, the Project purpose can be attained. Although assistance from AID is scheduled to terminate in 1983, the PCU will then be able to complete primary curriculum materials by no later than 1985 and continually update them by operating as an integral part of the MOE.

The chart below summarizes the progress made during Period One and the plans for Period Two in terms of Project outputs and inputs (the sector goal and Project purpose remains the same during the two periods).

PERIOD ONE (1975-1979)

PERIOD TWO (1979-1983)

OUTPUTS:

Institutional capability to:

- a) link curriculum development activities of PCU with those of the education system; and
- b) prepare and produce curriculum materials.

Institutional capability to:

- a) prepare and produce curriculum materials;
- b) distribute and maintain materials nationwide;
- c) coordinate curriculum development activities with pre-and in-service training; and
- d) evaluate and report on effectiveness of curriculum and materials.

PCU Swazi staff trained and on the job:

15 professional
15 support

PCU Swazi staff trained and on the job:

27 professional
15 support

PCU staff certified:

4 B.A. degrees (Education)
2 M.A. degrees (Education)

PCU staff certified:

13 additional B.A. degrees
4 additional M.A. degrees

Materials production:

- a) Ready for publication:
science, siSwati (gr. 1)
- b) In draft:
math (gr. 1 and 2)
science, siSwati (gr. 2)
social studies (gr. 3)
(begins with gr. 3)

Materials production:⁺

- a) Published and distributed:
science, siSwati, math (gr. 1-5), social studies, music, domestic science, agriculture, physical education, religious knowledge (gr. 1-6), English, arts and crafts (gr. 1-7)
- b) Ready for publication:
science, siSwati, math (gr.6), social studies, music, domestic science, agriculture, physical education, religious knowledge (gr. 7)
- c) In draft:
science, siSwati, math (gr.7)

* These projections of materials production and distribution are deemed to be the minimum output at the end of Period Two (see earlier discussion).

PERIOD ONE (1975-1979)

PERIOD TWO (1979-1983)

INPUTS: AID:

AID:

Technical assistance:

19.3 p/y
13 p/m short-term consultants

Technical assistance:

27.8 p/y
48 p/m short-term consultants

Participant training:

6 p/y in U.S.

Participant training:

13 p/y in U.S.
30 p/y in Swaziland
27 p/m in Africa

Construction:

6 staff houses

Construction:

2 staff houses

Commodities:

PCU office and production equipment
TIDC furnishings
Curriculum Resource Center materials

Commodities:

Additional production equipment
Curriculum Resource Center materials
Office and production supplies

Other:

Rental of housing - 2 years
African Curriculum Organization membership fees

INPUTS: GOS:

GOS:

PCU staff (MOE posts): 30
(19 established and 11 temporary)

PCU staff (MOE posts): 42

Commodities:

Office supplies
Equipment maintenance
Vehicle maintenance

Commodities:

Publication of curriculum materials
Equipment maintenance
Vehicle maintenance and replacement
Exam scoring

Other:

PCU facilities (IBRD)
4 TIDCs (IBRD)
8 vehicles (IBRD)

Other:

Curriculum Resource Centre (IBRD)
1 TIDC (IBRD)
Conversion of 1 TIDC to offices (IBRD)
8 vehicles (IBRD)

C. Project Strategy

1. Project Structure and Functions

In order to improve primary school education, the Project will develop and institute a competent curriculum development staff within the PCU. The strategy for accomplishing this is as follows:

(1) train a total of 27 Swazis as professional curriculum development specialists through on-the-job training by U.S.-provided advisors and other qualified consultants. Also, participant training at the University of Botswana and Swaziland (Swaziland campus), selected curriculum development training centers in Africa, and at a U.S. university, e.g. Eastern Michigan University. (See Staff Development section II.C.4). Costs of training at UBS will be borne by the GOS or the individual.

(2) utilize the skills and talents of the District Education Officers (DEOs), Inspectors, PCU Teacher Leaders, teacher educators from the three teacher training colleges, the School of Education at the University of Botswana and Swaziland (UBS), and teachers in the materials design process;

(3) establish a more streamlined materials approval procedure that involves the MOE and perhaps other representatives of the education system;

(4) test materials in pilot schools if needed before implementing them on a nationwide level; and

(5) support actively the movement (as stated in the Third National Development Plan) toward the integration of the Primary and Secondary Curriculum Units within the MOE and the closer coordination of curriculum development and teacher training activities in Swaziland.

The role of the U.S. advisors in carrying out this strategy will be to work daily in a collaborative manner with the Swazi curriculum development specialists in:

(1) developing skills involved with curriculum planning, materials design and preparation, production, evaluation and distribution, and to give continual feedback and assistance in their practice of these skills. The U.S. advisors' role in these curriculum development activities will evolve during the latter stages of Period Two from a collaborative one to an advisory/consulting role.

(2) assisting the Swazi staff in designing and holding curriculum development and materials design workshops that entail the participation of teachers and administrators; and

(3) participating in negotiations between the curriculum development staff and the MOE and other education

offices whose authorization and operations pertain to curriculum development activities (e.g. arranging for approval procedures, teacher education activities, materials implementation, logistics, etc). Again, the U.S. advisors' role will move from a collaborative to a more consultative role towards the end of Period Two.

This strategy, except for the increased participation of U.S. advisors in the early years of Period Two and a greater use of other African curricula as model and prototype materials, is a continuation of the activities during Period One of the Project. Thus, its implementation will result from the differentiated functions of the PCU that are now beginning to operate: (1) management, (2) materials design and preparation, (3) production, (4) teacher education, and (5) evaluation.

The responsibilities of staff members in each of these functions will be as follows:

(1) Management:

- (a) conceptualize the on-going development of curriculum;
- (b) direct and coordinate activities of the four other PCU functions;
- (c) work directly with the MOE (reporting to the Chief Inspector Primary) in coordinating the activities of the PCU with those of the Ministry, teacher training institutions, and district education offices;
- (d) report progress and make requests, as required, to the GOS and AID/S;
- (e) maintain accounts of inputs and achievement of outputs;
- (f) administer participant training activities (authorizations, contracts, selection of trainees, etc.); and
- (g) link PCU activities to those of other related donor agencies.

(2) Materials Design and Preparation:

- (a) initiate and maintain the process of curriculum design and approval at all grade levels in primary school (grades 1-7);
- (b) plan and monitor a schedule of design activities, coordinating it with (i) the required interaction of Teacher Educators in providing workshops and other training activities, (ii) evaluation in providing testing and feedback services, (iii) production, and (iv) management;
- (c) in collaboration with the teacher education component, direct workshops for teachers and administrators in curricula and materials design;

(d) prepare original and revised drafts of materials for production;

(e) participate in materials approval procedures as required; and

(f) develop and maintain a curriculum resource center which contains curricula and materials from other African and non-African programs. These will be used primarily in the curriculum design process but will be accessible to others at the PCU and the education community.

(3) Production:

(a) in collaboration with design and preparation staff, design the layout of teacher guides, workbooks, evaluation sheets, progress reports and other materials;

(b) illustrate materials and supply photographs as required;

(c) produce PCU materials for use in pilot schools (GOS will fund costs for production of materials for nationwide distribution);

(d) produce reports, tests, handouts and other printed and photographic materials for management, evaluation and teacher education components of PCU;

(e) as time and workload permits, perform art and design, printing and photographic services for other departments of the MOE and other agencies of the GOS (at their expense);

(f) maintain records of production; and

(g) maintain and supplement production equipment and supplies as necessary.

(4) Teacher Education:

(a) in collaboration with the design and preparation staff, be responsible for directing workshops for teachers and administrators in curricula and materials design;

(b) in collaboration with teacher training colleges, university and district level education personnel, design and implement additional in-service training sessions that entail the use of the new primary curriculum;

(c) direct the activities of Teacher Leaders and other staff who manage teacher education activities at the four TIDCs (see Annex F);

(d) share feedback from teachers and district personnel with design and evaluation staff;

(e) in collaboration with management, initiate and monitor for each PCU staff member his/her individual professional development program;

(f) in collaboration with management, assist teachers and administrators who participate in PCU training sessions (e.g. workshops and sessions at William Pitcher College) in getting appropriate credit for their progress; and

(g) in collaboration with management, plan and supervise the countrywide distribution of curriculum materials.

(5) Evaluation:

(a) evaluate the effectiveness of PCU materials as used in pilot schools by directing the administration, scoring and analysis of (i) annual exams of students who have used the materials, and (ii) periodic questionnaires completed by teachers who use the materials regarding their judgments on the value of the materials;

(b) share the evaluation results with other PCU components (design, production, etc.) in a useful fashion; and

(c) provide information for the purposes of decision-making and task improvement to other PCU components and related groups as follows:

(i) Management: quantity of PCU outputs; effectiveness of outputs; characteristics of those using materials; and interactions between the various components of PCU and the entire education system involved in the testing of pilot materials.

(ii) Materials design and preparation: effectiveness of materials; and teachers', students', and district administrators' reactions to materials.

(iii) Production: quantity and production deadlines for pilot-tested materials; and adequacy of production quality of pilot-tested materials.

(iv) Teacher Educators and teachers: testing and feedback procedures; requests for additional materials; and record-keeping in regard to materials.

(v) Students and parents: educational progress; examination taking skills; and feedback procedures.

2. Curriculum Development

A school curriculum is essentially a plan for the organization of learning activities designed to achieve either an implicit or explicit set of learning objectives. A curriculum indicates what is to be taught, how is to be taught, and when it is to be taught. There are a variety of philosophies behind the curriculum development process but most commonly the process is seen to include not only the formulation of the curriculum plan but also the range of activities needed to implement and evaluate this plan. The process then embraces important functions like translating subject area knowledge into appropriate teaching/learning experiences, designing and preparing instructional materials and aids to guide the teaching/learning experience, and devising ways to facilitate the

teacher's understanding and use of the curriculum.

A new curriculum will often rise or fall according to the appropriateness and quality of its instructional materials. Instructional materials play a major role in determining the direction, content, and methodology of the teaching/learning experience. This is readily apparent in a developing country where too often instructional materials are either in short supply or else totally absent in the classroom. The effects of this are amplified by the presence of untrained teachers, whose lack of knowledge in the subjects they are teaching necessitates an inordinate dependence on whatever instructional materials are available. The importance of instructional materials in the development of primary curriculum in a country like Swaziland takes on a double importance: it is needed to define the new skills, attitudes, and knowledge resulting from the decision to reorient primary education to the needs of the Swazi environment and to help reduce the negative effects of the large number of untrained teachers in the nation's schools.

Another important variable in the curriculum development process is the strategy chosen for dissemination of new curricular aims, methods and materials. The PCU's strategy has two crucial features: one is the time-honored use of pilot schools in the curriculum development process as sources of formative data for the entire process; the other is the system of dissemination which makes use of teacher centers (TIDCs) as focal points for introducing the products of the curriculum development process as well as for recurrent training, monitoring, and evaluation of the implementation of the curriculum (see Annex F). The latter feature takes into account successful experience in other countries, especially the United Kingdom.

The primary curriculum development strategy in Swaziland, which the PCU is charged with developing, seeks to shape appropriate learning experiences for primary school instruction that will lead to realization of a set of Primary School Outcomes published by the MOE in 1976. This set of observable pupil behaviours, some 250 items, was formulated with broad community input (see Annex G for sample outcomes). These outcomes are divided according to achievement in the lower primary (first four years) and upper primary (last three years) levels and to outcomes in three domains: cognitive, affective, and psychomotor. This set of outcomes became the basis for the formulation of a draft National Primary School Curriculum Plan (see Annex A). These two documents provide the policy directions for the curriculum development process. The PCU is responsible for devising instructional objectives, taking into account the

scope and sequence of learning throughout the seven years of primary school. The list of primary school outcomes come under 12 subject area headings: self-learning, siSwati, English, mathematics, science, agriculture, social studies, domestic science, religious knowledge, music, physical education, and arts and crafts. The PCU has grouped these outcomes into four subject areas for implementation:

- Language Arts : English and siSwati.
- Practical Arts : music, physical education, arts and crafts and domestic science.
- Science Related : mathematics, science, and agriculture.
- Cultural Studies: self-learning, religious knowledge, and social studies.

The use of instructional objectives and their subsequent development into learning modules represents a significant departure from the former way of organizing the curriculum. The latter was essentially a tightly-woven "scheme" of work made up of interlocking learning activities. The modular nature of the present design offers the possibility of greater flexibility, as component parts can be revised individually during the pilot stage. Commercial publication for nationwide distribution will follow more conventional formats.

The curriculum development process and its important materials design and preparation component proceed according to the diagram on the following page. The full cycle takes approximately two and a half years although this will be accelerated whenever subject matter, availability of resources and logistical matters permit. As PCU staff members continue to accumulate experience, it is expected that the time requirements for this cycle will be reduced. Improved skills in drafting materials, efficiency in logistics through trial and error, and increasingly effective evaluation and teacher education procedures will accelerate the curriculum development process during the course of the Project.

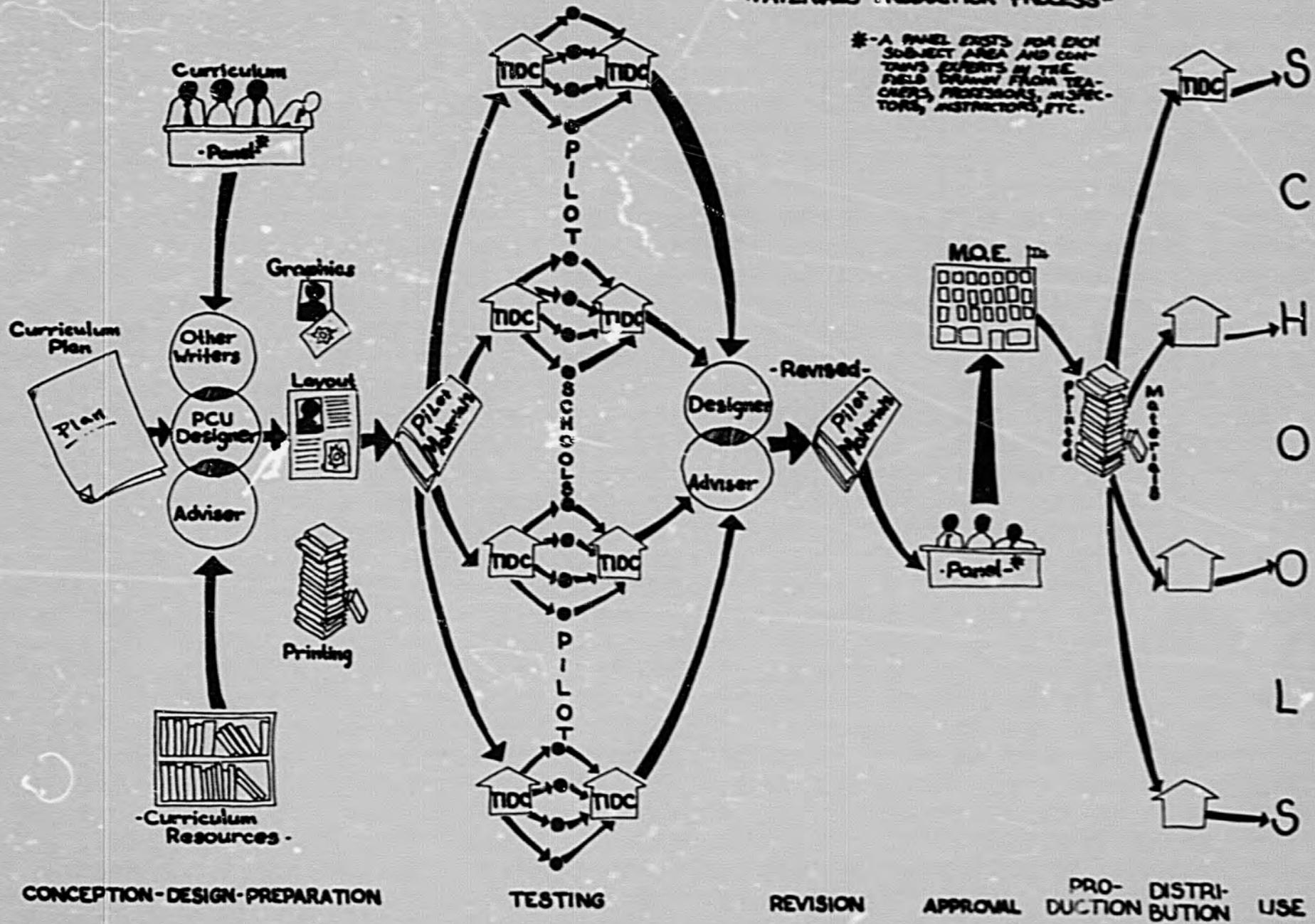
3. Institutional Development

The Project's strategy will rely upon the management's coordination of PCU curriculum development activities with those of other institutions in the education system, namely: (a) the MOE curriculum approval procedures; (b) the three teacher training colleges' (William Pitcher and Nazarene in Manzini and a new one to be established in Shiselweni) preparations of teachers and teacher-trainees to implement the new curricula; (c) the Teacher Innovation and Dissemination Centers' (TIDCs) decentralized control of the materials distri-

- MATERIALS PRODUCTION PROCESS -

*- A PANEL EXISTS FOR EACH SUBJECT AREA AND CONTAINS EXPERTS IN THE FIELD DRAWN FROM TEACHERS, PROFESSORS, INSPECTORS, INSTRUCTORS, ETC.

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CONCEPTION-DESIGN-PREPARATION

TESTING

REVISION

APPROVAL

PRODUCTION

DISTRIBUTION USE

bution and support services; and (d) the MOE's anticipated reform of curriculum development activities in order to integrate those of primary with those of secondary levels.

(a) Beginning early in the second period of the Project, the MOE will review the curriculum approval procedures so that there are three stages of approval: (i) approval of grade level objectives; (ii) approval of first draft materials prior to their pilot testing; and (iii) approval of final piloted and revised materials prior to their evaluation, approval and authorization for mass publication, distribution and use by the MOE.

Given that grade-level objectives have been approved, approval of materials will rest solely on their demonstrated effectiveness in helping students reach those objectives and in accordance with MOE policies.

(b) Teachers will be prepared to use the new materials through collaboration of the teacher education component of the PCU and the William Pitcher Teacher Training College in-service education staff. This staff has been supported since 1973 by SIDA funds and UNESCO experts. The responsibility for supervision and supporting teachers in the classrooms nationwide will be integrated into the broader in-service teacher-training responsibilities of William Pitcher College. This arrangement has been tentatively agreed to by the responsible personnel of the College, MOE and PCU.

(c) The continual preparation, support and supervision of teachers who are testing materials in pilot schools during the life of the Project will be the responsibility of the four Teacher Leaders (one is assigned to the TIDC in each of the four education districts; see Annex H for map). The full-time occupation of these Teacher Leaders in the PCU distribution and teacher education activities will constitute a decentralization of day-to-day responsibility for teacher education and evaluation activities. Nonetheless, these decentralized Teacher Leaders, who work in proximity and cooperation with District Education Officers and Inspectors, will also be responsible to the PCU Teacher Educator in Manzini. Teacher Leaders will continue their own periodic visits to the PCU and receive the regular visits of PCU staff members.

(d) The Third National Development Plan (1978-1982) calls for a coordination of primary and secondary curriculum development efforts in order to "ensure a more homogeneous approach to curriculum development" (see Annex I, p. 6).

The GOS foresees a revision of the junior secondary course of study to provide a continuation of the practical orientation of the new primary school curriculum. A 10-year cycle of basic education is planned. The PCU staff, under direction from management, will work throughout the life of the Project to facilitate this integration. The PCU management, will work in harmony with the management of the UNESCO-funded Secondary Curriculum Unit to advise the MOE on the structural arrangement for curriculum development without compromising the purpose and outputs of PCU.

4. Staff Development

The role of the PCU staff has changed during the fourth year and will continue to change in the new phase. Interaction between Swazi staff and U.S. technical advisors has become more collaborative with a view to making materials development less of a start-to-finish individual activity and more of a team effort involving different levels of expertise, subject area competence, and differentiation of functions. This approach will make possible more systematic use of people outside the PCU in the design and preparation process (e.g., faculty from UBS and the teacher training colleges). As a substantial change, more efficient use will be made of materials designed in other African countries that may be either wholly or partially appropriate for adaptation in Swaziland. There are five elements in the staff development strategy for Period Two: (2) participant training, (b) use of outside consultants, (c) involvement of teachers in the preparation of materials, (d) support from the Curriculum Resource Center, and (e) affiliation with the African Curriculum Organization.

(a) The Project's purpose of creating a national capability for the development of primary school curriculum will require a substantial amount of participant training during the second period of the Project, inasmuch as primary curriculum specialists do not exist in Swaziland (other than those trained during Period One).

Extensive use of in-country and on-the-job training is planned for Period Two. Courses will be specially tailored to the needs of PCU staff, and the training schedule will take into account the constraints of time and effort required by the immediate output objectives of materials production so as not to delay this activity. The in-country and on-the-job training will be reinforced, when appropriate, with training in the U.S. or in another African country. Short visits of Swazi PCU staff to curriculum units in other African

countries will be undertaken when judged appropriate.

The contractor will undertake to organize a comprehensive scheme of training for 17 PCU staff members that will lead toward degree certification and involve a mix of in-country and overseas study. During the second period, 13 persons will begin studies leading to a B.A. degree. This will include 7 Designers, 1 Teacher Educator, 1 Evaluator, and 4 Teacher Leaders. Their program of study will include 2 years of traditional teacher training, 2 years of specialized in-country training (24 hours credit) and 1 year in the United States (45 hours credit). Also, 4 PCU staff members (3 Designers and 1 Teacher Educator) will continue training that began in the first period of the Project. They will undertake specialized in-country studies at the Swaziland campus of the University of Botswana and Swaziland (UBS) leading to an M.A. degree.

The in-country training scheme involves a cooperative venture between UBS and Eastern Michigan University (EMU), the details of which are now being finalized. EMU is making provision for the transfer of UBS credit to an EMU degree, arrangements that 4-6 hours of EMU credit can be granted for PCU work-related experience, and provisions that a PCU staff member working for a B.A. degree can earn up to 30 credits by correspondence.

During the second period of the Project, it is planned that 4 individuals who began training in the first period will either complete or nearly complete requirements for an M.A. degree in education at the Swaziland campus of UBS (see Annex P).

PCU technical advisors will teach graduate level courses offered under the academic jurisdiction of UBS. These courses will be sequenced so as not to take PCU technical advisors away beyond a minimal amount from their normal daily functions.

In order to make a wider contribution to the manpower requirements of the education sector, to create a pool of individuals with training in curriculum development for possible future employment, and to ensure an optimal use of resources, the undergraduate courses taught by PCU technical advisors (a continuation of Period One activities) will be open to other participants. The MOE will be entitled to nominate two other participants for each new person to be nominated and trained for PCU. These individuals may be drawn from any other educational institution in the country, including the MOE, the teacher training colleges, the school inspectorate, and in-service units. However, they will not be

eligible for overseas training under the Project's auspices.

(b) A total of 48 person-months of consultant time is foreseen for the second period of the Project. This is required for both short-term expertise and the interaction effects with regular PCU staff who are responsible for developing the conceptual framework, teacher's guides, and children's materials for a sequential, multi-grade curriculum. The short-term consultants will be used either to provide specialized expertise in a subject area or to help in the writing or "fleshing out" of materials (see Annex N for examples of consultants). The consultants are a necessary project component in order to achieve the levels of outputs expected at the end of Period Two while at the same time guaranteeing up-to-date curriculum design and preparation inputs from the U.S., Africa and other countries.

The contractor will recruit and hire consultants with the needed subject area background and level of expertise for short-term assignments. This may include an initial assignment of 8-10 weeks and subsequent assignments in later years as deemed necessary.

Consultants will be recruited from three sources: curriculum specialists in the U.S.; curriculum specialists in other African countries, for example, an appropriate individual from IPAR in the Cameroons, the Kenya Institute of Education, or the curriculum units in Ghana and Nigeria; or local sources of subject area expertise which would include lecturers from UBS and the William Pitcher and Nazarene Teacher Training Colleges.

(c) As the capacity of the staff develops during the second period, the PCU will experiment with ways to involve MOE-selected educators in the preparation of instructional materials as a multi-disciplined team effort. In 1980, the PCU and a selected Senior Inspector will identify a group of 5-8 competent primary educators to take part in a collaborative materials development activity. The educators will attend workshops dealing with the overview of PCU materials development and specific materials writing skills. During the workshops, they will be assigned a material to work on and receive guidance from PCU staff in their initial efforts. The material will be completed after they have returned to their respective posts. If the experiment proves to be successful, these activities can be continued or even multiplied.

The PCU will also negotiate with the William Pitcher and Nazarene Colleges to give credit for a pilot group of second-year teacher trainees to work as materials prepa-

ration assistants, either after school or during school holidays, and to help PCU designers in the writing of materials.

(d) With the new emphasis on available African materials, a Curriculum Resource Center will be brought into operation early in the second period of the Project. (A feasibility study for establishing such a unit was undertaken by a Project consultant during Period One). The Center will be built and furnished by the World Bank and the curriculum materials and supplies funded by AID. The unit is intended to provide instructional resource support to guide the materials design and preparation activities of the PCU as well as to backstop the teacher education functions of the TIDCs. The Center will collect instructional materials being prepared and used in African and other countries in order to make possible the appropriate adaptation of successful materials in Swaziland. In this manner, the Curriculum Resource Center will play a specialized function relating to curriculum development. The identification and adaptation of these materials will speed up the production, distribution and use of new curriculum materials. Additionally, it will address the wider shortage of instructional resources in Swaziland and will thus assist the teacher training colleges and UBS where the general library facilities are found to be inadequate.

A total of \$70,000 is allocated for the acquisition of an estimated 7,000 new resource materials (new books and nonprint items). The GOS will provide for recurrent acquisitions of these materials from 1983 onwards.

Beginning in 1980, the Curriculum Resource Center will undertake to identify and collect resources made from indigenous materials that have been produced by various educational projects in Swaziland and other countries. The indigenous resource material will serve as models for the development by teachers of instructional aids during in-service workshops at the TIDCs during the PCU materials distribution process.

(e) In 1979, the PCU will become affiliated with the African Curriculum Organization whose headquarters are in Ibadan, Nigeria. This affiliation is necessary in order to make the primary curriculum development activities of Swaziland a part of the larger African network of curriculum developers and to provide a source of instructional materials produced elsewhere in Africa that could be adapted for use in Swaziland.

To assist in the transition to the GOS budgeting the necessary funds AID will fund the annual membership fees of approximately \$5,750 in 1979/80. In 1980/81 and

1981/82 AID will pay half and the GOS will pay the other half. In 1982/83 the GOS will assume full responsibility for the annual membership fee and for any additional years they may wish to maintain their affiliation with this organization.

III. PROJECT ANALYSES

This project is the continuation of the Swaziland Primary Curriculum Development Project that has been active since January 1975. This second period is proposed to continue toward the same goal and purpose as the previous one, with limited revisions in expected outputs and planned inputs. Much of the following analysis is derived from external and internal reports on Period One (see Annexes E, F and G), and on subsequent discussions between PCU, MOE and AID/Swaziland on how to improve the Project during its second period (1979-1983).

A. Economic Analysis

This analysis of the economic viability of the PCU project attempts to demonstrate the discrete improvement in the productivity of the educational system as a major project benefit. In addition, a discussion is included on other, non-quantified benefits and the recurrent budget implications of changes in the school repeater and dropout rates. The analysis has quantified the economic benefits where possible but has been forced to rely heavily on narrative explanation of expected benefits. Data on the education sector in Swaziland is of a general nature and the available information does not provide the detail needed to fully quantify the economic benefits of this project. Additionally, data on comparative productivity rates and earning power are lacking, thereby precluding a "with or without the project" analysis.

Project Benefits

One of the project's basic assumption is that there will be a discrete and distinct improvement in the quality of the educational system. The following analysis is designed to simply demonstrate the "higher productivity" of the educational system as a consequence of the PCU project.

1. Underlying Assumptions of Analysis

Essentially there are two events open to the school age population other than attendance or non attendance. The individual will be exposed or not exposed to the benefits of the PCU project. For the purposes of this exercise it is assumed that without curriculum reform, one

year of school attendance by an individual generates one unit of educational value, a "benchmark measure". The system will generate seven units of educational value per student when the student attends seven consecutive years of primary school. The units of educational value to the student are equivalent to the units of educational value generated by the system.

It is assumed that the PCU project increases the relevance and thus the productivity of the educational system. The discrete improvement in the quality of education, the value of its output, can be represented by the use of a simple weighing system. The weighing system is designed to differentiate between the so-called productivity of the new system attributable to the output of the PCU project. Technicians indicate that the gain to the student of exposure to PCU materials rises significantly in the first year. The rate of gain in each subsequent year declines as the cumulative gain grows. For these reasons it is assumed that one year of exposure to PCU materials generates 1.4 units of educational credit (as opposed to 1.0 units without the PCU reform). A second successive year of exposure generates 1.55 units of educational value. Exposure throughout primary school generates a 2.0 educational value for the Standard V (seven years) for each student. Thus, the gain to the student of exposure to PCU materials and methods generates an educational value in year seven that is twice the value to the non-exposed student. Whether differences are greater or larger than posed by the above weighing system is less significant than the demonstration of the gain to the individual and the school age population of a greater productivity of the educational system, in this case, due to the implementation of the PCU project.

2. Table 1 Model

Table 1 presents a model of the estimated increase in the value of output of the educational system assuming that the primary curriculum unit brings about a discrete and increasing educational gain to students with cumulative exposure. In year one there are 18.4 thousand students in Grade 1. No exposure to the PCU output generates 18.4 thousand units of educational value. Exposure to PCU materials, training and the like generate a greater educational value, defined for purposes of this analysis (and based upon above stated assumptions) as 25.7 thousand units of educational value. There are only 17.1 thousand students

in Grade II due to the high drop out rate. Without exposure to PCU output the cumulative units of educational value increase but the annual increase declines. Successive exposure to the PCU system raises the annual and cumulative units of educational value generated by the system (and received by the students) even as the dropout rate remains constant. Quantified PCU gains would be greater to the extent that more relevant materials modestly reduce the dropout rate. The following tabulation summarizes the units of educational value generated under alternative assumptions.

(Thousands)

No exposure to PCU	
no dropouts	128.5
with dropouts	106.4
With exposure to PCU	
no dropouts	225.8
with dropouts	183.9

3. Table II Model

Table II builds upon the previous stated assumptions and analysis in order to assess the educational impact of PCU. In this instance table models A, B and C assume a constant student population to isolate the consequences of varying exposure to the PCU system. Model A assumes the pre-PCU curriculum, equivalent to one unit of educational value for each student year. In this case the system's output of educational value is estimated at 631 thousand units. Model C, assuming a fully in-place and operational PCU, generates 1082 thousand units of educational value. During the transition from the pre-PCU curriculum and methodology to the Post-PCU situation, reflected in Model C, the system generates an intermediate educational value of 892 thousand units. These models demonstrate the greater "ordinal" productivity ranking of the educational system attributable to the operation of the PCU. In fact, the gains from the PCU will be substantially greater if the primary school constraint is removed by assuming projected rather than a static population assumption, i.e. the 1972 to 1977 student structure. The units of educational value during the transition period jumps to 1293 thousand in Model D which assumes the projected 1980 to 1986 primary school population structure as presented in the Ministry of Education, a financial and statistical analysis of Swaziland's education system.

4. Other Gains of the Enhanced Productivity of the Educational System

The enhanced productivity of the primary school educational system as demonstrated in the previous section reflects itself in the economic and development processes. There is the hope that a more relevant primary curriculum and educational system will reduce the dropout rate. Income and productivity potential, of "saved" dropouts will be greater. The ability of primary school attendees exposed to the PCU system - projected to rise from 23,000 in 1980 to 126,000 in 1985 --- to gain from eventual exposure to secondary and subsequent levels of education will grow along with their potential for greater productivity and higher incomes. However, the gain to society and the economy of the full-capture of the enhanced productivity of labor attributable to the discrete improvement in the relevance and effectiveness of the educational system will partially depend on non-educational determinants such as the performance and prospects of the economy.

There are "other" benefits to dropouts as well as primary school graduates flowing from exposure to the PCU system, particularly to students from farm households. The PCU system is designed to increase the awareness and capacity of the student to deal with real world opportunities and constraints. Specifically, increasing the student's knowledge and appreciation of such economic functions as budgeting will enhance his capacity to advance his economic well being relative to what it would otherwise be. An improvement in the capacity of the individual to manage his economic affairs benefits himself, his family and society. Improving the economic awareness and economic management capacity of an increasing share of the population through exposure to the PCU system, in particular the near subsistence element, serves to enhance the "well being" of the society as well as the development potential of the economy.

The importance of the PCU Project to an Economy in the Midst of a Process of Modernization

Swaziland is a country undergoing significant change in its quest for modernization and economic development. Gross National Product in current prices is reported to have increased from E57 million in 1969 to a reported E152 million in 1974, a per annum growth rate of approximately 12 percent. Real growth is estimated at seven percent per annum over the past ten years. The structure of production altered somewhat

as the share of value added by the agricultural sector rose from 19 percent in 1968/69 to 31 percent in 1976/77. Over this same time span, manufacturing's share of GDP increased from 13 to 16 percent. Swaziland's increasing financial strength reflects itself in the emergence of a budget surplus to finance development expenditures and a build-up of official reserves. Government deposits with the banking system also rose substantially. Official reserves increased from E40 million at the end of 1975 to over E97 million at the end of 1979.

Despite these great strides, the process of change and modernization has been cramped by the lack of skilled workers and the difficulty of spreading gains from urban growth poles to the rural poor. There is an increasing concern with the relevance of the educational system, its capacity to undergo continuing change in an increasingly more sophisticated world, an underpinning to the system's relevance to the development process.

The proposed project is viewed as a necessary ingredient to assure the increasing and continuing relevance of the educational system to the needs of a progressive, rapidly developing nation. The project's concern with functional literacy is particularly important in our effort to upgrade the awareness and life-skills of a significant share of the population burdened by the lack of an adequate education, the primary school dropouts. Table III focuses on the number of beneficiaries in one year, 1985, recognizing that there is a cumulative increase with each passing year. The burden of funding future "gainers" (outside the time frame of this project) shifts to the GOS implying significant leverage to the initial USAID investment activity.

Under the present system, there is insufficient emphasis on self learning skills, important for those who leave the formal educational system after primary school as well as those who continue. The new curriculum will be based on the expected activities of students after primary school and will be supported by appropriate teaching strategies and adequate teacher/student activity materials. Therefore, the effectiveness of primary education will be enhanced as school leavers are better prepared to: (1) enter the secondary or other post primary education system by virtue of their exposure to a curriculum directly related to and based on the expected roles they will play in the economic system, and (2) enter into productive activity in the event that a continued education

Table III

STRUCTURE OF PRIMARY SCHOOL POPULATION IN
1985 BY GRADE AND PROBABLE DROP-OUTS

(000's)

	<u>Numbers</u>	<u>Drop-Outs</u>	<u>Non Drop Outs</u>
Grade I	27.2	1.9	25.3
Grade II	23.2	0.5	22.7
Std. I	22.3	1.7	20.6
Std. II	20.2	1.4	18.8
Std. III	17.9	1.4	16.5
Std. IV	15.6	0.9	14.7
Std. V	15.7	2.3	13.4
TOTAL	141.2	10.10	131.1

is not possible. In the latter case, students who leave the education system after primary school will be better equipped to assume productive responsibilities should they remain in the rural sector and will not be caught in the unfortunate, but all too typical, dilemma of possessing theoretical knowledge that is not easily adapted to the rural/agricultural context. Additionally, primary leavers will be better equipped for job training as a result of the practical education base they will bring to prospective employers.

Economic Gains of the Proposed Project

Several efficiencies are expected as a result of the development of the new curriculum. Local development of the curriculum provides relevance to the Swazi context which, in turn, affects student motivation and achievement. In addition to subject content, the training of teachers in the use of the new curriculum, provision of student workbooks and teacher's guides make the system more efficient. The ramifications of these efficiencies can be illustrated as follows:

1. Estimates show that as many as 15 percent of all primary students are repeaters and that the high repetition rate costs the GOS approximately E350,000 yearly in recurrent expenditures. The new curriculum and teaching methodology will provide for evaluation of student achievement so that remedial action can be taken early. Therefore, to the extent that repetition is caused by problems related to the relevance of course subject matter and teaching methods, a significant reduction in the repetition rate should be possible.

2. As in many developing countries, school dropouts are frequent. The highest percentage of dropouts occur in the first and sixth year of school. In Swaziland, the high sixth grade dropout rate is attributed to the fact that poorer students are failed in order that results on the primary leaving exam in year seven will be higher. While the reasons for dropping out in the first year cannot be so neatly identified, it is clearly wasteful of resources since those who drop out in the first or second year do not possess lasting literacy or numeracy. The increased relevance of the curriculum will have pronounced effects on student motivation during the early school years and should result in lower dropout rates. This will not only result in GOS cost savings but will directly effect students' abilities to translate what they learn into productive and beneficial activities.

3. Since primary school graduates form the bulk of future primary teachers, their exposure to the revised curriculum will create a self-sustaining system that will enhance their abilities as teachers. In addition, there is the cost effectiveness of developing a fully effective Primary Curriculum Unit. This is assured by the proposed balance between GOS staff participation and outside technical assistance and assures continuity after the withdrawal of external assistance. Also, the innovative training arrangements worked out by the contractor and the GOS permits PCU staff to credit on the job experience and correspondence course-work toward a university degree, thereby reducing the time and expense of overseas academic training. This approach is cost effective in that the objective of creating a capable PCU staff is attained through a combination of programs at a lower cost than full-time academic training.

B. Social Soundness Analysis

1. Social Cultural Compatibility

The primary education system of Swaziland consists of about 105,000 students, taught by about 2,300 teachers, in some 430 primary schools located throughout the country. Thus 20 percent of the population is in primary schooling. Current GOS/donor projects are improving the system both in number and quality of teachers and facilities. This project supports these efforts with an improved curriculum. The GOS projects that by 1985 all children will have access to improved primary education. About ninety (90%) percent of the population of Swaziland is rural, and especially for this rural population, primary education forms a key element of their development. With the Swazi dual "modern/traditional" authority structure, the school system represents a strong modernizing force and a bridge between the two. A balanced cultural heritage is maintained through informal tribal communication and social interaction, and is reinforced in the new curriculum. A relatively small number of "Swazi Nation" schools, perhaps ten percent, began as community schools but are now absorbed into the formal curriculum structure and comply with Ministry of Education policy and guidelines. The local formation of these schools indicates a strong commitment on the part of rural population, especially since most of these schools remain locally financed. Curriculum materials developed under this project will be supplied to all schools on an equal basis.

Popular as well as professional Swazi participation in the determination of content of the primary curriculum performs an essential safeguard function: through this participation, PCU assures that "new" curriculum is introduced at a pace and degree necessary to support Swaziland's modernization process, while reinforcing the cultural values and authority structures which underpin the Swazi Nation. Care has been taken to build this "balancing" participation into the PCU materials research, writing, testing and introduction process. Based on the success of the first period of this project, we have reason to believe the project is socially and culturally compatible. Through the earlier establishment of "Primary School Outcomes" (see section II.A. p. 5) rural and urban families have had an opportunity to express themselves on curriculum content. Professional teacher, businessman and developer involvement in the "Outcomes", and through their representatives on curriculum approval panels, assures responsive yet culturally sensitive Swazi leadership in curriculum development. Student, teacher and community acceptance of new materials at sixteen (16) broadly representative pilot schools has been enthusiastic. No problem is envisioned as the new materials are spread from the pilot schools to nation-

wide use. In the initial stages, materials are to be introduced to rural communities through social celebrations with full local area leadership and recognition. The new established Teacher Innovation and Distribution Centers (TIDCs) (see Annex F) will play a key role in this introduction and acceptance process.

2. The Rural Poor and "Basic Human Needs"

The population of Swaziland, as in other African countries, is divided between modern and traditional sectors. Only ten percent of the Swazi population live in communities of 10,000 or more people. This means that 90 percent of the population live in the traditional socio-economic circumstances of rural areas. Most of these people engage in subsistence agriculture with little or no income from cash crops. The average per capita income is about \$70 per year. As such, the vast majority of the Swazi population could be classified as living in "absolute" poverty, according to current definitions.

The present direction of development assistance policy being followed by a number of agencies, including AID, seeks to find more direct solutions to the needs of the rural poor majority. AID's commitment to this direction is predicated on a Congressional Mandate and is being implemented in terms of a "basic human needs" approach to development. This approach stresses direct assistance to ensure minimum levels of an individual's food, health shelter, education and employment. It seeks to extend to the poor access to essential social services, including health care, sanitation, clean water, and opportunities for basic education. The basic education opportunities contained in the "basic human needs" approach might be conceptualized according to three criteria: clientele - basic education seeks to provide opportunities for people who are either being inadequately served by schools or not served at all; content - basic education promotes learning that is functionally-oriented and seeks to develop knowledge and skills related to nutrition, health, productive activity, civic participation, cultural appreciation, and literacy and numeracy; and delivery - basic education is delivered only through primary schools and through the range of non-formal education activities.

The design of this project is completely consistent with the "basic human needs" approach. The project contributes to a larger Swaziland commitment to redirect primary education toward content that is practical and related to the social, economic, and cultural possibilities of Swazi life; appropriately, this effort has a largely rural and functional bias. The design and use of the curricular materials being provided through the project appear likely to encourage a greater participation of both pupils and teachers in the education process and in

productive community activity. The curriculum development process especially recognizes that primary content must prepare the broad majority "for life", as it will be the only formal education the majority will receive for the foreseeable future.

The choice of primary education as a means of delivery of basic education is appropriate, given the present structure of school enrollment and the GOS's intentions to attain nationwide primary education by 1985. The rate of expansion of primary enrollment in recent years and the direction and magnitude of other current initiatives seem to make this goal realistic; some people believe that it may be achieved before 1985. The important aspect of this expansion is the sensitivity to social demand which will lead to the widening of access to minimum education opportunities for the rural poor. In the future formal education will be complemented by non-formal Rural Education Centers.

3. Beneficiaries

An appraisal of the social benefits associated with the outcomes of this project runs into difficulty when making an absolute distinction between direct and indirect beneficiaries. The purpose of the continuation of this project is to complete development of the institutionalized, national capacity for producing primary school curricula. This suggests that the direct beneficiaries would be the educational personnel who would make up this institution, and the indirect beneficiaries would be the primary school pupils who eventually benefit from a new and more relevant curriculum. If a curriculum development project were designed analogously to the model of a traditional teacher training project such a direct/indirect distinction would be clear cut. But the design of this project also provides for the delivery to primary schools of instructional materials that have been designed and produced locally. These materials are used in the pilot schools as soon as they are produced, with a nationwide level of dissemination foreseen during the lifetime of the project. This strategy identifies the direct beneficiaries of the project as the pupils of primary schools. From either point of view, it is clear that the curriculum development capacity being created by the project will have a direct impact on both the educational personnel and the primary school population.

In 1976, the primary school enrollment of 92,721 pupils was made up of about 68 percent from the 6-12 age group population - a figure considerably better than the average of Africa as a whole. According to GOS projections, by 1986, if nationwide primary education becomes a reality, there would be about 141,000 pupils enrolled in primary school. Applying

the present modern/traditional ratio in the absence of more precise data, this would mean that about 127,000 children living in rural areas would be affected by the project's activities and be the major beneficiaries.

4. Spread Effects

In discussing the spread effect of primary education, four factors are worth highlighting. One, primary education touches nearly every family in Swaziland, either through the nuclear or the extended family. The text materials and the students studying them will be at home daily and they will be interacting constantly with the older population; based on the experience in the pilot schools, this will be a positive interaction to the benefit to all Swazis.

The present work of the Peace Corps with the Rural Education Centers (RECs) indicates an active interest by older people in further knowledge, literacy and skills training; and AID proposed project in REC development beginning in 1981 will build on their work and the spin-offs from this project, for continued non-formal education.

Two, the revised curriculum emphasizes basic life skills and the "ripple effect" of application of mathematics, for example, to household problems of daily buying or selling will gradually improve both the immediate individual circumstances and open possibilities for cash crop transactions and small entrepreneurial action. (For example, a local girl who knits shawls merely names whatever price comes to mind since she is unable to add material cost, labor value and profit).

Three, even those who do "dropout" before seven years of schooling (estimated as high as 40 percent) will have learned some elementary skills necessary to live in a gradually more complex economy.

Four, with primary education, time is both the greatest asset and the overriding problem. Time permits the evolutionary growth process to proceed "normally" and for a smooth transition to be made to new life demands, yet modern society demands more rapid change. The absorption of the primary student into the full economy is years away but by emphasizing basic life skills they can begin to understand and work with the ideas and methods of economic society.

5. Equity

With the student as direct beneficiary, the distribution of project benefits is ideal, given the GOS goal of universal primary education. All of the three types of schools, ("maintained"-

GOS schools; "aided" - community schools given GOS financial assistance; and "non-aided" - private or community schools not given government financial assistance), will be treated equally under MOE materials distribution policy. In fact the most remote student will have access to the same materials and teachers as the more convenient urban dwellers.

If one presses for PCU staff as direct beneficiaries, equity lies in equal opportunity for selection since post-selection advantages of broader experience and possible advanced training are obvious. Experience to date reflects well on PCU and the MOE with staff representing a balance of men and women at the professional level, as well as a geographic diversity.

6. In summary the PCU project is mutually compatible with the youth and adult population and their goals and values; and it contains the promise of spreading both horizontally in effect and vertically in time.

Role of Women

Women in Swaziland form the base upon which most educational and much economic life is built. Women will provide a vital and integral role in the development, dissemination, and use of the revised primary curriculum as well as sharing in the benefits of the project. Currently, six of the fifteen professional staff members of the PCU are women, giving them direct access to a process effecting both other professionals in the teaching field and the students who will be exposed to the new subject matter. The PCU staff as a whole are sensitive to forming curriculum which, over time, changes the subtle bias against women in Swazi culture.

Women constitute 78 percent of the primary school teachers; this group will benefit from the in-service training that will upgrade their teaching skills and will also serve to spread the benefits of the revised curriculum to the ultimate target population - the primary students (of whom 49 percent are female). The last linkage is a crucial one in the process since it is the teachers who will help evaluate the revised curriculum and who, through their effectiveness as teachers, will assure that the students gain the maximum benefits.

The role of women in the development process will be enhanced in non-professional areas as well. Women serve as the effective head of household in many cases due to the absence of males who are employed in the Republic of South Africa or who find modern sector employment in parts of Swaziland distant from the home area. The new primary curriculum will give those

primary leavers who do not continue their formal education a more relevant base of knowledge for the important decisions concerning household affairs. In the years to come the role of rural women decision makers will become critical to the success of GOS programs in health, nutrition, and agricultural development, a role that will be more effectively played by women who have been exposed to the "basic life skills" that will be part of the revised primary curriculum.

C. Technical Feasibility

This section of analysis will cover (1) technical aspects of the Project that have worked well in Period One and will therefore be continued, (2) revisions proposed in order to resolve technical problems incurred during Period One, and (3) proposed plans for the transition during this project period from pilot-school to nationwide implementation of the curriculum.

1. Continuations

The basic curriculum development methodology proposed for Period One still appears very suitable and, in many respects, deficiencies in Project operations to date have appeared not because the plan was faulty but because for various reasons it has not been fully and properly implemented. The methodology that will be continued during Period Two is that of deriving instructional objectives from national educational goals and providing lessons and materials that meet these objectives. Lessons are incorporated into modules that, in turn, are integrated into school term-length and year-length sets. This methodology is theoretically sound, has been demonstrated effectively under conditions similar to those in Swaziland, and has been accepted to date by the MOE, the education community and the PCU.

The pilot-testing of materials in 16 selected schools throughout the country has proven to be a feasible means of introducing the materials and gathering information for their revisions. Pilot-testing arrangements allow for availability of "subjects" for various evaluation purposes and flexibility in testing exercises. Pilot-testing has also freed the PCU from facing the logistical problems of nationwide implementation until a time when the MOE and PCU are prepared to do so.

Although the actual work force requirements of the PCU will be reduced after the initial materials for grades 1-7 have been published and distributed, the surplus staff can be easily absorbed by the understaffed MOE. In fact, as often happens in developing countries, some of the trained staff may be drawn away from the PCU even during the life of the Project. The Project staff will therefore be prepared to offer courses to as many students as are qualified, anticipating their usefulness to intermittent PCU activities such as curriculum development workshops.

Distribution of pilot-test materials is facilitated through the establishment of four Teacher Innovation and Dissemination Centers (TIDCs) in the Manzini, Lubombo, Shiselweni

and Hhohho Districts. This arrangement, although only now at the point where the TIDCs are built and Teacher Leaders assigned to them, is planned as a first step in promoting a "spread effect." The Centers will serve as materials distribution and teacher education centers in outlying areas of the country and as reproducible models of similar centers in other areas to be built by the GOS in future years. Difficulties experienced in transporting people and supplies between the Centers and the PCU in Manzini and between the Centers and the schools they serve are now being studied and plans implemented to solve the problem. It is understood that the distribution of pilot-test materials will be a continuing function of the teacher education component of the Project. The additional input of another 8 vehicles from the World Bank will undoubtedly assist in easing some of the logistical problems.

Training of Swazis to staff the PCU is taking place through both on-the-job and participant training programs. On-the-job training is still the best method of preparing individuals to manage curriculum development activities while, at the same time, a functioning system is being installed. Problems have arisen during Period One because the on-the-job training strategy was inappropriate but the effects of the on-the-job training are expected to improve noticeably (see following section on proposed revisions).

Participant training was planned to take place both in Swaziland and the U.S. under the auspices of the U.S. contractor (EMU). Training in the U.S. of PCU staff members earning Bachelor's and Master's degrees is under way, although its commencement was delayed (see Implementation Schedule, Annex J).

It is too soon to measure the payoff to the Project of individuals who have had participant training overseas. In any case, it is necessary to upgrade staff members through degree and certificate-granting programs to raise the professional level of the PCU. No certificates or degrees in primary curriculum development are presently offered in Swaziland.

The in-country participant training proposed in the original plan (see PROP, Annex B, p. 29) has not been fully implemented because of the early developmental problems associated with PCU and the insufficient time for U.S. advisors to conduct courses. This situation, however, will be remedied by the increase in U.S. technical assistance and the advisors' emphasis placed on this vital component. In-country training possibilities will be increased since the absence in the PCU of staff members overseas had created great gaps in human resources available to the PCU (see following section on proposed revisions).

PCU facilities and commodities are in place and adequate, except as noted in the following sections calling for some additional inputs.

2. Revisions

Revisions proposed to strengthen the Project are related to three perceived areas of weakness: the curriculum design and approval process, staff training, and manpower. The design and approval process will be augmented and strengthened in two ways. First, periodic workshops held by the PCU for teachers, district administrators and teacher training personnel throughout the country will be scheduled at appropriate times in the development of each grade level curriculum. These will insure the broad participation of educators in the development process and increase the manpower available to design curricula and write materials. Second, the approval system for curricula and materials procedures within the MOE will be simplified, agreed upon by all parties involved, and implemented (see section II.C.3).

Staff training activities will be increased. First, the Curriculum Resource Center will be augmented in order that materials can be solicited from other African nations, the U.S. and elsewhere, for adaptation to Swaziland and for use in designing Swazi materials. Having access to these materials is expected to be a significant support to the PCU staff. Second, the U.S. supplied technical staff will be increased from 6 to 9 and will include five primary curriculum designers with relevant subject-matter specialization (e.g. language arts and math). The role of the U.S. advisors will change from that of "on call" editors to one of active collaboration, demonstration and teaching, especially in the early years of Period Two. Finally, participant training activities will shift in balance over the life of the Project from U.S. training to in-country and on-the-job training. There will be (i) increased opportunities for academic courses and credit for on-the-job training through the University of Botswana and Swaziland, (ii) courses offered by the U.S. staff at PCU with credit available at a U.S. university, and (iii) correspondence courses through that university, e.g. EMU (see Annex P). Courses will be offered on the students' own time (e.g. at night) so as not to detract from their productive work time at the PCU.

In addition, PCU staff members, through Swaziland's membership in the African Curriculum Organization, will have opportunities to visit other curriculum development programs in Africa and to attend training workshops and seminars elsewhere on the continent, a GOS expense.

Current manpower shortages will be reduced through the addition of 12 Swazi professional staff and 3 U.S.-provided advisors (preference for at least 2 to be qualified TCNs from an African country). The increase in U.S.-provided advisors is justified for the following reasons: (i) the dimensions and the time required for the task of developing a primary school curriculum -- both in terms of the training requirements for creating an institutional capacity and the output function of materials production -- was underestimated in the PROP for the first period of the Project. The total number of Swazi professionals and T.A. advisors needed for such an effort was unrealistically low. The additional advisor posts are needed to correct this understaffing, interact with an increase in Swazi staff, and make up for the resulting shortfalls of activity during Period One; (ii) experienced gained during the first period of the Project demonstrate the need for full-time curriculum specialists in subject areas to work collaboratively with Swazi curriculum designers on a day-to-day basis; and (iii) additional advisors are needed in order to implement the participant training component of the Project. During Period Two, the nature of this training will become more work-related and more in-country and on-the-job oriented. The provision of a total of 9 U.S.-funded advisors will be part of a contractual agreement with a U.S. university (i.e. EMU, see Annex D). In addition, staff members will be more productive as a result of augmented training activities. Finally, the periodic design workshops involving administrators, Teacher Educators and teachers will increase the pool of available short-term designers, as well as contribute to the large task of familiarizing the education community with the new curricula.

3. Transition Period

The transition from pilot-school testing to nationwide implementation of the curriculum will commence in Period Two starting in approximately January 1980.

This transition will entail commercial publication of materials, distribution of materials, and, throughout and after the Project, their maintenance and revision.

The first project plan (see PROP, Annex B, pp. 36-38) calls for GOS funds to cover publication costs for the nationwide distribution of curriculum materials. Funds for publication of materials in 1979 for Grade 1 are being provided by IBRD. The GOS has budgeted funds for 1980 for Grade 2 materials and arrangements between the GOS and IBRD are now being finalized for sharing curriculum materials production costs for nationwide distribution for the years 1981-83.

Although a materials distribution plan will be worked out in detail by the PCU staff by October 1979, it will be revised in June 1980 and throughout the Project on the basis of the January 1980 introduction of Grade 1 science and siSwati materials. The basic arrangement will be as follows: primary school headmasters, who are presently budgeted for annual trips to a book store to pick up materials, will instead be routed to the TIDC in their respective districts for materials. The publisher will deliver materials directly to these four Centers.

The resupplying of materials will be done in conjunction with the administrative arrangements of the TIDCs and the District Education Offices to which they are attached, and, when convenient, with the in-service teacher training activities sponsored by the MOE through teacher training colleges. These arrangements will have to be worked out in detail by the PCU as logistical problems are tackled.

The mid-project evaluation in 1981 will provide planning and budgeting information about the 1980 and 1981 trial-run of materials distribution for a continuous implementation system which is to be installed by the MOE.

D. Administrative Feasibility

This section of analysis will cover (1) the administrative components of the Project that have proven effective and will be continued, (2) revisions in the plan proposed to solve administrative problems, and (3) organization charts of the PCU and its relationship to the MOE.

1. The area of most difficulty during Period One has been administration. Nonetheless, PCU management has been developing and assuming a greater and more responsible leadership role. The responsible administrator for the PCU is the Acting Director (Swazi) who works in close collaboration with the EMU Chief of Party. This leadership will continue when the PCU Director returns from training at EMU.

Also, the differentiated functions of the PCU staff into materials design and preparation, production, evaluation, and teacher education remain operable but with the provision that the Acting Director/Director and Chief of Party take on a more explicit management function, coordinating the activities of these four other components.

2. Significant revisions have occurred and others are proposed with respect to the PCU and MOE administrative arrangements in order to overcome what has appeared to be a lack of project leadership and inadequate MOE support.

(a) As a covenant to the new Project Agreement, the GOS will establish 14 new professional posts and 9 new support staff posts at the PCU.

This accomplishment will demonstrate the GOS's commitment to the continuation of the Project and the MOE's ability to procure the necessary resources. Posts assigned for professional staff will lead toward a reduction of manpower shortages at this level. The assignment of permanent posts to staff members now working on a temporary status should reduce the low morale of those who have been working to date under insecure employment conditions, thus creating problems for the Project as a whole.

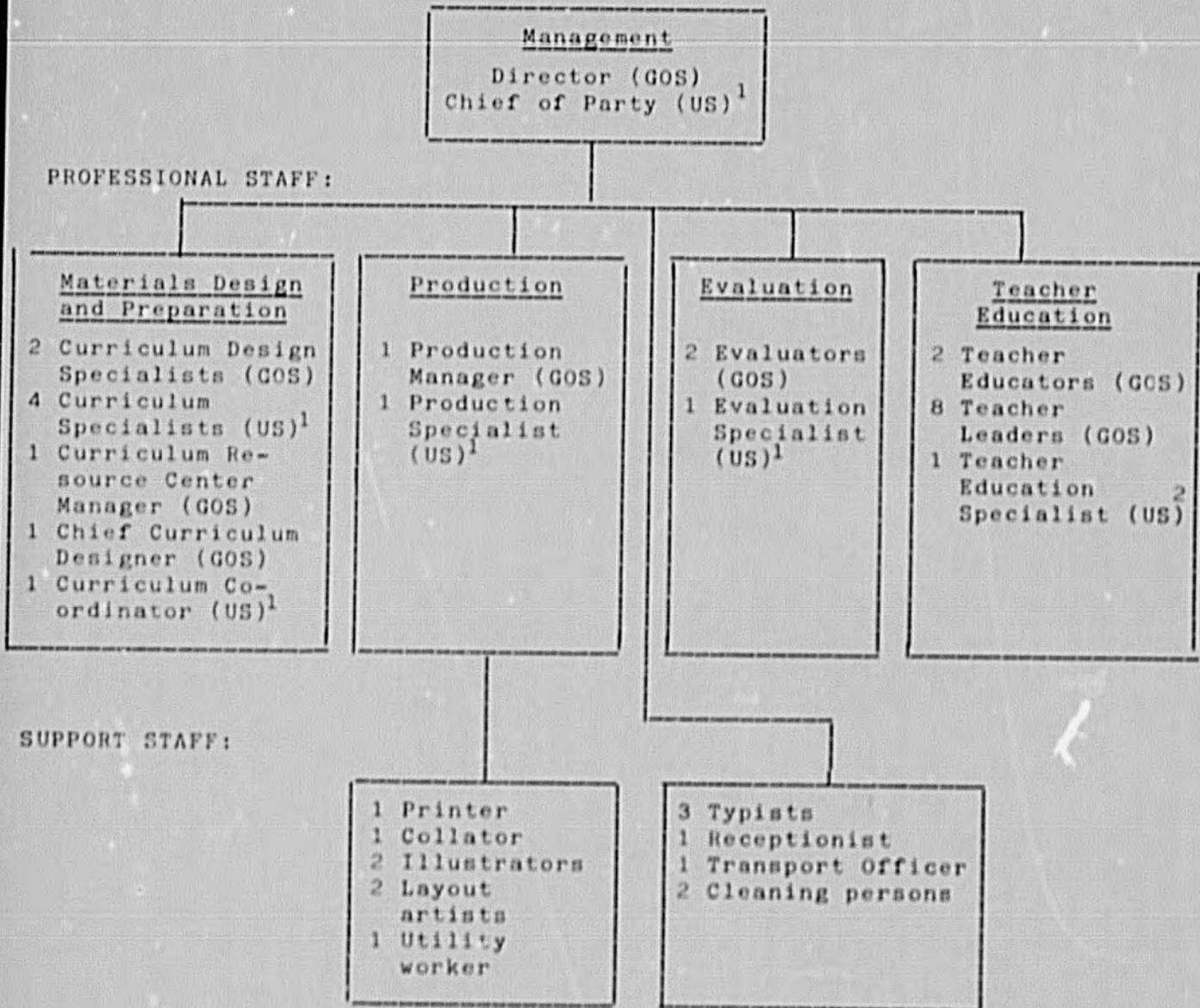
(b) The status of the PCU within the MOE has been changed so that the PCU Director reports to the Chief Inspector Primary (MOE), thus moving the Director from a position of subordination to the Principal of William Pitcher College (with no direct link to the Chief Inspector Primary) to one of proximity with the higher levels of MOE officials (see following organization chart). This revision strengthens the MOE's means of direct support to the PCU. The MOE is now in a good position to back up the PCU Director in the management of PCU staff and operations and support him/her in negotiations and collaborative operations with related institutions, including the District Education Officers, Inspectors, and teacher training colleges staff members.

(c) The management component of the PCU (Director, U.S. Chief of Party and Chief Curriculum Designer) will have explicit responsibility for internal project management and leadership functions, thus increasing the coordination among project component activities, and reducing the occasional lack of commitment among support staff.

(d) The management component of the PCU will have explicit responsibility for external project negotiations and linkages, thus improving communications between the PCU and the MOE. Since the time and energy devoted in Period One to getting facilities and commodities in place are no longer required by management, they will be able to spend more effort in establishing and maintaining linkages with other institutions in the education community and Swaziland development activities.

(e) This project has been planned in conjunction with the simultaneous planning activities of the UNESCO In-Service Teacher Training Project (Period Two) at the William Pitcher College. Therefore, discrepancies between the goals and strategies of these two projects will be minimized and the necessary collaboration between the two functions of curriculum development and teacher training will exist. The

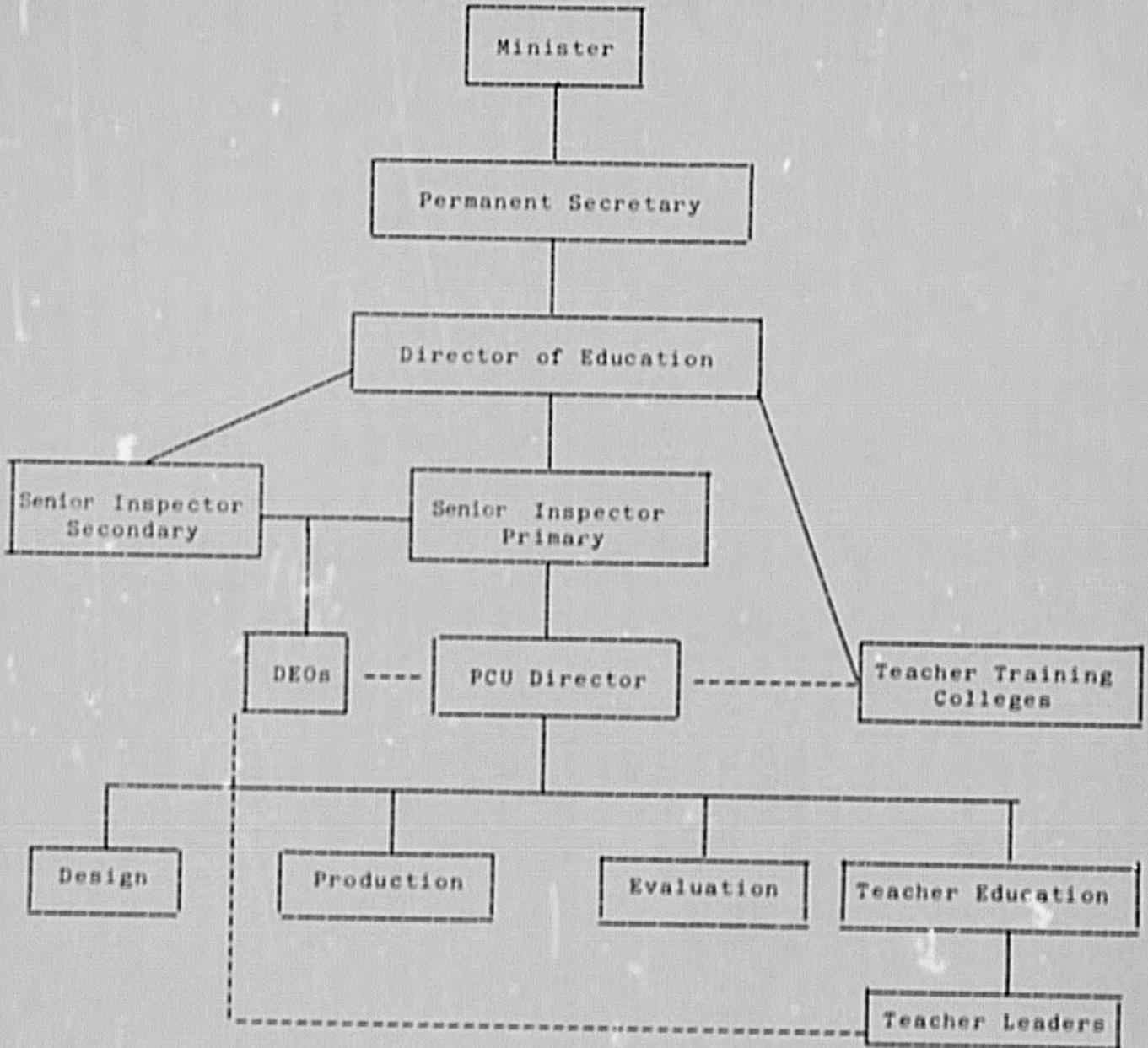
3. Proposed PCU Organization Chart



^{1/} See Annex P for job descriptions for U.S.-provided advisors.

PCU Organization Status Within the MOE:

January 1979



eventual formalized integration of the Primary and Secondary Curriculum Units within the MOE will contribute to the growing compatibility of these two services. The PCU management will play an active role in carrying out this integration without compromising the purposes and outputs of PCU.

The two units that administer the Primary Curriculum Development Project are the PCU and the MOE (see organization chart). The PCU was activated in 1974 and has now become a functioning entity in the educational system. Since 1975, its budget has been furnished with funds from the GOS, AID and the IBRD. Curriculum development activities constitute 1 percent of the total 1978/79 MOE budget and will rise appreciably in 1979/80. Organizational patterns for staff training, curriculum development and materials production are established, and facilities, equipment and supplies are sufficient, except where requested for Period Two. When additional PCU posts are established and filled, as has already been proposed to the GOS Department of Establishments and Training by the MOE, and staff members trained as foreseen in this paper, the PCU will be capable of functioning without external aid as an integral part of the Swazi educational system.

The MOE has existed since the initiation of the independent Swazi government in 1968, and has administrative, financial and academic control over the nation's education system. The central staff of the MOE totals about 100 of whom about 35 are professionals. It is administered by the Permanent Secretary for Education under the direction of the Minister, while the primary schools are specifically administered by the Chief Inspector Primary. In each of the four districts of the country -- Hhohho, Manzini, Shiselweni and Lubombo, there is a District Education Officer responsible for the administrative and professional supervision of primary schools and related activities. Each district houses a TIDC, the main activities of which are supported by the PCU. In addition to primary school activities, the Ministry supports activities in secondary, higher and non-formal education and in educational planning.

Due largely to the relatively small size of the government, population and territory of Swaziland, the Permanent Secretary maintains close working relations with all MOE officials and is aware of all MOE activities, including those of the PCU.

E. Environmental and Engineering Analysis

Period One construction activities included the six houses (AID-funded) for the technical assistance team and the two PCU buildings and four TIDCs (IBRD).

Period Two activities will include the construction of two houses (AID-funded) for the increased technical assistance team and the construction of the Curriculum Resource Center, TIDC, and conversion of the TIDC adjoining the PCU buildings into an office complex (IBRD).

An environmental examination was not required at the time of signing the PROP but an IEE has now been done and is included as Annex R. The small construction component of the Project will have no adverse impacts on the environment. The Project activities will have positive impacts on human resources and socio-economic patterns in the country. Therefore, it is believed that no further environmental investigations are required and a Negative Determination is recommended.

An engineering analysis was done for the two houses to be built by AID and is included as part of Annex V. The analysis concludes that the requirements of F.A.A. Section 611(a) have been satisfied.

The plans and cost estimates for the World Bank-funded construction activities have been submitted to the Planning Section of the MOE by the Public Works Department, Ministry of Works, Power and Communications.

F. Financial Analysis

The budgetary provisions for the second period of the Project indicate an increase in expenditures over the first period. The total cost of Period Two will be \$5,529,000 while the total cost for AID will be \$3,833,000. (Period One obligations were \$2,152,000). The increase is explained by both inflationary trends and the increased level of activity during the second period, especially the three additional advisors and consultancies. The amount of participant training will increase by more than seven-fold during the second period, although the costs of such a large increase will be held in check by the increased utilization of in-country and on-the-job training. AID construction activities will be only for the development of additional T.A. housing. Additional equipment for the PCU will be provided as well as substantial supplies for the production of curriculum materials for pilot-testing.

The GOS will contribute \$1,199,000 for the second period of the Project (\$1,164,000 contributed during Period One). This will include recurrent institutional costs and salaries, production costs for commercial printing of curriculum materials for nationwide implementation, vehicle replacement, staff travel expenses, clerical assistance for the PCU Evaluation Unit and membership fees for the African Curricu-

lum Organization. The GOS's recurrent budget for PCU will increase primarily due to the increase by 12 in the number of professional posts above that which was provided during Period One (see following Estimated GOS Costs table).

As in Period One, the World Bank will continue to provide funds for PCU construction activities, commodities, vehicles, and production of curriculum materials for nationwide distribution. The Bank will be more than doubling its Period One contribution by providing \$497,000 to PCU development activities.

1. AID Inputs (\$3,833,000)

Technical Assistance (\$2,730,000) see following chart

Successful implementation of the second period of the Project will require the services of 9 technical advisors (a maximum of 6 and a minimum of 4 were provided during Period One). They will undertake assignments of 2-4 years duration and these assignments are to be phased in and out according to the chart on the following page (see Annex S for detailed budget). Job descriptions for the various posts are contained in Annex N.

The implementing contractor will attempt to recruit at least two TCNs with the necessary qualifications from an African country. U.S. advisors will be recruited only if qualified individuals cannot be found.

Additional short-term consultancies will be used in order to provide specialized expertise in a subject area or help in the writing of curriculum materials (see section II.C.4.b).

Participant Training (\$368,000)

The training activities envisioned for Period One will continue but with a much stronger emphasis placed on a greater amount of in-country and on-the-job training (see section II.C.4.a.). Training will also be in the U.S. and other African countries (see Annex S for detailed budget).

Equipment and Commodities (\$339,000)

In order for PCU to keep up with the accelerated curriculum development, pilot-testing, and distribution activities proposed for Period Two, it is necessary to provide additional equipment to the PCU Production Unit, Curriculum Resource Center, and the TIDCs. A detailed listing of

TECHNICAL ADVISORS - PRIMARY CURRICULUM UNIT
1979 - 1983

POSITIONS ¹	1979/1980	1980/1981	1981/1982	1982/1983
Chief of Party ²	July 1979 - August 1983			
Curriculum Coordinator	Feb. 1980 - Jan. 1982			
Curriculum Specialist ²	September 1979 - August 1983			
Curriculum Specialist ²	September 1979 - August 1983			
Curriculum Specialist	Jan. 1980 - Aug. 1983			
Curriculum Specialist	Jan. 1980 - Dec. 1981			
Evaluation Specialist ²	Oct. 1979 - Sept. 1981			
Teacher Education Specialist ²	August 1979 - July 1983			
Production Specialist ²	Aug. 1979 - July 1981			
Short-term Consultants				

^{1/} See Annex N for job descriptions and examples of consultants.

^{2/} Advisers provided during the first period of the Project.

all equipment is given in Annex M along with specifications, costs and justifications.

Also, additional commodities are essential for the successful attainment of project outputs. Reading materials, teaching aids and books will be provided for the Curriculum Resource Center and the TIDCs. Substantial paper and printing supplies are necessary for the Production Unit in order to produce the curriculum materials for pilot-testing (the GOS will provide funds for the production of curriculum materials for nationwide distribution and use). The listing of all commodities is found in Annex M while the detailed budget for all equipment and commodities is shown in Annex S.

Construction (₦70,000)

Six houses were built during Period One for the U.S. technical assistance team. Two additional houses will be built for the increase in advisors (see Annex R for IEE, Annex V for Engineering Analysis and Annex S for detailed budget). Due to the phasing of advisors, an allowance for housing rental is provided in case the ninth advisor is in country while the other eight are occupying the AID-built houses (see bar chart p. for arrivals and departures of the technical assistance team).

Other Costs (₦143,000)

AID will assist the GOS/PCU in providing membership fees for the African Curriculum Organization. The 1979/80 annual fees will be paid in full by AID while the 1980/81 and 1981/82 fees will be shared equally with the GOS. In 1982/83, the GOS will pay the entire cost for the membership and any subsequent years thereafter. The total cost to AID will be ₦11,000.

As stated above, AID will also provide an allowance of ₦12,000 for the rental of housing in Manzini when, and if, it is necessary for the ninth advisor.

Lastly, an allowance of ₦120,000 is made for the mid-project (₦60,000) and end-of-project (₦60,000) external evaluations (see Annex S for detailed budget).

Contingency (5%) (₦183,000)

2. GOS Inputs (₦1,199,000)

Recurrent Budget (₦828,000)

The GOS will fund 27 professional and 15 support staff positions for the PCU during the second period

(see previous organization chart). The budget provides for the establishment of additional staff positions above those established and funded during Period One (see Estimated GOS Costs table and schedule of post establishments in the Covenants section).

The GOS will also continue their provisions for institutional recurrent costs such as petrol, communications, office supplies, janitorial services, additional furniture and equipment, and power.

Specific allowances will be provided for the following PCU activities (see Estimated GOS Costs table for detailed budget):

a) African Curriculum Organization membership fees - as mentioned under AID Inputs, the GOS will progressively take over the membership fees for this very important input to the curriculum development process. The membership is believed to be essential for the proposed curriculum design and production schedule because it will assist the PCU in identifying relevant and useful African materials for adaptation or adoption.

b) Although the World Bank is providing additional project vehicles, it is essential that the MOE/GOS begin to establish a fund for the eventual replacement of the new vehicles.

c) The GOS will provide funds for non-training related travel expenses to conferences held in Swaziland and other countries.

d) In order to evaluate the effectiveness of the new curriculum materials, periodic questionnaires will be completed by respective members of the education community. It will be necessary for the GOS to occasionally provide part-time clerical assistance for the compilation and evaluation of these questionnaires.

Capital Budget (Z314,000)

With assistance from the World Bank, the GOS will provide funds for the production of PCU developed curriculum materials for nationwide distribution and use. While production of pilot-testing materials is being funded by AID, the GOS is committed to providing adequate funds for the production of all subject and grade levels of the new curriculum for nationwide implementation.

The GOS will also continue to provide the necessary basic furniture for all T.A. housing.

Contingency (5%) (£57,000)

Recurrent Budget Analysis

The GOS's commitment to the PCU and its curriculum development activities is well within the financial and human resource capabilities of the government. The 1978/79 expenditure estimates for the MOE total E10.2 million compared to E8.8 million in FY 77/78. This represents a growth rate of 16 percent in the MOE's recurrent budget. The FY 79/80 budget estimates expenditures of E12.3 million, or an increase of 21 percent over FY 78/79 estimates. The MOE's recurrent budget represents 21.1 percent of total GOS recurrent expenditure projected for FY 79/80. Other major ministerial allocations are for Defence and Police (15.9%); Work, Power, and Communication (10.3%); Agriculture (10.2%); and Health (9.2%).

Within the MOE FY 79/80 budget, E5.2 million of expenditures are allocated to Primary Education and E6 million to teacher education.

MOE financial requirements for the Primary Curriculum Unit over the next four years are estimated at approximately E1,199,000 for a yearly average of E300 thousand. This level of recurrent expenditure is considered reasonable in terms of the GOS overall financial position. Recent GOS budgetary performance and projections for FY 79/80 are given below:

GOS National Budget (E millions)

Fy76/77 - FY79/80

Recurrent Account	<u>76/77</u>	<u>77/78</u>	<u>78/79</u>	<u>79/80</u> (budget)
Revenue	62	78	87	115
Expenditures	<u>46</u>	<u>51</u>	<u>48</u>	<u>58</u>
Surplus	16	27	39	57

While recurrent expenditures have remained relatively stable over the past three years, capital expenditures have been rising sharply. Although recurrent revenues have shown respectable increases over the same period, producing large recurrent account surpluses, they have fallen far short of total expenditures resulting in an overall deficit of E46 million in FY 78/79.

To finance this deficit, the GOS will depend on foreign savings as well as domestic resources. Foreign reserves have risen steadily from E56 million in 1976 to E95

million in 1978, and it is expected that those will be drawn to fund a large part of the deficit.

This recent budgetary performance represents a sharp departure from past conservative fiscal policies. In past years, recurrent account surpluses have been sufficient to finance capital expenditures. However, substantial investment capital was required for a number of large projects getting under way this fiscal year, and it is expected that expenditures will follow the more normal pattern in future years.

In view of the basic strength of the Swazi economy and the GOS's demonstrated ability to both generate domestic resources and attract foreign resources for development purposes, the GOS should be able to absorb the recurrent costs of this project without financial difficulty.

In October 1978, the MOE made the necessary request to the GOS Department of Establishments and Training for the 1979/80 establishment at PCU of eight additional professional and support staff positions. The future requirements for an additional 9 positions in 1980/81 and 6 more positions in 1981/82 were also submitted.

3. IBRD Inputs (Z497,000)

Equipment and Commodities (Z90,000)

As in Period One, the World Bank will continue to provide vehicles (8 in Period One and 8 in Period Two). The vehicles are essential for the PCU activities including its link with the four TIDCs. As mentioned above, the GOS will establish a fund for the replacement of these vehicles so that the necessary logistical support is provided to the PCU once donor assistance terminates.

Furnishings for the new Curriculum Resource Center, TIDC, and offices will also be provided by the World Bank.

Construction (Z119,000)

During Period One, the World Bank provided funds for the construction of the PCU buildings and the four TIDCs. The Bank will continue to provide construction funds for the for the development of the Curriculum Resource Center, an additional TIDC to be located in Manzini, and the conversion of the TIDC adjoining the PCU buildings into an office complex. (Estimates for the above equipment, commodities and construction inputs have been submitted to the World Bank/Swaziland and the MOE).

SUMMARY COST ESTIMATE AND FINANCIAL PLAN

(U.S. \$000s)

INPUTS	AID		GOS		IBRD		TOTAL
	FX	LC	FX	LC	FX	LC	
<u>Technical Assistance</u> ¹							
Advisors (27.8 py)	2,446						2,446
Consultants (48 pm)	284						284
							<u>2,730</u>
<u>Equipment and Commodities</u>							
PCU components ²	339						339
Furnishings for Cur. Res. Ctr., ⁴						23	23
TIDC and offices ⁴							
Vehicles (8) ³						67	67
							<u>429</u>
<u>Construction</u> ¹							
Houses for T.A.(2)		70					70
Cur. Res. Ctr., ⁴							
TIDC and offices						119	119
							<u>189</u>
<u>Participant Training</u> ¹							
U.S. (13 py)	196						196
Local (30 py)	34						34
Africa (27 pm)	138						138
							<u>368</u>
<u>Recurrent Budget</u> ⁵			12	816			828
<u>Capital Budget</u> ⁵				314		288	602
<u>Other</u> ¹							
African Cur. Org. membership fees	11						11
Rental of housing	12						12
External project evaluations	120						120
							<u>143</u>
Sub-total ⁶	3,580	70	12	1,130	-	497	5,289
Contingency 5%	183	-	-	57	-	-	240
TOTAL	3,763	70	12	1,187	-	497	5,529

¹/-See Annex S for detailed budget.

²/-See Annex M for equipment and commodities list, specifications and costs, and Annex S for detailed budget.

³/-3 Landrovers and 2 stationwagons to be purchased in 1979; 1 station-wagon, 1 VW bus and 1 VW Golf to be purchased in 1980. The 1979 cost per vehicle averages \$8,050 and the 1980 cost per vehicle \$8,855.

⁴/-Based on January 1979 costs estimates from Mr. Bais, Architect at the Public Works Dept. Headquarters, Mbabane. Drawings and estimates provided to be MOE Planning Section.

⁵/-See Estimated GOS Costs table in Financial Analysis section.

⁶/-Inflationary factors already built into respective items, see Annex S and Estimated GOS Costs table.

Projections of A.I.D. Expenditures and Obligations
by Fiscal Year and Component

(U.S. \$000s)

	1979		1980		1981		1982		1983		TOTAL	
	EXP	OBL	EXP	OBL	EXP	OBL	EXP	OBL	EXP	OBL	EXP	OBL
Technical Assistance	71	400	721	366	835	1134	587	600	516	230	2730	2730
Participant Training	25	50	127	140	143	140	73	38	-	-	368	368
Equipment and Commodities	107	150	70	90	77	60	85	39	-	-	339	339
Construction	70	70	-	-	-	-	-	-	-	-	70	70
Other	6	10	8	10	69	80	-	-	60	43	143	143
Contingency (5%)	14	20	47	50	56	50	37	40	29	23	183	183
TOTAL	293	700	973	656	1180	1464	782	717	605	296	3833	3833

Life of Project Costs

(U.S. \$000s)

	Period I	Period II	TOTAL
AID	2,152	3,833	\$ 5,985
GOS	1,164	1,199	2,363
IBRD	241	497	738
TOTAL	\$3,557	\$5,529	\$ 9,086

ESTIMATED GOS COSTS

(Emalangi on 000s)
(1E = Z1.15)

Item	1979/80	1980/81	1981/82	1982/83	Total
<u>Recurrent Budget</u>					
1. Personnel, transport, consumables, durables, and power costs ¹	115	162	170	180	672
2. African Curriculum Organization membership fees	-	3	2	5	10
3. Provision for vehicle replacement	15	17	18	20	70
4. Staff travel for conferences	2	2	2	3	9
5. Part-time clerical assistance for Evaluation Unit	1	1	1	1	4
				Sub-total	E 720 (Z 828)
<u>Capital Budget</u>					
1. Curriculum materials production ²	111	25	50	75	261
2. Furniture for T.A. housing	12	-	-	-	12
				Sub-total	E 273 (Z 314)
Total ³	256	210	243	284	E 993
				Contingency	50
					E1043 (Z1199)

^{1/} Personnel allowance for 1979/80 includes establishment of 8 new PCU posts, 1980/81 includes establishment of 9 new posts, and 1981/82 includes establishment of 6 new posts.

^{2/} Based on 1979/80 costs for commercial production of year 2 curriculum materials (math, science, isiSwati) and a franking machine. Production costs starting in 1980/81 will be shared with IBRD and the GOS will take over the entire cost by 1983/84.

^{3/} Based on 1979 costs plus 10 percent inflation per annum.

Other Costs (\$288,000)

The World Bank will provide funds to the GOS Capital Budget for the production of curriculum materials for nationwide distribution and use. The 1979/80 production costs are fully funded by the GOS while the 1980-83 production costs will be shared between the GOS and the Bank, with the GOS progressively funding a greater proportion of the expense (see Summary Cost Estimate and Financial Plan and Estimated GOS Costs tables).

G. Implementation Arrangements

1. Administrative Responsibilities in Project Implementation

Implementation of Period Two of the Project will be the joint responsibility of the GOS, the contractor and AID. Specific implementation responsibilities are discussed below.

a. The GOS

The Ministry of Education (MOE) will assume overall responsibility for providing the necessary budget support and the establishment of the required staff positions at the PCU. A replacement mechanism will be established and maintained by the MOE to ensure that adequate resources are available for the timely replacement of PCU equipment and vehicles. Additionally, the Ministry will be responsible for creating the staff positions needed to create a viable curriculum unit. A covenant will be included in the Project Grant Agreement delineating the staff positions to be established within the PCU over the remaining four years of the Project (see section G.3).

The Primary Curriculum Unit is the Project's principal implementing agent and, as such, will play the major role in project administration. Accordingly, the PCU will provide the required counterparts to the technical assistance team, supply personnel for long- and short-term participant training, and, in conjunction with the technical assistance team, develop programs for participant training. All substantive aspects of the curriculum development process will be the joint responsibility of the PCU and the technical assistance team. As the Project proceeds, it is expected that the PCU staff will assume more functional and managerial responsibilities while the technical assistance team's role becomes increasingly advisory in nature.

b. The Contractor

Under this project, the institutional contractor will be responsible for all long- and short-term technical assistance as described in this paper. In addition to those activities related to the fulfillment of the Project's objectives, this responsibility includes all administrative arrangements related to recruitment, transportation, shipment of household effects and other support functions. Additionally, the contractor will be responsible for implementing all project-funded participant training and, in conjunction with the PCU, develop training programs, select trainees, and assume all support functions while participants are in training.

Regarding project scheduling, the contractor will prepare a comprehensive PERT-type analysis from which detailed annual work plans will be developed. It is anticipated that the PERT-type analysis and first annual work plan will be completed by September 30, 1979.

c. A.I.D.

USAID/Swaziland will be responsible for monitoring Project implementation. The Human Resources Development Officer will maintain communications with the Director of PCU and Chief of Party of the technical assistance team, assure that the GOS is performing agreed-to services, and monitor project performance indicators to ensure that project implementation is on schedule and that substantive goals are being met.

Funds for construction will be disbursed on a fixed amount reimbursement (FAR) basis with procedures for advances, if necessary, to be defined in the Project Agreement and Project Implementation Letters.

USAID/S will prepare and submit to the GOS, as necessary, a series of Project Implementation Letters (PILs) during the life of the Project. These Letters will describe specific actions to be taken during project implementation and will clarify and expand upon the responsibilities and conditions included in the Project Agreement.

2. Implementation Schedule

A list of critical events for the Project is included as Annex J. It is anticipated that the Project will be authorized in early May 1979, with the signing of the Project Grant Agreement also in May. The technical assistance contract for the remaining four years of the Project will be signed by June 30, 1979. Project implementation will span

approximately four years and two months; the Project Assistance Completion Date is August 30, 1983, when the last participants return from U.S. academic training and the remainder of the technical assistance team departs.

3. Covenants and Contracting Procedures

a. Covenants

The Project Grant Agreement will include in substance, the following covenants:

(1) The Grantee will covenant that a mechanism will be established to provide for replacement of the IBRD-provided PCU vehicles; and

(2) The Grantee will covenant to establish 14 additional professional positions and 9 additional support positions at the Primary Curriculum Unit.

b. Contracting and Procurement Arrangements

As previously mentioned in the Project Paper, Eastern Michigan University (EMU) was selected as the institutional contractor for the first four years of the Project. Both the GOS and USAID/S consider EMU's performance highly satisfactory and wish to retain EMU as contractor for the remaining four years of the Project. A justification for negotiating solely with EMU for the technical and training services required to complete the Project is included as Annex Q to this paper. The justification is made on the basis of predominant capability and cost considerations associated with the selection of another contractor.

All commodities and equipment, except those being requested through a waiver (see Annexes O and W) are expected to be of U.S. source and origin. AID standard policies with respect to excess property will be followed.

Both an AID direct contract and a host country contract will be let for materials, commodities, and equipment; the direct contract for non-waived items and a host country contract for waived construction materials and commodities.

For the waived commodities, a host country contract will be let using standard GOS procurement procedures. For the U.S. source and origin commodities, EMU's contract will be written to include such procurement through sub-contract with a U.S. procurement agency.

A 7 percent procurement fee has been added to the cost of U.S. source and origin commodities.

H. Evaluation Plan

The external evaluation of this project will be, first and foremost, measurements of the PCU's progress toward developing full institutional capability of primary curriculum development activities. This capability is more complex and far reaching than mere curriculum materials production and includes progress in evaluation, teacher education, and collaboration with the education community at large, particularly the MOE and District Education Offices.

The Project's objectives toward which progress will be measured by external evaluation are the following:

- (a) staff on the job and proportion trained;
- (b) Curriculum Resource Center adequately stocked with prototype and model materials;
- (c) curricula designed, drafted and tested;
- (d) materials being distributed in a time manner and in use in schools nationwide;
- (e) TIDCs operating with full-time activities in teacher assistance;
- (f) demonstrations of active collaboration between PCU and
 - MOE (Chief Inspector Primary, Director of Education, Permanent Secretary, those responsible for secondary curriculum development, and those responsible for teacher training),
 - teacher training college personnel, and
 - TIDC and District Education Office personnel;
- (g) active participation in relevant African Curriculum Organization programs;
- (h) materials produced at an optimal pace;
- (i) evaluation and reporting system functioning in a timely and useful fashion, insuring quality control of materials;
- (j) curriculum and materials approval system being used by PCU and MOE; and
- (k) participant training being effectively implemented.

Two external evaluations are planned: one mid-Period Two in 1981 and the other at the end of the Project in 1983.

In addition to items (a) through (k) above, the mid-Period Two evaluators should pay particular attention to the following matters:

(a) the adequacy of the materials distribution system and need for revisions in it;

(b) the quality of materials, as evidenced in periodic evaluations of pilot-testing materials;

(c) the feasibility and optimal implementation arrangements of the materials design and production schedule; and

(d) the effectiveness of the participant training activities and the extent, if any, to which they add to or detract from production activities.

The internal project evaluation component will be able to supply to the external evaluators the necessary management information tools and student test results needed to measure Project progress.

The main purpose of the mid-Period Two evaluation will be to analyze the success of the PCU in completing the expected project activities. If the interim (1981) targets are being met, consideration will be given to expansion of one or more of the following Project activities, all of which will have been implemented only on the scale of pilot testing during the first two years of Period Two:

(a) periodic curriculum design and materials writing workshops for educators (e.g., MOE headquarters and district level officials, teacher trainers, and teachers) as part of the curriculum development process;

(b) extension of the Curriculum Resource Center into audio-visual materials production, production of teaching aids from indigenous materials, and/or collection and organization of materials from other curriculum projects (e.g. agricultural education) in Swaziland, for which donor assistance has been completed;

(c) revision of the materials distribution system in a manner that may require additional inputs and financing. (The nationwide distribution system will have been tested on a full-scale basis in 1980 and may require significant revision); and

(d) introduction of primary school students' needs analysis and more elaborate research on the effectiveness of the curricula in the schools. This would entail an expansion of evaluation activities beyond that of student examinations for the purpose of pilot testing materials.

The 1983 end-of-project evaluation will be summative; the final point of progress toward the Project's pur-

pose and outputs as stated in the Logical Framework will be measured.

The Project will be evaluated on the basis of criteria stated in the Logical Framework and on revisions implemented subsequent to the mid-Period Two evaluation.

ANNEXES

- A. Draft National Primary School Curriculum Plan (1974-1982)
- * B. PROP
- * C. Project Agreement (No. 75-5-8)
- * D. Contract between AID and Eastern Michigan University
(AID/Afr-C-1172)
- * E. Swaziland Primary Curriculum Development Project - Biennial
External Progress Evaluation (Pacific Consultants,
AID/Afr-1197)
- F. Report on the Teacher Innovation and Dissemination Centers
- G. Sample student outcomes from Primary School Outcomes
- H. District Map of Swaziland
- I. Third National Development Plan, Education Chapter
- J. Implementation Schedule
- K. Logical Framework
- L. Project Appraisal Report - September 17, 1978
- M. Equipment and commodity list
- N. Job descriptions for technical assistance team
- O. Statutory Checklist
- P. PCU Academic Credit Arrangements with UBS and EMU
- Q. Waivers/Justification for Non-competitive Procurement
- R. IEE
- S. Financial Plans
- T. Draft PAF II
- U. Economic Analysis - Education Output
- V. Engineering Analysis
- W. GOS Request for Assistance

Available from AFR/DR/SA

NATIONAL PRIMARY SCHOOL CURRICULUM PLAN

1974 - 1982

A Summary (Draft)

GOVERNMENT OF
SWAZILAND
MINISTRY OF EDUCATION

INTRODUCTION

To continue its achievement of national development goals, Swaziland is now undertaking a five-year Second National Development Plan. One aim of this plan is a revision of the primary school curriculum. The revision has already begun. This summary describes important parts of the National Primary School Curriculum Plan, shows how the plan is based on policy set forth in the Second National Development Plan, and reports on the plan's progress so far. The summary also discusses the proposed technical assistance to be requested from foreign donors to help with the plan.

The Minister of Education has said the following things in his Preface to the National Primary School Curriculum Plan: "We are confident that this plan will help prepare all the nation's children for a better life than they could have otherwise. It will give them skills which they can use immediately out of school and teach them to be good citizens who are loyal to their country and King, and will desire to see the nation progress... With the establishment of the Primary Curriculum Unit, we will have the capability for the first time of producing our own curriculum materials, which have been imported in the past and which are often irrelevant to our needs... It does all of these things, with a few exceptions, by building on existing infrastructure and utilising existing personnel. The plan will produce a much more efficient education without increasing costs in any substantial way."

SECOND NATIONAL DEVELOPMENT PLAN

The Second National Development Plan will guide the development of our nation from 1973 to 1977. Its overall purpose, as stated by the Prime Minister in his introduction, is "...the upliftment of our people so that they may have the opportunity for self-fulfillment. Better schools, better health services, better infrastructure in the end must aim at this ultimate social purpose."

Based upon the policy laid down in the Second National Development Plan, a broad programme of curriculum reform has begun. Government has given high priority to primary school curriculum development, as indicated in the following selections from the Second National Development Plan:

- A. "Government recognizes that primary education is the foundation upon

which most further development of our human resources is based (page 153);"

B. "The three major aims of expanding enrolments, improving quality, and changing the orientation of curricula are closely interrelated and there is no doubt at this time that the number of children who benefit from primary education can be increased considerably... (page 153)."

C. "Government believes that priority over the Plan period should be given to tackling these problems of quality at primary level. This is not only because better primary education is an absolute prerequisite for raising the standards of other parts of the educational system, but also because improvements in quality will themselves be conducive to expanded primary school enrolments (page 157)."

D. "...a widespread and fundamental reform of the primary curriculum will be instituted...Not only will the content of existing subjects be made more appropriate to the local situation, but a programme will be developed for the introduction of teaching in agriculture and other syllabuses. Funds will be made available to construct and equip as many school gardens and simple workshops as possible and new programmes will be developed for the training of primary school teachers in these subjects. The new curriculum will be terminal in nature and will contain a strong rural bias. Its development and implementation will be presided over by a Curriculum Development Committee, consisting of inspectors, teachers and other interested individuals, which has been set up by the Ministry of Education, while its broad aims and objectives will be defined by the National Educational Commission (page 159)."

Our nation is beginning the development of a culturally relevant and financially realistic primary educational system which will directly serve its needs. The new curriculum will reflect our national goals, interests, aspirations and cultural traditions. This curriculum development will be co-ordinated and implemented according to guidelines contained in the National Primary School Curriculum Plan.

FUTURE PLANS

This section summarises the National Primary School Curriculum Plan. It is covered in more detail in the plan itself, but all important parts are given below.

A. Overview and Overall Plan Products

Although a full understanding of the National Primary School Curriculum Plan cannot be had without detailed study of the plan itself, the following overview of the eight-year plan gives a broad picture of the aims of the plan.

Curriculum projects are often built upon imported educational programmes, and they are implemented like traditional educational systems. In many cases they are based on materials developed by foreign technical experts, with the development of materials sometimes even taking place outside the countries where they are to be used. Such projects are often not co-ordinated with existing curriculum development capabilities and activities. As a result, they sometimes do not produce effective and appropriate curricula. In some cases they focus on education as an academic exercise rather than as a part of a broad programme of national development. Only when designed, developed, and kept current within our national system can curriculum development properly respond to our national requirements and assist manpower development.

The products from this project will each be co-ordinated within an eight-year management development plan. These products are all co-ordinated with Swaziland's Second National Development Plan. The 13 products are as follows:

1. The curriculum co-ordination and policy-making system will be established. This will be the broad system within which the curriculum development project will operate. It will be an essential component of the educational system, and will assure the national and cultural relevance of the curriculum reform programme. The new system will also co-ordinate national educational development in other areas such as non-formal education, rural education, vocational training and adult literacy programmes.

2. Educational outcomes will be formulated. Without specified objectives, any curriculum system will not support national development goals. All systems by their nature are directional. The educational goals of the system under development will be consistent with the purposes and directions of the national aims.

3. The Primary Curriculum Unit will be established. Any curriculum system must produce materials, and provide for their production and distribution. The PCU organised under this project will provide this capability.

4. Local curriculum development specialists for the unit will be trained. There will be qualified local personnel who will serve all needs of the PCU. This is essential for continuation of the system as well as for short-term success. Training, unfortunately, is often neglected or given

insufficient emphasis in technical assistance programmes, partly because of pressures from donors for immediate project impact.

5. The PCU Building and Teaching Innovation and Distribution Centres will be completed. There will be adequate facilities located in Manzini. The PCU will thus be well placed to serve as the centre for curriculum development, as it will be able to use staff resources of the ITCs as well as be closely co-ordinated with teacher training efforts. Further, Teaching Innovation and Distribution Centres will be established in each district.

6. Teaching Innovation and Distribution Centres will be established. The project will succeed only if it meets teachers' needs and if teachers are closely involved in its development. These rural centres will provide current information to the PCU and to teachers on the quality of the curriculum and its usefulness. They will also provide continuous on-site training for teachers, and appropriate adaptation capability to change materials to fit local conditions.

7. Teacher leaders and inspectors will be trained. Staff of the Teaching Innovation and Distribution Centres will comprise a cadre of teacher leaders, supervised by DEOs and primary inspectors who will provide the link between the field and central portions of the system.

8. A progress reporting system will be established. The project will provide continuous assessment both for student and curriculum monitoring and diagnosis. To avoid additional administrative duties for already overworked teachers, and to avoid problems of reliability and validity, a central information and data reporting system will be developed which may use the computer as the basic monitoring component. Sufficient local expertise will be available to operate this system.

9. A materials production system will be established. After exemplary materials have been developed they must be produced in quantities large enough to be distributed to all schools. Initially, however, materials production will be contracted out to existing printing facilities in Swaziland, and possibly out of the country. Eventually, all production may be done within Swaziland.

10. A national distribution system will be established. Inadequate distribution of materials can cause the failure of any curriculum reform, regardless of the quality of the materials themselves. Within the present project, materials will be distributed from the PCU to the Teaching Innovation and Distribution Centres. From these centres, the teacher leaders will distribute them to the teachers.

11. The teacher training programme will be established. Both pre-service and in-service training of teachers are essential components of any curriculum development effort. Teachers are the ultimate implementers of the curriculum, and any curriculum reform will fail if teachers are not well trained in the content and methods of the new curriculum and its associated materials. Teachers must be involved in the developmental process from the beginning, not only to make full use of their teaching experience, but also to assure that they will identify themselves as having contributed to the development of the new programme.

12. Curriculum library facilities will be established. Given a sufficient resource library, curriculum development specialists will be exposed to many current educational ideas, as well as the more traditional ones, which they will find useful to their local situation. Libraries will be established at the PCU and at the Teaching Innovation and Distribution Centres.

13. The first cycle of curriculum development will be completed. A major outcome of the eight-year project will be a complete revision of the primary school curriculum. Considerable technical assistance will be required to assist local specialists to perform this work. At the completion of the first cycle, they will be trained so they can continue to revise and update the curriculum themselves, without further technical assistance.

B. Institutional Development

The most important new institution to be developed will be the Primary Curriculum Unit. As mentioned above, this started in January 1974, and work on its development will continue throughout the life of the project. At the end of the eight-year project, there will be a new national institution, staffed fully with trained local educators. They will be able to continue to update the curriculum in response to the changing needs in Swaziland. Swaziland will not be dependent upon foreign educators for development of syllabuses, setting of educational aims or production of teaching materials. In addition to the PCU, Teaching Innovation and Distribution Centres will be established in each district and changes will be made in the teacher training college syllabuses to prepare teachers to use the new curriculum materials.

C. New Approaches to Teaching.

The plan is not based on experimentation with new or untried educational methods. Instead, the educational approaches are based on educational methods

which are already in use, and they all have been designed by educators with practical experience. Within these limits, however, some new approaches are being used in the following areas:

1. The plan has been designed by Swaziland. The plan is not one which has been imported from another country. Throughout the several planning efforts which preceded the present project, much work was done by short-term advisors. Much current curriculum work in our country is still done by expatriates with all of the attendant problems of lack of continuity. Planning for the current project, while assisted by a resident USAID advisor, reflects the national aims of our nation. This is adequately documented above through excerpts from the Second National Development Plan. The plan has been developed by the Ministry of Education and is based on discussion with numerous curriculum advisory bodies.

2. Educational Technology. Educational technology is an organized approach to education, in terms of clear objectives. It is based on research in human learning. Parts of the plan related to educational technology are explained below under Materials and Equipment.

a. Materials. The project will introduce teaching approaches which are today being used successfully in many educational settings. More specifically, the approaches to be used include the following:

1. A systems approach. This includes clarification of educational outcomes, development of ways to reach these outcomes, definition of relationships among various parts of the educational system, and development of these parts.

ii. Precise definition of educational outcomes. This has already begun with broad outcomes related to national development. It will conclude with very specific teaching objectives and evaluation instruments which can be used by teachers and by the Ministry of Education to evaluate and revise the methods and materials.

iii. Continuous evaluation and revision. Student and teacher progress will be followed continuously. A system will provide the Ministry with information about the work of the teachers and the progress of the students.

b. Equipment. Special educational equipment will not be emphasized in this project. Problems with equipment maintenance, absence of rural electrical power sources, unreliability of battery-powered equipment, and general dissatisfaction with equipment-based educational approaches by experts in many developing countries, make any equipment-based programme a high risk. Within limits, however, there will be some use of equipment. For example, educational radio is currently being used at the primary level. This will be expanded if it fits in with teaching methods which will be used. Also, use of the new

central computer is being considered for processing examination results, reporting on success of the new curriculum, and collecting information about student progress.

3. Character building and attitude development will be an explicit part of the curriculum. Formulation of attitudes and character is often an implicit part of educational systems. However, rarely does the educational system directly focus on such outcomes. The formation of appropriate attitudes and character is particularly important in developing countries. It is there that national growth depends heavily upon the efforts of its citizens. Many of these educational goals are found across different cultures (e.g., honesty, patriotism, and self-reliance). In the more traditional curriculum, such outcomes are not explicitly taught in classrooms, nor are they tested as part of the examination system. Hence, they are outcomes which are often not sufficiently developed at the end of formal schooling, or at least not as a direct result of school experiences. Inclusion of such outcomes as an explicit part of the curriculum is a distinctly innovative approach to education.

4. Modularization of instructional materials. The module format is quite useful as it allows changes to be made in part of the curriculum without extensive modifications. It also simplifies evaluation of curricula by dividing complex outcomes into simpler units. The primary curriculum syllabus is currently organized by subjects within each instructional year. The revised curriculum will be divided into instructional modules, each requiring between five to fifteen hours of classroom time. These units will constitute an approach consistent with current educational methods. Modules will cover more than a single subject area. The concept of modularization is not a new one. The actual use of modules is widespread in short courses and special training programmes. They have been proven effective for many different educational purposes. Each module will consist of some or all of the following components:

- a. Specified instructional objectives. These may be from several subject areas--the integrated curriculum approach-- and will also measure outcomes in character building and attitude formation.
- b. Student reading materials and teachers' guides.
- c. Audio-visual aids. These will be simple and will not require any support not easily available to all schools.
- d. Materials which require student participation and activity.
- e. Evaluation measures to determine outcomes. Some paper-and-pencil tests will be used, but evaluation will often be done with easily used check-lists for specific abilities or attitudes.

5. Conceptual and problem solving learning. Emphasis will be on teaching conceptual learning, problem analysis skills and problem solving by itself.

Parts of the present curriculum emphasise recall of information which by itself is often not transferrable into needed life skills. The curriculum will be adjusted to include knowledge, skills and attitudes which will transfer outside of the classroom, and which are required for the complex and rapidly changing culture in Swaziland.

6. In-service teacher training and feedback. Traditional school systems make little organised attempt to reach primary school teachers in their classrooms, and often do not give them adequate supplies of new materials. Nor do they make available re-education programmes to help with the introduction of new materials. Additionally, there is often no reporting of student progress on a formal basis until the leaving examination at the end of primary school. Under the plan a far-reaching training system will re-educate teachers within their own schools and communities, distribute new materials and monitor use and success of these materials. The parts of this system will include the establishment of Teaching Innovation and Distribution Centres in each district, a cadre of school inspectors and teacher-leaders, and a progress reporting system. This approach, like the use of modules, has rarely been incorporated in a systematic way into full-scale curriculum development projects.

D. Co-ordination with Existing Programmes.

The plan has not been designed to replace any existing educational programmes. Instead, it will co-ordinate and build upon current programmes. Details of this co-ordination are reported in the plan itself. Full co-ordination, for example, is planned with the following projects: English Through Activity (British Council), the In-Service Teacher Training Programme (UNESCO), the Swaziland Integrated Science Project (ODA), the Matsupa National High School Project (SIDA via UNDP), the School Agriculture Scheme (UNICEF), and the Schools Agriculture Programme (ODA).

E. Technical Assistance.

To help with the development of this project, a request for technical assistance will be made to foreign donors. Table 1 shows the total man-years of technical assistance to be requested. Note that there is a larger amount of technical assistance during the early phases of the project when Swazi educators will be in training. There will be a gradual lessening of foreign assistance as locals assume their roles without advisory support.

TABLE 1

Man-Years of Technical Assistance Estimates

by Post and Calendar Year

Post	1975	76	77	78	79	80	81	82	Total
Project Director	1	1	1	1	1	1	1	1	8
Educational Technologist	1	1	1	1	1	1	1	1	8
Educational Technologist	1	1	1	1	1	1			6
Educational Technologist	1	1	1						3
Teacher Trainer	1	1	1	1	1				5
Teacher Trainer	1	1	1	1					4
Systems Designer	1	1	1						3
Totals	7	7	7	5	4	3	2	2	37

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TABLE 2

Training Estimates
(Man-Years of Overseas Training)

Training Activity	1974	75	76	77	78	79	80	81	82	Total
Special Courses		1	1	1	1	1	1	1	1	8
Master's Degrees		1	1	1	2	2	1			9
Doctoral Degrees						1	1	1		3
Totals		2	2	2	3	4	3	2	1	19

TABLE 3

Total Donor Assistance Cost Estimates

Item	1975	76	77	78	79	80	81	82	Total
Technical Assistance	378	378	378	270	216	162	108	108	1998
Participant Training	20	20	20	30	40	30	20	10	190
Commodities	204	63	47	45	92	42	42	42	577
Capital Construction	397								397
Other Costs	5	5	5	5	5	5	5	5	40
Totals	1004	466	450	350	353	239	175	165	3202

F. Training

Training is planned so that all posts initially occupied by technical advisors, which are shown in Table 1, will eventually be occupied by trained and qualified local educators. The schedule for this training is shown in Table 2.

G. Cost

The total estimated donor cost to implement the plan, in dollars times 1,000, is shown in Table 3.

PROGRESS TO DATE

To implement the National Primary School Curriculum Plan, the Primary Curriculum Unit has been established. It is already staffed with five experienced Swazi educators, one of whom is the Director. All PCU staff members have taught in primary school. Together they represent a combined total of over 87 years of primary school teaching experience. A USAID Technical Advisor is working with the PCU staff. A staff training programme has begun; two training workshops already have been conducted in Swaziland through funds and personnel provided by USAID. The first workshop focused on preparation of teaching materials, and the second covered development of a portion of the new primary school syllabus. More training workshops will take place during the next year, and some of the PCU staff eventually will be sent to the United States for further technical training.

Educational aims for the new curriculum have been developed on the basis of relevant national educational documents and on interviews with influential educators and community leaders. These have included the following groups: The Swazi National Council; Senior Inspectors; teacher educators; headmasters of primary schools; primary school teachers; District town leaders; private industry; religious leaders; the UBLS School of Education; economic planners; and parents. Information from all interviews has been used to develop a list of educational aims in terms of how students will be expected to behave after finishing school. In their present form these educational outcomes are not specific enough for classroom teachers to use. However, they will be useful in describing the more general aims of education. A review of this list of outcomes is being undertaken by the appropriate policy making committees to establish priorities.

These educational outcomes have been incorporated into the National

Primary School Curriculum Plan. As one of its first tasks the PCU, working closely with the various subject panels, will produce detailed teaching objectives based on these educational outcomes. These objectives will later be incorporated into a new primary syllabus to be presented to the Ministry of Education for final review and approval.

The general purpose of the lower primary curriculum will be to develop basic language and mathematics skills and to provide a foundation for continued learning during school as well as after formal schooling is completed. The curriculum will include the beginning of self-instructional skills, good attitudes, and good behaviour. The upper primary curriculum will place more emphasis on subject matter with attention to problem-solving thinking, useful life-related skills, and good attitudes. After completion of his schooling the student will be prepared to make an active and meaningful contribution to his society.

The outcomes of the new syllabus have been stated in terms of what students will be able to do, in each of three areas or domains, after completing school. At the end of primary school, for example, students will be able to do the following things in each of the three domains listed below. These are only examples, of course, and do not cover the entire list of primary school student outcomes.

A. Cognitive Domain

1. Demonstrates increased oral and silent reading skills (Examples: reads at 150 words per minute; skims material for important parts; reads newspapers and magazines).
2. Demonstrates increased skills in writing (Examples: writes report summarizing radio lesson; takes notes during a speech; completes business forms).
3. Performs operations with integers and fractions (Examples: computes complex fractional equivalents; relates common fractions to decimals and percentages; solves mathematical sentences).

B. Attitude Domain

1. Willingly communicates in English (Examples: voluntarily speaks in English while using the telephone; writes business letter on own initiative; contacts information sources outside the school).
2. Willingly communicates in siSwati (Examples: expresses personal

ideas; spontaneously leads others in dramatizing a folk tale; writes a short story about personal experiences).

3. Willingly participates in patriotic activities (Examples: attends national holiday ceremonies; joins service oriented groups; demonstrates national consciousness in ways such as displaying a flag in the home).

C. Psychomotor Domain

1. Produces good quality clothing (Examples: makes clothes for younger family members; patches worn parts of clothing; uses a sewing machine).

2. Applies handicraft skills (Examples: makes wood carvings; makes woven baskets from sisal fibres; moulds clay figures).

3. Participates in games and sports (Examples: plays on school athletic teams; performs physical exercises; **helps** teach games to others).

October 20, 1978

TO : Mr. Raymond Magagula
Dr. William Kromer

FROM : Dr. J.D. Mullhern

RE : REPORT ON THE TEACHER INNOVATION AND DISSEMINATION CENTRES

Attached is a final draft of the report you requested of me concerning the Teacher Innovation and Dissemination Centres. In developing this report I first met with each DEO and Teacher Leader, reviewed documents which had been prepared previously in P.C.U., held a meeting with the Teacher Leaders on October 12 to receive their reactions, and again held a meeting on October 19 to which the DEOs, district Inspectors and the Teacher Leaders were invited to share their reactions. Although none of the DEOs were present on the 19th, a good discussion did take place at that time. After each meeting the document was revised and modified. It is my recommendation that you request the Chief Inspector Primary to convene a meeting with the DEOs as soon as possible to get their reaction to the paper. If this could be done before October 27, I am prepared to revise it once again before I leave on the 27th.

THE TEACHER INNOVATION AND DISSEMINATION CENTRES

INTRODUCTION:

Teachers' Centres are relatively new to education. The proto-type for today's version can be found in the reform legislation pertaining to English education in the post World War II era. However, it was not until the introduction of the Nuffield Mathematics Programme and the North-West Curriculum Project that they had a real purpose. The Centres flourished within these projects as places where teachers could receive practical in-service help on classroom problems and where teachers could plan curriculum changes with other teachers. Through the cooperative efforts of the British Schools Council and the Department of Education and Science over 500 centres have been established in England and Wales. Although there is a wide variation in the degree of success that each has attained, the most successful centres share the following characteristics:

1. The Ministry and the local educational authorities are cooperatively committed to the centres.
2. The teachers served by the centre feel that it is responsive to their needs.
3. The teachers served by the centre are included in the governance of the centre.
4. The curriculum development projects and in-service programmes are coordinated with those of the local education authorities.
5. The centre warden is viewed by the teachers as being a representative of their concerns.

A somewhat different situation developed in the U.S.A. as American educators copied the English "centre" concept and adapted it to their special needs. It is not surprising then to find the first of the American centres were sponsored by colleges of education and were designed to help train new teachers. Gradually these centres engaged in the in-service function in order to achieve certain objectives in the training process for the new teachers. These centres have been greatly reduced as the need for new teachers has diminished. However, the need for continuing education for teachers already in the classroom has recently been recognised by the Federal government and state and local education authorities. Consequently, sizeable numbers of teachers centres or professional development centres (as preferred by the Americans) have been established by local school authorities. Although it is too early to identify a national pattern or a reliable

list of characteristics of successful centres, the following pattern seems to be emerging from the more successful ones:

1. Teachers constitute a significant portion of the governing board, 50% or more in many cases.
2. The major emphasis is on the professional development needs of teachers.
3. The local school authorities and colleges of education have a significant role in the governance, planning and programme areas of the centres along with the teachers.
4. The teachers feel the centres are meeting their expectations.

The four TIDCs attached to the four district education offices in Swaziland are very similar to those being developed elsewhere. They share the same difficulties experienced by other centres in that the purposes of the centre are not very clear; teachers are not quite sure what the centres are and tend not to come, unless called; the teacher leader and the DEO do not always agree as to what the centre should do; and the teacher leader is not quite certain as to the lines of authority concerning the centres.

The purpose of this paper is to examine and recommend changes in the organisation of the centres, develop the overall purposes of the TIDCs, propose specific objectives for the four TIDCs, and recommend future plans relative to the centres.

ORGANIZATION:

One of the key elements in the Swaziland Primary Curriculum Development Project is the presence of a TIDC in each of the four districts. The buildings for the TIDCs at Nhlanguano, Pigg's Peak, and Siteki are very similar. Each of these three TIDCs include two offices, a classroom, a teachers' workroom, and a library. Offices for the DEO and primary inspectors are also included in these three TIDCs. In addition, there is a storeroom for instructional materials in each TIDC. The building for the TIDC in Manzini is located on the William Pitcher College complex. It contains a classroom and a teachers' workroom. All four centres will be equipped with selected materials and equipment for the use of teachers in developing, making, or building instructional materials and learning aids.

Thus, it can be seen that each TIDC is a place. It is a building, but more importantly, the TIDC is a concept. The TIDC is conceived of as a direct link between the school system and the curriculum development systems, and its functions are specifically related to in-service training and the professional growth of

teachers.

Teachers' centres must be viewed as neutral territory, a place that provides assistance to teachers and where they can discuss classroom problems without feeling apprehensive about it. If it is not, teachers will not use the centres. This is especially true where the DEO/Inspectorate staff share the same physical setting. The proposal does not clarify jurisdictional control over the TIDCs when it states:

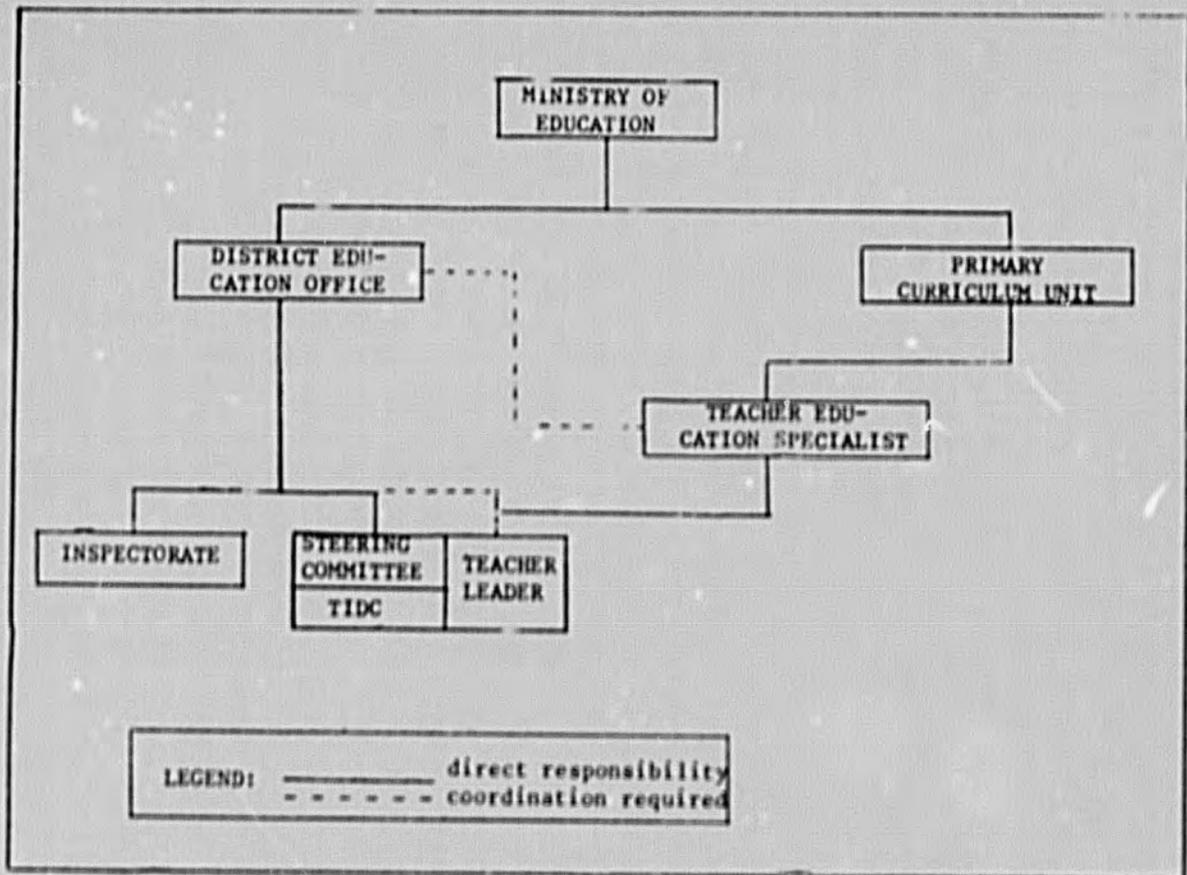
"Primary administrative responsibility for the TIDCs will rest with the District Education Officer. Teacher leaders assigned to the TIDCs will be PCU staff members and will carry out teacher training under the director of the DEOs but shall have professional and technical assistance from the Primary Curriculum Unit"

If the teacher leader is to serve the teachers and be a spokesman for the teachers, it is important to maintain the teacher leader under the jurisdiction of the teacher education specialist at the P.C.U. Obviously there must be co-operation among the teacher leader, the DEO and the inspectorate staff, and the DEO is the final authority within the district. It is reasonable to expect that the teacher leader will draw up plans for each month and after they have been approved by the PCU, to file a copy with the DEO. Certainly the DEO may question some of the activities and the absence of others.

If the teachers are to come to the TIDC for other than attendance at required meetings, the teachers themselves are the best source of information concerning those things the teachers expect of the TIDC. Similarly, if we want the inspectors and headmasters to make use of the TIDC, the inspectors and headmasters are the best source of information concerning those things they expect of the TIDC. The best means of accomplishing this and at the same time giving a sense of ownership to all parties, is to organize a TIDC steering committee at each site and bring all parties together as partners. In this case the DEO will organize the committee and his representative as chairperson will be the teacher leader. In addition, four teachers, four headmasters and two inspectors should be appointed to the committee. The committee should assist and advise the teacher leader concerning the development and use of the centre as a means of helping district teachers grow professionally.

The organizational structure of the TIDC is as follows:

(see next page)



PURPOSE:

The primary purpose of the centres is to help improve the quality of education for all Swazi children no matter where they live. In order to achieve this goal the Centre staff should be prepared to assist the pilot school teachers and all other Swazi teachers on the classroom use of the new curriculum materials. At the same time the Centre staff should be prepared to serve as the intermediary between the P.C.U. and the pilot school teachers and all other Swazi teachers on matters pertaining to the new curriculum materials.

Although the net effect of this change broadens the responsibility of the teacher leader, it does not change the basic relationships that currently exist among teachers, inspectors and teacher leaders. In other words, the teacher leader is not granted "inspector" responsibility in non-pilot schools, a responsibility that they do not have in the pilot schools. The teacher leader is a facilitator only, one who assists the pilot teachers to improve their teaching.

They do not have authority to judge and evaluate as to whether or not a teacher is satisfactory. No matter what, this instructional facilitator role exercised by the teacher leader is to be limited to the pilot schools except as a headmaster might request their assistance through the DEO.

There are three functions that must take place through the TIDC.

The first function is that of in-service education of classroom teachers within the district. Although the centre may assist in the orientation and training of the DEOs, the inspectorate and headmasters, primary responsibility for this task rests with the PCU staff. The second function is that of assisting the pilot school teachers and others in the use of the new curriculum materials. In order to do this the Centre staff must be thoroughly knowledgeable about the new materials and their classroom use. The third function is that of developing the potential of the Centre as a resource centre for teachers. It should be a place where teachers can visit and receive assistance on classroom problems by reading books, examining materials, constructing teaching aids and discussing the problem with the teacher leader.

The purposes of the centres are as follows:

1. Serve as an in-service education centre for district teachers on the new curriculum materials.
2. Serve as a neutral meeting ground where pilot teachers and teacher leaders can discuss the curriculum materials with the design staff.
3. Serve as a curriculum resource centre where books, materials and teaching aids are available on loan to classroom teachers.

SPECIFIC OBJECTIVES:

In order to successfully accomplish these purposes, it is necessary to consider specific objectives. Further, it is necessary to establish these objectives in terms of responsibilities for the teacher leader, who is responsible for coordinating the TIDC.

The teacher leader:

1. schedules monthly meetings for and serves as the chairperson of the TIDC Steering Committee which includes representative teachers, headmasters and members of the inspectorate;
 2. conducts in-service curriculum workshops and training days on a regularly scheduled basis for pilot school teachers at the TIDC;
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3. schedules in-service curriculum workshops and training days on a regularly scheduled basis in cooperation with other agencies for the district teachers at the TIDC;
4. organizes and schedules professional development courses for teachers through the PCU, In-Service, William Pitcher College and Nazarene College at the TIDC;
5. organizes and conducts regularly scheduled meetings with the pilot school teachers to obtain their recommendations concerning the pilot curriculum materials;
6. visits each pilot school classroom on a twice-monthly basis and observes teacher use of the materials on at least one of these visits;
7. assesses the need for and assembles teaching aids including professional books, in the TIDC, and makes them available to teachers on a loan basis;
8. makes teachers aware of simple and inexpensive teaching aids through displays at the TIDC and technical assistance, whenever possible.

Obviously this is a very large task for one teacher leader. A second professional employee and a carpenter must be assigned to the TIDC if the potential value of the TIDC is to be realized.

RECOMMENDATIONS:

The following list of recommendations is not intended to be a static list but rather flexible in that some items may be eliminated while others may be added:

1. Furniture stored at the Manzini TIDC be removed immediately as its only current use is that of a warehouse.
2. Immediate steps be taken to transform the Manzini TIDC into a TIDC with the plans approved by both the DEO and the PCU Director.
3. A follow-up be instituted concerning the equipment for the centres (see attached list).
4. Each centre develop a purchase plan for equipment (purchases under equipment orders).
5. The teacher leaders:

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5. The teacher leaders: Continued
 - a. Schedule and participate in the development of orientation/workshop sessions for district-wide Grade I teachers on the new materials.
 - b. Schedule Grade 2 pilot teacher feedback sessions on the Grade 2 materials and organize the information for use by the design staff.
 - c. Develop and schedule Grade 3 pilot teacher and headmaster in-service workshops on the Grade 3 materials.
 - d. Assist the PCU in planning in-service workshops for all members of the inspectorate, In-Service, William Pitcher College and Nazarene College staff on the Grade I materials.
 - e. Distribute to all concerned parties the revised job descriptions of the teacher leader, teacher education specialist and teacher education adviser.
6. That the term "teacher leader" be modified because it no longer accurately reflects the responsibilities of the job and that consideration be given to the classification of "Teacher Leader and TIDC Coordinator".
7. A second professional staff member, provided for in the In-Service Proposal, be assigned to the TIDC.
8. A carpenter whose job it will be to make simple teaching aids for teachers be assigned to each TIDC.
9. The kitchen facilities be upgraded in each TIDC so that tea and even a meal may be prepared in each centre.
10. Additional space, as the need develops, be given to each TIDC for material displays and exhibitions.
11. Funds for the travel support of the Teacher Leaders be part of the TIDC support budget.

TERMS OF REFERENCE

POST: TEACHER LEADER:

1. Responsible to: Teacher Education Specialist
2. Supervisory Responsibilities: The District TIDC
3. Overall Responsibility: To plan and implement, in cooperation with the PCU and DEO, in-service training for pilot teachers and all other teachers using the new curriculum materials.
4. Specific Responsibilities:
 - a. Schedules monthly meetings for and serves as the chairperson of the TIDC Steering Committee which includes representative teachers, headmasters and members of the inspectorate.
 - b. Conducts in-service workshops and training days on a regularly scheduled monthly basis for pilot school teachers at the TIDC.
 - c. Schedules in-service curriculum workshops and training days on a regularly scheduled monthly basis in cooperation with other agencies for the district teachers at the TIDC.
 - d. Organizes and schedules professional development courses for teachers through the PCU, In-Service, William Litcher Teachers College, at the TIDC.
 - e. Organizes and conducts regularly scheduled meetings with the pilot school teachers to obtain their recommendations concerning the pilot curriculum materials.
 - f. Visits each pilot school classroom on a twice-monthly basis and observes teacher use of the materials on at least one of these visits.
 - g. Assesses the need for and assembles teaching aids including professional books in the TIDC and makes them available to teachers on a loan basis.
 - h. Makes teachers aware of simple and inexpensive teaching aids through displays at the TIDC and technical assistance, whenever possible.
 - i. Other responsibilities as may be deemed appropriate by the Director of P.C.U

TERMS OF REFERENCE

POST: TEACHER EDUCATION SPECIALIST:

1. Responsible to: Director, PCU
2. Supervisory Responsibilities: Responsible for the overall effectiveness of the four TIDCs and direct supervision of the teacher leaders.
3. Overall Responsibility: To design and implement programmes of in-service education for teachers on the new curriculum materials, and to effectively coordinate training programmes so as to coincide with the introduction of the new materials at each grade level.
4. Specific Responsibilities:
 - a. The development of a fully coordinated plan of in-service education for teachers related to the redesigned curriculum materials that will ensure implementation of those materials.
 - b. Supervise the development of individual plans for in-service programmes through each of the four TIDCs.
 - c. The coordination of all in-service efforts on the curriculum materials by other agencies including William Pitcher College and U.B.S.
 - d. Assume leadership for the development of orientation training sessions on the new materials for all persons including teacher leaders who will be responsible for training the teachers on the new materials.
 - e. Assume leadership for the development of orientation/training sessions on the new materials at the PCU and TIDCs for primary school headmasters.
 - f. Assume leadership for the development of orientation/training sessions on the new materials at the PCU for teaching personnel at William Pitcher College, Nazarene College and U.B.S., who are responsible for working with pre-service primary school teachers.
 - g. Assist teaching personnel at the various colleges and U.B.S. to redesign pre-service programmes to reflect the new primary school curriculum.
 - h. Supervise end of term material evaluation workshop for pilot school teachers and the teacher leaders in conjunction with the curriculum design staff.
 - i. Other responsibilities as may be deemed appropriate by the Director of P.C.U.

TERMS OF REFERENCE

POST: TEACHER EDUCATION ADVISER:

1. Responsible to: Director PCU/EMU Chief of Party
2. Supervisory Responsibilities: None
3. Overall Responsibility: To assist the Teacher Education Specialist in the supervision of the TIDC, to assist in the design and implementation of in-service education programmes for teachers on the new curriculum materials and to assist in the coordination of all training programmes so as to coincide with the introduction of the new materials at each grade level.
4. Specific Responsibilities: The teacher education adviser will assist the teacher education specialist in each of the following tasks:
 - a. The development of a coordinated plan of in-service education for teachers related to the redesigned curriculum materials so as to ensure implementation of those materials.
 - b. The supervision of the teacher leaders and of the individual plans for in-service programmes at each of the TIDCs.
 - c. The coordination of all in-service efforts related to the curriculum materials by other agencies including William Pitcher College and U.B.S.
 - d. The management of the orientation/training sessions on the new materials for persons who will be responsible for training the teachers on the new materials.
 - e. The management of the orientation/training sessions on the new materials for the primary school headmasters.
 - f. The management of the orientation/training sessions on the new materials for personnel at William Pitcher College, Nazarene College and U.B.S., who are responsible for the pre-service education of primary school teachers.
 - g. The redesign of pre-service programmes at the various colleges and U.B.S. to reflect the new materials.
 - h. The organization of end of term evaluation workshop for pilot school teachers, teacher leaders and curriculum design staff.

In addition, the Teacher Education Adviser will be responsible for the following tasks:

- i. The development and monitoring of the conceptual framework of the TIDCs.
- j. The coordination of EMU sponsored credit and non-credit course offerings.
- k. The development of effective relationships with U.B.S relative to transfer of credit between the two institutions, cooperative programmes, etc.
- l. To teach selected courses as assigned by the EMU Chief of Party.
- m. To assist in the development and revision of curricula materials in selected subject areas as assigned by the EMU Chief of Party.
- n. To carry out any other responsibilities as may be deemed appropriate by the EMU Chief of Party.

SAMPLE STUDENT OUTCOMES FOR PRIMARY SCHOOL

LOWER PRIMARY

1. Child demonstrates problems solving skills.
(Cognitive Domain)

- Child:
- (i) Given an incomplete story asks relevant questions.
 - (ii) Makes deduction from common experiences, e.g., relates clouds to rain.
 - (iii) Puts steps of familiar tasks in order.
 - (iv) Explains one feasible way to solve a common problem, e.g., how to keep a grass roof from blowing away in the wind.
 - (v) Identifies five uses of a large stone, or other object.

2. Child has developed orienting and attending skills.
(Affective Domain)

- Child:
- (i) Completes classroom tasks without continued guidance.
 - (ii) Identifies most significant part of a passage or lesson.
 - (iii) Listens carefully when information is being presented.
 - (iv) Waits for his turn, does not handle materials not intended for use.
 - (v) Avoids quitting tasks because of fear of failure.

**3. Child has acquired certain manipulative skills.
(Psychomotor Domain)**

- Child:**
- (i) Can stack objects.
 - (ii) Can align objects.
 - (iii) Can operate fastener and locks.
 - (iv) Can use a hammer, pliers, a screwdriver, spanner, nuts and bolts, etc.
 - (v) Can pour liquids, sand, etc.

**4. Child reads siSwati both orally and silently.
(Cognitive Domain)**

- Child:**
- (i) Reads labels and signs.
 - (ii) Reads simple rules and regulations, e.g., road rules, public health rules, etc.
 - (iii) Reads simple stories.
 - (iv) Reads personal letters.
 - (v) Reads elementary library books.

**5. Child can understand different number grouping in base 10.
(Cognitive Domain)**

- Child:**
- (i) Adds and subtracts numbers in various number groups.
 - (ii) Converts numbers in base 10 to other number groups.
 - (iii) Solves problems in number groups.

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(iv) Multiplies and divides numbers in various numbers in base 10.

(v) Counts in different multiples, e.g., counting by 2's, 4's, etc.

6. Child shows interest in using scientific explanations of natural events. (Attitude Domain)

- Child:
- (i) Challenges superstitions.
 - (ii) Makes a guess as to why a certain thing happens as it does using scientific explanations.
 - (iii) Makes observations of things happening in life, and makes a guess as to why they happened that way. Makes more observations and seeks facts to test guesses.
 - (iv) Asks teacher to explain natural events.
 - (v) Tells others why things happen using scientific explanations.

7. Child shows an interest in gardens and orchards. (Cognitive Domain)

- Child:
- (i) Helps to plant.
 - (ii) Helps to water the garden.
 - (iii) Helps to weed the garden.
 - (iv) Cares for plant environment in school.
 - (v) Handles plants properly.
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8. Child knows the structure of the Swazi family life.
(Cognitive Domain)

- Child:
- (i) Distinguishes the two types of families, e.g., nuclear family and extended family.
 - (ii) Describes the duties of family members.
 - (iii) Explains the advantages and disadvantages of extended family.
 - (iv) Explains the line of authority of the Swazi family.
 - (v) States the education of the clans.

UPPER PRIMARY

1. Child expresses an attitude of open-mindedness, of willingness to accept change, of flexibility, of being able to adjust to new situations. (Attitude Domain)

- Child:
- (i) Changes when circumstances demand.
 - (ii) Seeks advice when appropriate.
 - (iii) States one example of some change of traditional culture that should occur in a developing country.
 - (iv) Responds good naturedly to criticism.
 - (v) Supports traditional values where appropriate.
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2. Child willingly communicates in siSwati by reading, speaking, listening and writing. (Attitude Domain)

- Child:
- (i) Spontaneously tells personal experiences to others in siSwati.
 - (ii) Voluntarily conducts lessons with friends in siSwati after school.
 - (iii) Willingly seeks to read during his leisure time.
 - (iv) Offers to write a news article.
 - (v) Willingly writes poems in siSwati.

3. Child desires to communicate in English. (Attitude Domain)

- Child:
- (i) Seeks books, magazines and suitable comics to read.
 - (ii) Listens to English radio broadcasts.
 - (iii) Tells personal experiences in English.
 - (iv) Completes the school assignment neatly and on time.
 - (v) Voluntarily uses English if the opportunity arises.

4. Child developed basic handwriting skills. (Psychomotor Domain)

- Child:
- (i) Forms letters clearly, neatly and correctly.
 - (ii) Uses printing.
 - (iii) Uses writing instrument correctly.

- (iv) Uses cursive writing.
- (v) Uses the same type of lettering throughout his writing.

5. Child performs operations with integers and fractions.
(Cognitive Domain)

- Child:
- (i) Computes fractional equivalents.
 - (ii) Relates vulgar fractions to decimals and percentages.
 - (iii) Performs operations with positive and negative integers.
 - (iv) Performs operations with mixed fractions.
 - (v) Solves problems involving addition, subtraction, division and multiplication in operations of numbers.

6. Child understands Swazi culture and tradition.
(Cognitive Domain)

- Child:
- (i) Describes Swazi cultural behavior.
 - (ii) Describes the traditional norms.
 - (iii) Describes Swazi traditional functions or celebrations.
 - (iv) Lists the Swazi national holidays and the places where they are celebrated.
 - (v) States the principles of Swazi family organization.

7. Child has developed some skills in the manipulation and construction of apparatus. (Psychomotor Domain)

- Child:
- (i) Follows a plan and assembles apparatus to carry out an experiment.
 - (ii) Makes and records accurate observations.
 - (iii) Constructs and improvises essential apparatus for experimentation.
 - (iv) Records conclusions.
 - (v) Uses measuring devices accurately (scale, balance).

8. Child desires to grow gardens using improved agricultural methods. (Psychomotor Domain)

- Child:
- (i) Plants suitable seeds at the appropriate time.
 - (ii) Cares for the garden, e. g., pest control, watering.
 - (iii) Willingly spends extra time in the garden.
 - (iv) Uses the produce to enrich the family diet.
 - (v) Willingly takes part in the plant environment of the schools.
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NATIONAL PRIMARY SCHOOL CURRICULUM PLAN

1974 - 1982

A Summary (Draft)

GOVERNMENT OF

SWAZILAND

MINISTRY OF EDUCATION

Printed in Swaziland

May 1974

INTRODUCTION

To continue its achievement of national development goals, Swaziland is now undertaking a five-year Second National Development Plan. One aim of this plan is a revision of the primary school curriculum. The revision has already begun. This summary describes important parts of the National Primary School Curriculum Plan, shows how the plan is based on policy set forth in the Second National Development Plan, and reports on the plan's progress so far. The summary also discusses the proposed technical assistance to be requested from foreign donors to help with the plan.

The Minister of Education has said the following things in his Preface to the National Primary School Curriculum Plan: "We are confident that this plan will help prepare all the nation's children for a better life than they could have otherwise. It will give them skills which they can use immediately out of school and teach them to be good citizens who are loyal to their country and King, and will desire to see the nation progress... With the establishment of the Primary Curriculum Unit, we will have the capability for the first time of producing our own curriculum materials, which have been imported in the past and which are often irrelevant to our needs... It does all of these things, with a few exceptions, by building on existing infrastructure and utilising existing personnel. The plan will produce a much more efficient education without increasing costs in any substantial way."

SECOND NATIONAL DEVELOPMENT PLAN

The Second National Development Plan will guide the development of our nation from 1973 to 1977. Its overall purpose, as stated by the Prime Minister in his introduction, is "...the upliftment of our people so that they may have the opportunity for self-fulfillment. Better schools, better health services, better infrastructure in the end must aim at this ultimate social purpose."

Based upon the policy laid down in the Second National Development Plan, a broad programme of curriculum reform has begun. Government has given high priority to primary school curriculum development, as indicated in the following selections from the Second National Development Plan:

A. "Government recognizes that primary education is the foundation upon

which most further development of our human resources is based (page 153);"

B. "The three major aims of expanding enrolments, improving quality, and changing the orientation of curricula are closely interrelated and there is no doubt at this time that the number of children who benefit from primary education can be increased considerably... (page 153)."

C. "Government believes that priority over the Plan period should be given to tackling these problems of quality at primary level. This is not only because better primary education is an absolute prerequisite for raising the standards of other parts of the educational system, but also because improvements in quality will themselves be conducive to expanded primary school enrolments (page 157)."

D. "...a widespread and fundamental reform of the primary curriculum will be instituted...Not only will the content of existing subjects be made more appropriate to the local situation, but a programme will be developed for the introduction of teaching in agriculture and other syllabuses. Funds will be made available to construct and equip as many school gardens and simple workshops as possible and new programmes will be developed for the training of primary school teachers in these subjects. The new curriculum will be terminal in nature and will contain a strong rural bias. Its development and implementation will be presided over by a Curriculum Development Committee, consisting of inspectors, teachers and other interested individuals, which has been set up by the Ministry of Education, while its broad aims and objectives will be defined by the National Educational Commission (page 159)."

Our nation is beginning the development of a culturally relevant and financially realistic primary educational system which will directly serve its needs. The new curriculum will reflect our national goals, interests, aspirations and cultural traditions. This curriculum development will be co-ordinated and implemented according to guidelines contained in the National Primary School Curriculum Plan.

FUTURE PLANS

This section summarises the National Primary School Curriculum Plan. It is covered in more detail in the plan itself, but all important parts are given below.

A. Overview and overall Plan Products

Although a full understanding of the National Primary School Curriculum Plan cannot be had without detailed study of the plan itself, the following overview of the eight-year plan gives a broad picture of the aims of the plan.

Curriculum projects are often built upon imported educational programmes, and they are implemented like traditional educational systems. In many cases they are based on materials developed by foreign technical experts, with the development of materials sometimes even taking place outside the countries where they are to be used. Such projects are often not co-ordinated with existing curriculum development capabilities and activities. As a result, they sometimes do not produce effective and appropriate curricula. In some cases they focus on education as an academic exercise rather than as a part of a broad programme of national development. Only when designed, developed, and kept current within our national system can curriculum development properly respond to our national requirements and assist manpower development.

The products from this project will each be co-ordinated within an eight-year management development plan. These products are all co-ordinated with Swaziland's Second National Development Plan. The 13 products are as follows:

1. The curriculum co-ordination and policy-making system will be established. This will be the broad system within which the curriculum development project will operate. It will be an essential component of the educational system, and will assure the national and cultural relevance of the curriculum reform programme. The new system will also co-ordinate national educational development in other areas such as non-formal education, rural education, vocational training and adult literacy programmes.

2. Educational outcomes will be formulated. Without specified objectives, any curriculum system will not support national development goals. All systems by their nature are directional. The educational goals of the system under development will be consistent with the purposes and directions of the national aims.

3. The Primary Curriculum Unit will be established. Any curriculum system must produce materials, and provide for their production and distribution. The PCU organised under this project will provide this capability.

4. Local curriculum development specialists for the unit will be trained. There will be qualified local personnel who will serve all needs of the PCU. This is essential for continuation of the system as well as for short-term success. Training, unfortunately, is often neglected or given

insufficient emphasis in technical assistance programmes, partly because of pressures from donors for immediate project impact.

5. The PCU building and Teaching Innovation and Distribution Centres will be completed. There will be adequate facilities located in Manzini. The PCU will thus be well placed to serve as the centre for curriculum development, as it will be able to use staff resources of the TTCs as well as be closely co-ordinated with teacher training efforts. Further, Teaching Innovation and Distribution Centres will be established in each district.

6. Teaching Innovation and Distribution Centres will be established. The project will succeed only if it meets teachers' needs and if teachers are closely involved in its development. These rural centres will provide current information to the PCU and to teachers on the quality of the curriculum and its usefulness. They will also provide continuous on-site training for teachers, and appropriate adaptation capability to change materials to fit local conditions.

7. Teacher leaders and inspectors will be trained. Staff of the Teaching Innovation and Distribution Centres will comprise a cadre of teacher leaders, supervised by DEOs and primary inspectors who will provide the link between the field and central portions of the system.

8. A progress reporting system will be established. The project will provide continuous assessment both for student and curriculum monitoring and diagnosis. To avoid additional administrative duties for already overworked teachers, and to avoid problems of reliability and validity, a central information and data reporting system will be developed which may use the computer as the basic monitoring component. Sufficient local expertise will be available to operate this system.

9. A materials production system will be established. After exemplary materials have been developed they must be produced in quantities large enough to be distributed to all schools. Initially, however, materials production will be contracted out to existing printing facilities in Swaziland, and possibly out of the country. Eventually, all production may be done within Swaziland.

10. A national distribution system will be established. Inadequate distribution of materials can cause the failure of any curriculum reform, regardless of the quality of the materials themselves. Within the present project, materials will be distributed from the PCU to the Teaching Innovation and Distribution Centres. From these centres, the teacher leaders will distribute them to the teachers.

11. The teacher training programme will be established. Both pre-service and in-service training of teachers are essential components of any curriculum development effort. Teachers are the ultimate implementors of the curriculum, and any curriculum reform will fail if teachers are not well trained in the content and methods of the new curriculum and its associated materials. Teachers must be involved in the developmental process from the beginning, not only to make full use of their teaching experience, but also to assure that they will identify themselves as having contributed to the development of the new programme.

12. Curriculum library facilities will be established. Given a sufficient resource library, curriculum development specialists will be exposed to many current educational ideas, as well as the more traditional ones, which they will find useful to their local situation. Libraries will be established at the PCU and at the Teaching Innovation and Distribution Centres.

13. The first cycle of curriculum development will be completed. A major outcome of the eight-year project will be a complete revision of the primary school curriculum. Considerable technical assistance will be required to assist local specialists to perform this work. At the completion of the first cycle, they will be trained so they can continue to revise and update the curriculum themselves, without further technical assistance.

B. Institutional Development

The most important new institution to be developed will be the Primary Curriculum Unit. As mentioned above, this started in January 1974, and work on its development will continue throughout the life of the project. At the end of the eight-year project, there will be a new national institution, staffed fully with trained local educators. They will be able to continue to update the curriculum in response to the changing needs in Swaziland. Swaziland will not be dependant upon foreign educators for development of syllabuses, setting of educational aims or production of teaching materials. In addition to the PCU, Teaching Innovation and Distribution Centres will be established in each district and changes will be made in the teacher training college syllabuses to prepare teachers to use the new curriculum materials.

C. New Approaches to Teaching.

The plan is not based on experimentation with new or untried educational methods. Instead, the educational approaches are based on educational methods

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which are already in use, and they all have been designed by educators with practical experience. Within these limits, however, some new approaches are being used in the following areas:

1. The plan has been designed by Swaziland. The plan is not one which has been imported from another country. Throughout the several planning efforts which preceded the present project, much work was done by short-term advisors. Much current curriculum work in our country is still done by expatriates with all of the attendant problems of lack of continuity. Planning for the current project, while assisted by a resident USAID advisor, reflects the national aims of our nation. This is adequately documented above through excerpts from the Second National Development Plan. The plan has been developed by the Ministry of Education and is based on discussion with numerous curriculum advisory bodies.

2. Educational Technology. Educational technology is an organized approach to education, in terms of clear objectives. It is based on research in human learning. Parts of the plan related to educational technology are explained below under Materials and Equipment.

a. Materials. The project will introduce teaching approaches which are today being used successfully in many educational settings. More specifically, the approaches to be used include the following:

i. A systems approach. This includes clarification of educational outcomes, development of ways to reach these outcomes, definition of relationships among various parts of the educational system, and development of these parts.

ii. Precise definition of educational outcomes. This has already begun with broad outcomes related to national development. It will conclude with very specific teaching objectives and evaluation instruments which can be used by teachers and by the Ministry of Education to evaluate and revise the methods and materials.

iii. Continuous evaluation and revision. Student and teacher progress will be followed continuously. A system will provide the Ministry with information about the work of the teachers and the progress of the students.

b. Equipment. Special educational equipment will not be emphasized in this project. Problems with equipment maintenance, absence of rural electrical power sources, unreliability of battery-powered equipment, and general dissatisfaction with equipment-based educational approaches by experts in many developing countries, make any equipment-based programme a high risk. Within limits, however, there will be some use of equipment. For example, educational radio is currently being used at the primary level. This will be expanded if it fits in with teaching methods which will be used. Also, use of the new

central computer is being considered for processing examination results, reporting on success of the new curriculum, and collecting information about student progress.

3. Character building and attitude development will be an explicit part of the curriculum. Formulation of attitudes and character is often an implicit part of educational systems. However, rarely does the educational system directly focus on such outcomes. The formation of appropriate attitudes and character is particularly important in developing countries. It is there that national growth depends heavily upon the efforts of its citizens. Many of these educational goals are found across different cultures (e.g., honesty, patriotism, and self-reliance). In the more traditional curriculum, such outcomes are not explicitly taught in classrooms, nor are they tested as part of the examination system. Hence, they are outcomes which are often not sufficiently developed at the end of formal schooling, or at least not as a direct result of school experiences. Inclusion of such outcomes as an explicit part of the curriculum is a distinctly innovative approach to education.

4. Modularization of instructional materials. The module format is quite useful as it allows changes to be made in part of the curriculum without extensive modifications. It also simplifies evaluation of curricula by dividing complex outcomes into simpler units. The primary curriculum syllabus is currently organized by subjects within each instructional year. The revised curriculum will be divided into instructional modules, each requiring between five to fifteen hours of classroom time. These units will constitute an approach consistent with current educational methods. Modules will cover more than a single subject area. The concept of modularization is not a new one. The actual use of modules is widespread in short courses and special training programmes. They have been proven effective for many different educational purposes. Each module will consist of some or all of the following components:

- a. Specified instructional objectives. These may be from several subject areas--the integrated curriculum approach-- and will also measure outcomes in character building and attitude formation.
- b. Student reading materials and teachers' guides.
- c. Audio-visual aids. These will be simple and will not require any support not easily available to all schools.
- d. Materials which require student participation and activity.
- e. Evaluation measures to determine outcomes. Some paper-and-pencil tests will be used, but evaluation will often be done with easily used check-lists for specific abilities or attitudes.

5. Conceptual and problem solving learning. Emphasis will be on teaching conceptual learning, problem analysis skills and problem solving by itself.

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Parts of the present curriculum emphasise recall of information which by itself is often not transferrable into needed life skills. The curriculum will be adjusted to include knowledge, skills and attitudes which will transfer outside of the classroom, and which are required for the complex and rapidly changing culture in Swaziland.

6. In-service teacher training and feedback. Traditional school systems make little organised attempt to reach primary school teachers in their classrooms, and often do not give them adequate supplies of new materials. Nor do they make available re-education programmes to help with the introduction of new materials. Additionally, there is often no reporting of student progress on a formal basis until the leaving examination at the end of primary school. Under the plan a far-reaching training system will re-educate teachers within their own schools and communities, distribute new materials and monitor use and success of those materials. The parts of this system will include the establishment of Teaching Innovation and Distribution Centres in each district, a cadre of school inspectors and teacher-leaders, and a progress reporting system. This approach, like the use of modules, has rarely been incorporated in a systematic way into full-scale curriculum development projects.

D. Co-ordination with Existing Programmes.

The plan has not been designed to replace any existing educational programmes. Instead, it will co-ordinate and build upon current programmes. Details of this co-ordination are reported in the plan itself. Full co-ordination, for example, is planned with the following projects: English Through Activity (British Council), the In-Service Teacher Training Programme (UNESCO), the Swaziland Integrated Science Project (ODA), the Matsapa National High School Project (SIDA via UNDP), the School Agriculture Scheme (UNICEF), and the Schools Agriculture Programme (ODA).

E. Technical Assistance.

To help with the development of this project, a request for technical assistance will be made to foreign donors. Table 1 shows the total man-years of technical assistance to be requested. Note that there is a larger amount of technical assistance during the early phases of the project when Swazi educators will be in training. There will be a gradual lessening of foreign assistance as locals assume their roles without advisory support.

TABLE 1

Man-Years of Technical Assistance Estimates

by Post and Calendar Year

Post	1975	76	77	78	79	80	81	82	Total
Project Director	1	1	1	1	1	1	1	1	8
Educational Technologist	1	1	1	1	1	1	1	1	8
Educational Technologist	1	1	1	1	1	1			6
Educational Technologist	1	1	1						3
Teacher Trainer	1	1	1	1	1				5
Teacher Trainer	1	1	1	1					4
Systems Designer	1	1	1						3
Totals	7	7	7	5	4	3	2	2	37

TABLE 2

Training Estimates
(Man-Years of Overseas Training)

Training Activity	1974	75	76	77	78	79	80	81	82	Total
Special Courses		1	1	1	1	1	1	1	1	8
Master's Degrees		1	1	1	2	2	1			8
Doctoral Degrees						1	1	1		3
Totals		2	2	2	3	4	3	2	1	19

TABLE 3

Total Donor Assistance Cost Estimates

Item	1975	76	77	78	79	80	81	82	Total
Technical Assistance	378	378	378	270	216	162	108	108	1998
Participant Training	20	20	20	30	40	30	20	10	190
Commodities	274	63	47	45	92	42	42	42	577
Capital Construction	397								397
Other Costs	5	5	5	5	5	5	5	5	40
Totals	1004	466	450	350	353	239	175	165	3202

F. Training

Training is planned so that all posts initially occupied by technical advisors, which are shown in Table 1, will eventually be occupied by trained and qualified local educators. The schedule for this training is shown in Table 2.

G. Cost

The total estimated donor cost to implement the plan, in dollars times 1,000, is shown in Table 3.

PROGRESS TO DATE

To implement the National Primary School Curriculum Plan, the Primary Curriculum Unit has been established. It is already staffed with five experienced Swazi educators, one of whom is the Director. All PCU staff members have taught in primary school. Together they represent a combined total of over 87 years of primary school teaching experience. A USAID Technical Advisor is working with the PCU staff. A staff training programme has begun; two training workshops already have been conducted in Swaziland through funds and personnel provided by USAID. The first workshop focused on preparation of teaching materials, and the second covered development of a portion of the new primary school syllabus. More training workshops will take place during the next year, and some of the PCU staff eventually will be sent to the United States for further technical training.

Educational aims for the new curriculum have been developed on the basis of relevant national educational documents and on interviews with influential educators and community leaders. These have included the following groups: The Swazi National Council; Senior Inspectors; teacher educators; headmasters of primary schools; primary school teachers; District team leaders; private industry; religious leaders; the UBLS School of Education; economic planners; and parents. Information from all interviews has been used to develop a list of educational aims in terms of how students will be expected to behave after finishing school. In their present form these educational outcomes are not specific enough for classroom teachers to use. However, they will be useful in describing the more general aims of education. A review of this list of outcomes is being undertaken by the appropriate policy making committees to establish priorities.

These educational outcomes have been incorporated into the National

Primary School Curriculum Plan As one of its first tasks the PCU, working closely with the various subject panels, will produce detailed teaching objectives based on these educational outcomes. These objectives will later be incorporated into a new primary syllabus to be presented to the Ministry of Education for final review and approval.

The general purpose of the lower primary curriculum will be to develop basic language and mathematics skills and to provide a foundation for continued learning during school as well as after formal schooling is completed. The curriculum will include the beginning of self-instructional skills, good attitudes, and good behaviour. The upper primary curriculum will place more emphasis on subject matter with attention to problem-solving thinking, useful life-related skills, and good attitudes. After completion of his schooling the student will be prepared to make an active and meaningful contribution to his society.

The outcomes of the new syllabus have been stated in terms of what students will be able to do, in each of three areas or domains, after completing school. At the end of primary school, for example, students will be able to do the following things in each of the three domains listed below. These are only examples, of course, and do not cover the entire list of primary school student outcomes.

A. Cognitive Domain

1. Demonstrates increased oral and silent reading skills (Examples: reads at 150 words per minute; skims material for important parts; reads newspapers and magazines).
2. Demonstrates increased skills in writing (Examples: writes report summarizing radio lesson; takes notes during a speech; completes business forms).
3. Performs operations with integers and fractions (Examples: computes complex fractional equivalents; relates common fractions to decimals and percentages; solves mathematical sentences).

B. Attitude Domain

1. Willingly communicates in English (Examples: voluntarily speaks in English while using the telephone; writes business letter on own initiative; contacts information sources outside the school).
2. Willingly communicates in isiSwati (Examples: expresses personal

ideas; spontaneously leads others in dramatizing a folk tale; writes a short story about personal experiences).

3. Willingly participates in patriotic activities (Examples: attends national holiday ceremonies; joins service oriented groups; demonstrates national consciousness in ways such as displaying a flag in the home).

C. Psychomotor Domain

1. Produces good quality clothing (Examples: makes clothes for younger family members; patches worn parts of clothing; uses a sewing machine).

2. Applies handicraft skills (Examples: makes wood carvings; makes woven baskets from sisal fibres; moulds clay figures).

3. Participates in games and sports (Examples: plays on school athletic teams; performs physical exercises; helps teach games to others).

October 20, 1978

TO : Mr. Raymond Magagula
Dr. William Kromer

FROM : Dr. J.D. Mulhern

RE : REPORT ON THE TEACHER INNOVATION AND DISSEMINATION CENTRES

Attached is a final draft of the report you requested of me concerning the Teacher Innovation and Dissemination Centres. In developing this report I first met with each DEO and Teacher Leader, reviewed documents which had been prepared previously in P.C.U., held a meeting with the Teacher Leaders on October 12 to receive their reactions, and again held a meeting on October 19 to which the DEOs, district Inspectors and the Teacher Leaders were invited to share their reactions. Although none of the DEOs were present on the 19th, a good discussion did take place at that time. After each meeting the document was revised and modified. It is my recommendation that you request the Chief Inspector Primary to convene a meeting with the DEOs as soon as possible to get their reaction to the paper. If this could be done before October 27, I am prepared to revise it once again before I leave on the 27th.

THE TEACHER INNOVATION AND DISSEMINATION CENTRES

INTRODUCTION:

Teachers' Centres are relatively new to education. The proto-type for today's version can be found in the reform legislation pertaining to English education in the post World War II era. However, it was not until the introduction of the Nuffield Mathematics Programme and the North-West Curriculum Project that they had a real purpose. The Centres flourished within these projects as places where teachers could receive practical in-service help on classroom problems and where teachers could plan curriculum changes with other teachers. Through the cooperative efforts of the British Schools Council and the Department of Education and Science over 500 centres have been established in England and Wales. Although there is a wide variation in the degree of success that each has attained, the most successful centres share the following characteristics:

1. The Ministry and the local educational authorities are cooperatively committed to the centres.
2. The teachers served by the centre feel that it is responsive to their needs.
3. The teachers served by the centre are included in the governance of the centre.
4. The curriculum development projects and in-service programmes are coordinated with those of the local education authorities.
5. The centre warden is viewed by the teachers as being a representative of their concerns.

A somewhat different situation developed in the U.S.A. as American educators copied the English "centre" concept and adapted it to their special needs. It is not surprising then to find the first of the American centres were sponsored by colleges of education and were designed to help train new teachers. Gradually these centres engaged in the in-service function in order to achieve certain objectives in the training process for the new teachers. These centres have been greatly reduced as the need for new teachers has diminished. However, the need for continuing education for teachers already in the classroom has recently been recognised by the Federal government and state and local education authorities. Consequently, sizeable numbers of teachers centres or professional development centres (as preferred by the Americans) have been established by local school authorities. Although it is too early to identify a national pattern or a reliable

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list of characteristics of successful centres, the following pattern seems to be emerging from the more successful ones:

1. Teachers constitute a significant portion of the governing board, 50% or more in many cases.
2. The major emphasis is on the professional development needs of teachers.
3. The local school authorities and colleges of education have a significant role in the governance, planning and programme areas of the centres along with the teachers.
4. The teachers feel the centres are meeting their expectations.

The four TIDCs attached to the four district education offices in Swaziland are very similar to those being developed elsewhere. They share the same difficulties experienced by other centres in that the purposes of the centre are not very clear; teachers are not quite sure what the centres are and tend not to come, unless called; the teacher leader and the DEO do not always agree as to what the centre should do; and the teacher leader is not quite certain as to the lines of authority concerning the centres.

The purpose of this paper is to examine and recommend changes in the organisation of the centres, develop the overall purposes of the TIDCs, propose specific objectives for the four TIDCs, and recommend future plans relative to the centres.

ORGANIZATION:

One of the key elements in the Swaziland Primary Curriculum Development Project is the presence of a TIDC in each of the four districts. The buildings for the TIDCs at Nhlanguano, Pigg's Peak, and Siteki are very similar. Each of these three TIDCs include two offices, a classroom, a teachers' workroom, and a library. Offices for the DEO and primary inspectors are also included in these three TIDCs. In addition, there is a storeroom for instructional materials in each TIDC. The building for the TIDC in Manzini is located on the William Pitcher College complex. It contains a classroom and a teachers' workroom. All four centres will be equipped with selected materials and equipment for the use of teachers in developing, making, or building instructional materials and learning aids.

Thus, it can be seen that each TIDC is a place. It is a building, but more importantly, the TIDC is a concept. The TIDC is conceived of as a direct link between the school system and the curriculum development systems, and its functions are specifically related to in-service training and the professional growth of

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teachers.

Teachers' centres must be viewed as neutral territory, a place that provides assistance to teachers and where they can discuss classroom problems without feeling apprehensive about it. If it is not, teachers will not use the centres. This is especially true where the DEO/Inspectorate staff share the same physical setting. The proposal does not clarify jurisdictional control over the TIDCs when it states:

"Primary administrative responsibility for the TIDCs will rest with the District Education Officer. Teacher leaders assigned to the TIDCs will be PCU staff members and will carry out teacher training under the director of the DEOs but shall have professional and technical assistance from the Primary Curriculum Unit"

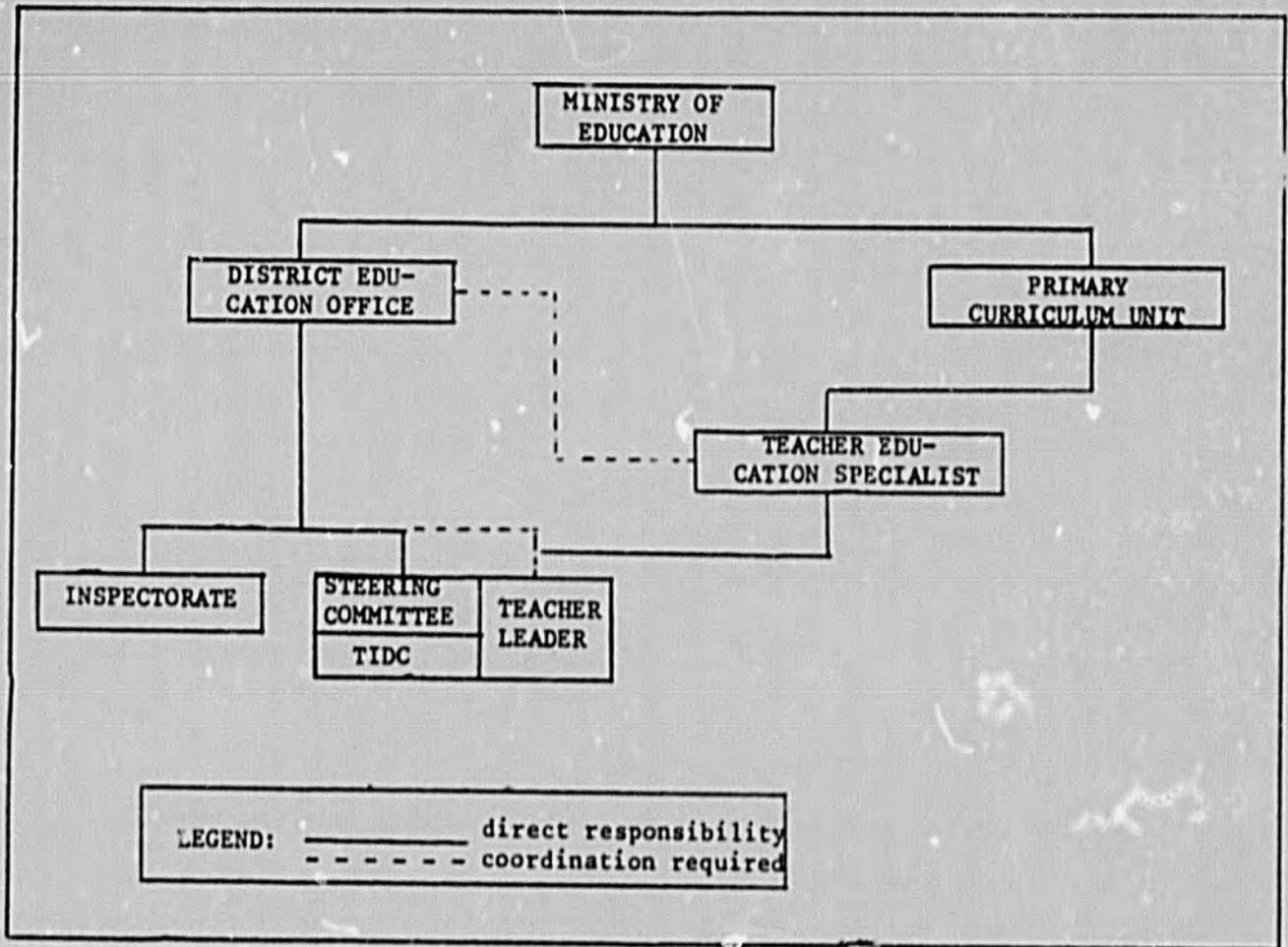
If the teacher leader is to serve the teachers and be a spokesman for the teachers, it is important to maintain the teacher leader under the jurisdiction of the teacher education specialist at the P.C.U. Obviously there must be co-operation among the teacher leader, the DEO and the inspectorate staff, and the DEO is the final authority within the district. It is reasonable to expect that the teacher leader will draw up plans for each month and after they have been approved by the PCU, to file a copy with the DEO. Certainly the DEO may question some of the activities and the absence of others.

If the teachers are to come to the TIDC for other than attendance at required meetings, the teachers themselves are the best source of information concerning those things the teachers expect of the TIDC. Similarly, if we want the inspectors and headmasters to make use of the TIDC, the inspectors and headmasters are the best source of information concerning those things they expect of the TIDC. The best means of accomplishing this and at the same time giving a sense of ownership to all parties, is to organize a TIDC steering committee at each site and bring all parties together as partners. In this case the DEO will organize the committee and his representative as chairperson will be the teacher leader. In addition, four teachers, four headmasters and two inspectors should be appointed to the committee. The committee should assist and advise the teacher leader concerning the development and use of the centre as a means of helping district teachers grow professionally.

The organizational structure of the TIDC is as follows:

(see next page)

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PURPOSE:

The primary purpose of the centres is to help improve the quality of education for all Swazi children no matter where they live. In order to achieve this goal the Centre staff should be prepared to assist the pilot school teachers and all other Swazi teachers on the classroom use of the new curriculum materials. At the same time the Centre staff should be prepared to serve as the intermediary between the P.C.U. and the pilot school teachers and all other Swazi teachers on matters pertaining to the new curriculum materials.

Although the net effect of this change broadens the responsibility of the teacher leader, it does not change the basic relationships that currently exist among teachers, inspectors and teacher leaders. In other words, the teacher leader is not granted "inspector" responsibility in non-pilot schools, a responsibility that they do not have in the pilot schools. The teacher leader is a facilitator only, one who assists the pilot teachers to improve their teaching.

They do not have authority to judge and evaluate as to whether or not a teacher is satisfactory. No matter what, this instructional facilitator role exercised by the teacher leader is to be limited to the pilot schools except as a headmaster might request their assistance through the DEO.

There are three functions that must take place through the TIDC.

The first function is that of in-service education of classroom teachers within the district. Although the centre may assist in the orientation and training of the DEOs, the inspectorate and headmasters, primary responsibility for this task rests with the PCU staff. The second function is that of assisting the pilot school teachers and others in the use of the new curriculum materials. In order to do this the Centre staff must be thoroughly knowledgeable about the new materials and their classroom use. The third function is that of developing the potential of the Centre as a resource centre for teachers. It should be a place where teachers can visit and receive assistance on classroom problems by reading books, examining materials, constructing teaching aids and discussing the problem with the teacher leader.

The purposes of the centres are as follows:

1. Serve as an in-service education centre for district teachers on the new curriculum materials.
2. Serve as a neutral meeting ground where pilot teachers and teacher leaders can discuss the curriculum materials with the design staff.
3. Serve as a curriculum resource centre where books, materials and teaching aids are available on loan to classroom teachers.

SPECIFIC OBJECTIVES:

In order to successfully accomplish these purposes, it is necessary to consider specific objectives. Further, it is necessary to establish these objectives in terms of responsibilities for the teacher leader, who is responsible for coordinating the TIDC.

The teacher leader:

1. schedules monthly meetings for and serves as the chairperson of the TIDC Steering Committee which includes representative teachers, headmasters and members of the inspectorate;
 2. conducts in-service curriculum workshops and training days on a regularly scheduled basis for pilot school teachers at the TIDC;
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3. schedules in-service curriculum workshops and training days on a regularly scheduled basis in cooperation with other agencies for the district teachers at the TIDC;
4. organizes and schedules professional development courses for teachers through the PCU, In-Service, William Pitcher College and Nazarene College at the TIDC;
5. organizes and conducts regularly scheduled meetings with the pilot school teachers to obtain their recommendations concerning the pilot curriculum materials;
6. visits each pilot school classroom on a twice-monthly basis and observes teacher use of the materials on at least one of these visits;
7. assesses the need for and assembles teaching aids including professional books, in the TIDC, and makes them available to teachers on a loan basis;
8. makes teachers aware of simple and inexpensive teaching aids through displays at the TIDC and technical assistance, whenever possible.

Obviously this is a very large task for one teacher leader. A second professional employee and a carpenter must be assigned to the TIDC if the potential value of the TIDC is to be realized.

RECOMMENDATIONS:

The following list of recommendations is not intended to be a static list but rather flexible in that some items may be eliminated while others may be added:

1. Furniture stored at the Manzini TIDC be removed immediately as its only current use is that of a warehouse.
2. Immediate steps be taken to transform the Manzini TIDC into a TIDC with the plans approved by both the DEO and the PCU Director.
3. A follow-up be instituted concerning the equipment for the centres (see attached list).
4. Each centre develop a purchase plan for equipment (purchases under equipment orders).
5. The teacher leaders:

5. The teacher leaders: Continued
 - a. Schedule and participate in the development of orientation/workshop sessions for district-wide Grade I teachers on the new materials.
 - b. Schedule Grade 2 pilot teacher feedback sessions on the Grade 2 materials and organize the information for use by the design staff.
 - c. Develop and schedule Grade 3 pilot teacher and headmaster in-service workshops on the Grade 3 materials.
 - d. Assist the PCU in planning in-service workshops for all members of the inspectorate, In-Service, William Pitcher College and Nazarene College staff on the Grade I materials.
 - e. Distribute to all concerned parties the revised job descriptions of the teacher leader, teacher education specialist and teacher education adviser.
6. That the term "teacher leader" be modified because it no longer accurately reflects the responsibilities of the job and that consideration be given to the classification of "Teacher Leader and TIDC Coordinator".
7. A second professional staff member, provided for in the In-Service Proposal, be assigned to the TIDC.
8. A carpenter whose job it will be to make simple teaching aids for teachers be assigned to each TIDC.
9. The kitchen facilities be upgraded in each TIDC so that tea and even a meal may be prepared in each centre.
10. Additional space, as the need develops, be given to each TIDC for material displays and exhibitions.
11. Funds for the travel support of the Teacher Leaders be part of the TIDC support budget.

TERMS OF REFERENCE

POST: TEACHER LEADER:

1. Responsible to: Teacher Education Specialist
2. Supervisory Responsibilities: The District TIDC
3. Overall Responsibility: To plan and implement, in cooperation with the PCU and DEO, in-service training for pilot teachers and all other teachers using the new curriculum materials.
4. Specific Responsibilities:
 - a. Schedules monthly meetings for and serves as the chairperson of the TIDC Steering Committee which includes representative teachers, headmasters and members of the inspectorate.
 - b. Conducts in-service workshops and training days on a regularly scheduled monthly basis for pilot school teachers at the TIDC.
 - c. Schedules in-service curriculum workshops and training days on a regularly scheduled monthly basis in cooperation with other agencies for the district teachers at the TIDC.
 - d. Organizes and schedules professional development courses for teachers through the PCU, In-Service, William Pitcher Teachers College, at the TIDC.
 - e. Organizes and conducts regularly scheduled meetings with the pilot school teachers to obtain their recommendations concerning the pilot curriculum materials.
 - f. Visits each pilot school classroom on a twice-monthly basis and observes teacher use of the materials on at least one of these visits.
 - g. Assesses the need for and assembles teaching aids including professional books in the TIDC and makes them available to teachers on a loan basis.
 - h. Makes teachers aware of simple and inexpensive teaching aids through displays at the TIDC and technical assistance, whenever possible.
 - i. Other responsibilities as may be deemed appropriate by the Director of P.C.U.

TERMS OF REFERENCE

POST: TEACHER EDUCATION SPECIALIST:

1. Responsible to: Director, PCU
2. Supervisory Responsibilities: Responsible for the overall effectiveness of the four TIDCs and direct supervision of the teacher leaders.
3. Overall Responsibility: To design and implement programmes of in-service education for teachers on the new curriculum materials, and to effectively coordinate training programmes so as to coincide with the introduction of the new materials at each grade level.
4. Specific Responsibilities:
 - a. The development of a fully coordinated plan of in-service education for teachers related to the redesigned curriculum materials that will ensure implementation of those materials.
 - b. Supervise the development of individual plans for in-service programmes through each of the four TIDCs.
 - c. The coordination of all in-service efforts on the curriculum materials by other agencies including William Pitcher College and U.B.S.
 - d. Assume leadership for the development of orientation training sessions on the new materials for all persons including teacher leaders who will be responsible for training the teachers on the new materials.
 - e. Assume leadership for the development of orientation/training sessions on the new materials at the PCU and TIDCs for primary school headmasters.
 - f. Assume leadership for the development of orientation/training sessions on the new materials at the PCU for teaching personnel at William Pitcher College, Nazarene College and U.B.S., who are responsible for working with pre-service primary school teachers.
 - g. Assist teaching personnel at the various colleges and U.B.S. to redesign pre-service programmes to reflect the new primary school curriculum.
 - h. Supervise end of term material evaluation workshop for pilot school teachers and the teacher leaders in conjunction with the curriculum design staff.
 - i. Other responsibilities as may be deemed appropriate by the Director of P.C.U.

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TERMS OF REFERENCE

POST: TEACHER EDUCATION ADVISER:

1. Responsible to: Director PCU/EMU Chief of Party
2. Supervisory Responsibilities: None
3. Overall Responsibility: To assist the Teacher Education Specialist in the supervision of the TIDC, to assist in the design and implementation of in-service education programmes for teachers on the new curriculum materials and to assist in the coordination of all training programmes so as to coincide with the introduction of the new materials at each grade level.
4. Specific Responsibilities: The teacher education adviser will assist the teacher education specialist in each of the following tasks:
 - a. The development of a coordinated plan of in-service education for teachers related to the redesigned curriculum materials so as to ensure implementation of those materials.
 - b. The supervision of the teacher leaders and of the individual plans for in-service programmes at each of the TIDCs.
 - c. The coordination of all in-service efforts related to the curriculum materials by other agencies including William Pitcher College and U.B.S.
 - d. The management of the orientation/training sessions on the new materials for persons who will be responsible for training the teachers on the new materials.
 - e. The management of the orientation/training sessions on the new materials for the primary school headmasters,
 - f. The management of the orientation/training sessions on the new materials for personnel at William Pitcher College, Nazarene College and U.B.S., who are responsible for the pre-service education of primary school teachers.
 - g. The redesign of pre-service programmes at the various colleges and U.B.S. to reflect the new materials.
 - h. The organization of end of term evaluation workshop for pilot school teachers, teacher leaders and curriculum design staff.

In addition, the Teacher Education Adviser will be responsible for the following tasks:

- i. The development and monitoring of the conceptual framework of the TIDCs.
- j. The coordination of EMU sponsored credit and non-credit course offerings.
- k. The development of effective relationships with U.B.S relative to transfer of credit between the two institutions, cooperative programmes, etc.
- l. To teach selected courses as assigned by the EMU Chief of Party.
- m. To assist in the development and revision of curriculum materials in selected subject areas as assigned by the EMU Chief of Party.
- n. To carry out any other responsibilities as may be deemed appropriate by the EMU Chief of Party.

SAMPLE STUDENT OUTCOMES FOR PRIMARY SCHOOL

LOWER PRIMARY

1. Child demonstrates problems solving skills.
(Cognitive Domain)

- Child:
- (i) Given an incomplete story asks relevant questions.
 - (ii) Makes deduction from common experiences, e.g., relates clouds to rain.
 - (iii) Puts steps of familiar tasks in order.
 - (iv) Explains one feasible way to solve a common problem, e.g., how to keep a grass roof from blowing away in the wind.
 - (v) Identifies five uses of a large stone, or other object.

2. Child has developed orienting and attending skills.
(Affective Domain)

- Child:
- (i) Completes classroom tasks without continued guidance.
 - (ii) Identifies most significant part of a passage or lesson.
 - (iii) Listens carefully when information is being presented.
 - (iv) Waits for his turn, does not handle materials not intended for use.
 - (v) Avoids quitting tasks because of fear of failure.

3. Child has acquired certain manipulative skills.
(Psychomotor Domain)

- Child:
- (i) Can stack objects.
 - (ii) Can align objects.
 - (iii) Can operate fastener and locks.
 - (iv) Can use a hammer, pliers, a screwdriver, spanner, nuts and bolts, etc.
 - (v) Can pour liquids, sand, etc.

4. Child reads siSwati both orally and silently.
(Cognitive Domain)

- Child:
- (i) Reads labels and signs.
 - (ii) Reads simple rules and regulations, e. g., road rules, public health rules, etc.
 - (iii) Reads simple stories.
 - (iv) Reads personal letters.
 - (v) Reads elementary library books.

5. Child can understand different number grouping in base 10.
(Cognitive Domain)

- Child:
- (i) Adds and subtracts numbers in various number groups.
 - (ii) Converts numbers in base 10 to other number groups.
 - (iii) Solves problems in number groups.

- (iv) Multiplies and divides numbers in various numbers in base 10.
- (v) Counts in different multiples, e.g., counting by 2's, 4's, etc.

6. Child shows interest in using scientific explanations of natural events. (Attitude Domain)

- Child:
- (i) Challenges superstitions.
 - (ii) Makes a guess as to why a certain thing happens as it does using scientific explanations.
 - (iii) Makes observations of things happening in life, and makes a guess as to why they happened that way. Makes more observations and seeks facts to test guesses.
 - (iv) Asks teacher to explain natural events.
 - (v) Tells others why things happen using scientific explanations.

7. Child shows an interest in gardens and orchards. (Cognitive Domain)

- Child:
- (i) Helps to plant.
 - (ii) Helps to water the garden.
 - (iii) Helps to weed the garden.
 - (iv) Cares for plant environment in school.
 - (v) Handles plants properly.

8. Child knows the structure of the Swazi family life.
(Cognitive Domain)

- Child:
- (i) Distinguishes the two types of families, e.g., nuclear family and extended family.
 - (ii) Describes the duties of family members.
 - (iii) Explains the advantages and disadvantages of extended family.
 - (iv) Explains the line of authority of the Swazi family.
 - (v) States the education of the clans.

UPPER PRIMARY

1. Child expresses an attitude of open-mindedness, of willingness to accept change, of flexibility, of being able to adjust to new situations. (Attitude Domain)

- Child:
- (i) Changes when circumstances demand.
 - (ii) Seeks advice when appropriate.
 - (iii) States one example of some change of traditional culture that should occur in a developing country.
 - (iv) Responds good naturedly to criticism.
 - (v) Supports traditional values where appropriate.

2. Child willingly communicates in siSwati by reading, speaking, listening and writing. (Attitude Domain)

- Child:
- (i) Spontaneously tells personal experiences to others in siSwati.
 - (ii) Voluntarily conducts lessons with friends in siSwati after school.
 - (iii) Willingly seeks to read during his leisure time.
 - (iv) Offers to write a news article.
 - (v) Willingly writes poems in siSwati.

3. Child desires to communicate in English. (Attitude Domain)

- Child:
- (i) Seeks books, magazines and suitable comics to read.
 - (ii) Listens to English radio broadcasts.
 - (iii) Tells personal experiences in English.
 - (iv) Completes the school assignment neatly and on time.
 - (v) Voluntarily uses English if the opportunity arises.

4. Child developed basic handwriting skills. (Psychomotor Domain)

- Child:
- (i) Forms letters clearly, neatly and correctly.
 - (ii) Uses printing.
 - (iii) Uses writing instrument correctly.

- (iv) Uses cursive writing.
- (v) Uses the same type of lettering throughout his writing.

5. Child performs operations with integers and fractions.
(Cognitive Domain)

- Child:
- (i) Computes fractional equivalents.
 - (ii) Relates vulgar fractions to decimals and percentages.
 - (iii) Performs operations with positive and negative integers.
 - (iv) Performs operations with mixed fractions.
 - (v) Solves problems involving addition, subtraction, division and multiplication in operations of numbers.

6. Child understands Swazi culture and tradition.
(Cognitive Domain)

- Child:
- (i) Describes Swazi cultural behavior.
 - (ii) Describes the traditional norms.
 - (iii) Describes Swazi traditional functions or celebrations.
 - (iv) Lists the Swazi national holidays and the places where they are celebrated.
 - (v) States the principles of Swazi family organization.

7. Child has developed some skills in the manipulation and construction of apparatus. (Psychomotor Domain)

- Child:
- (i) Follows a plan and assembles apparatus to carry out an experiment.
 - (ii) Makes and records accurate observations.
 - (iii) Constructs and improvises essential apparatus for experimentation.
 - (iv) Records conclusions.
 - (v) Uses measuring devices accurately (scale, balance).

8. Child desires to grow gardens using improved agricultural methods. (Psychomotor Domain)

- Child:
- (i) Plants suitable seeds at the appropriate time.
 - (ii) Cares for the garden, e. g., pest control, watering.
 - (iii) Willingly spends extra time in the garden.
 - (iv) Uses the produce to enrich the family diet.
 - (v) Willingly takes part in the plant environment of the schools.

MAP OF
DISTRICTS, DISTRICT EDUCATION OFFICES, TEACHER INNOVATION
DISTRIBUTION CENTERS



▲ - DEO
● - TIDC

THIRD
NATIONAL
DEVELOPMENT PLAN

1978 - 1982

EDUCATION CHAPTER

PLANNING SECTION
MINISTRY OF EDUCATION

10TH FEBRUARY, 1976.

INTRODUCTION

Education lies close to the heart of a society's life and concerns. Culture, the political system and economic arrangements should be reflected in any educational endeavour. It is the right of every child to have access to education. It is the purpose of education to provide programmes geared to the needs of the individual. Yet it is the dilemma of a developing country, devoid of a conson, integrated, infrastructure of economic activity and developed human resources, to provide these educational services when the demands for investment far outstrip the availability of resources, both financial and human. Inevitably, choices must be made and priorities set for the development of the educational system. In no way can investment in training and facilities be uncontrolled; there is no way in which primary, secondary and tertiary levels of education can grow without controlling the rate at which growth takes place. Therefore, in this context, society is constrained to make demands upon individuals to develop those capacities and skills urgently required by a nation which wishes to reinforce its cultural identity whilst raising the quality of life of the population as a whole.

Access to education in Swaziland has been limited in the past. At the time of independence a gradually strengthening resurgence of aspirations among people began to gain momentum, whilst a determined programme of development, constrained by the lack of trained human resources and by financial factors, was set in motion. It is the delicate balance of these two issues which is at the core of education policy for the next five years.

Social demand for education will be the guiding principle for educational provision at the lower levels in the system, whilst manpower requirements will determine enrolments and courses at the higher levels. Government has set the goal for reaching Universal Primary Education by 1985, a mere two years after the present plan period expires. UPE implies a full primary programme of seven years for all children of primary school age. Expansion of facilities is being matched by revision of the curriculum mainly through the reformulation of the content of programmes of study. Emphasis is placed on the rich Swazi culture, the heritage of the people and also the possibilities for advancement provided by work and exploitation of the natural resources of the country.

When UPE becomes a reality, a basic ten year education programme for every child is envisaged as a post 1985 goal. It is necessary to begin developing the structure for such a system now.

The present Junior Secondary School course of three years should be made available to primary school leavers who qualify. The curriculum will be revised through the inclusion of practical subjects with a bias towards preparing the majority of those who complete the course for employment and self employment opportunities. Continuing to expand enrolments at this level stems from the need to ensure that the initial seven years at school are made more profitable by providing a post-primary experience for that growing majority of children who complete their first cycle at age 12 and 13. This approach will also help alleviate the pressure, in the long term of the increasing number of children leaving primary school as UPE approaches. Furthermore, Government's rural development programme will be supported by school leavers having been exposed to the re-oriented curriculum and possessing certain basic skills which can be further developed.

It is intended that some of this further training is accomplished through non-formal education programmes provided by education centres situated in rural areas. These centres are designed in such a way that they provide courses according to the expressed needs of the communities in which they operate, and serve, on an interministerial basis, the various extension agencies of government.

At the senior secondary school level it is necessary to restrict entrance to manpower requirements. First, it is a matter of resources. If heavy investments are made at the primary and junior secondary level, adjustments should be made elsewhere in the system. Second, it is vital, economically and socially, to ensure that the output from senior secondary is closely geared to employment opportunities; the high unit cost makes education much more expensive if it results in underemployment and, more seriously, unemployment. Individuals and society pay dearly for years of training that are ended by the prospect of not finding work consonant with academic achievements.

Vocational training programmes are seen to run parallel to senior secondary programmes; emphasis will be placed on developing a reservoir of urgently required skills, responding to the needs of industrial and agricultural development in various parts of the country. While quantitative development should be carefully measured and monitored, the opportunity should be taken to consolidate and strengthen the quality of post Junior Certificate education programmes.

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The present poor quality of graduates from the senior secondary schools is reflected by dissatisfaction amongst employers seeking qualified school leavers and the University mounting special pre-entry courses in some disciplines.

University education is geared to manpower requirements; the production of graduate and diploma manpower principally for the economic development of Swaziland. It is also committed to enhancing its reputation as a centre of advanced learning for the benefit of the Swazi nation and the propagation of development oriented research with particular reference to Swaziland

The medium through which education is imparted is the teacher. There is a direct relationship between the quality of education which school children receive and the quality of the teacher. The teacher, furthermore, plays a vital role in the life of the community. An efficient education system demands a teacher of quality and such a teacher should be attracted to the service. This raises two issues: training and remuneration. A new teacher training college is to be established in the Ntlangano area, emphasis will be placed on the quality of pre- and in-service training and improvements will be made in the living conditions of teachers, particularly at the primary level.

Public investment in education should be seen to improve the standard of living of the people. This must be reflected in increased economic activity, the cultural and social benefits accruing, and by reaching the political goal of self-reliance. Despite the considerable localisation achieved in the public and private sector since independence, much still remains to be done. The need for local people to fill new and existing middle and high level jobs, generated by economic development and the present state of the economy, will grow. Formal post-school education and training programmes must be further developed to satisfy manpower requirements. The earlier neglect of on-the-job training, both in the public and private sector, must be rectified.

II

REVIEW OF PROGRESS IN THE SECOND PLAN PERIOD

PRIMARY EDUCATION

Three major aims for primary education were stated in the second plan:

- To continue the expansion of primary enrolments as rapidly as resources permit, with the ultimate long-term objective of universal primary education;
- To reorient the curricula at the primary level to counteract the current non-technological bias and to enable school leavers to move more rapidly into employment opportunities which are open to them;
- To raise the quality of school education, improving performance at all levels and reducing the high incidence of repetition and dropout.

In general the quantitative developments have been satisfactory. Enrolments between 1973 and 1976 inclusive have increased by 13 percent. The number of teachers has increased by 19 percent (see Table XV -).

TABLE XV -
ENROLMENTS, TEACHERS, PRIMARY SCHOOLS

<u>Year</u>	<u>Number of Schools</u>	<u>Number of Pupils</u>	<u>Number of Teachers</u>
1973	395	01 694	2 112
1974	403	06 110	2 220
1975	412	09 520	2 303
1976	420	02 721	2 813
Percent increase	6%	13%	19%

Source: Central Statistical Office, Education Statistics, 1973 to 1976.

A specific target was set for primary education when Government accepted the Report of the National Education Commission in early 1976*. It was decided that universal primary education is to be achieved by 1985 and the Ministry of Education began planning to meet this major objective.

The rate of expansion of primary school facilities has been inadequate. During the same period of the plan, in spite of the large increases in enrolments and teachers, the number of schools increased by only 6% (see Table XV -). A sample survey conducted by the Ministry of Education in 1975/76 showed that more than half the classrooms are inadequate and the majority without equipment and basic facilities. Moreover, teachers' houses are in very short supply.

In 1974/75 the Ministry of Education devised standards for the building of new schools with a self-help plan to co-ordinate the communities' building efforts.

The Ministry of Education has also devised a long term building programme for primary schools. Prototype buildings were constructed in 1977/78, giving particular attention to design, construction materials, and methods of building. Procedures for dealing with the regional distribution of schools are to be developed.

A Primary Curriculum Development Project was initiated in 1973. The Grade 1 curriculum programme and prototype materials were introduced in selected schools in 1977.

The buildings for the Curriculum Centre and four Teaching Innovation Development Centres were completed in 1977/78. However, there is much work to be done before a nationwide new primary curriculum is implemented; the second plan objectives will only be met, at the best, by the end of the third plan period.

* The National Education Commission was established by Cabinet in 1972 to investigate the organisation of education and to advise the Minister for Education on desirable changes and future developments. Members of the Commission were officials of Government, representatives of the University, the Swazi National Council and others concerned with education. The Report was published in 1975.

If the number of primary school teachers has increased satisfactorily, the proportion of qualified teachers has in fact decreased (see Table XV -).

TABLE XV -
TEACHER QUALIFICATIONS, PRIMARY SCHOOLS

<u>Year</u>	<u>Qualified</u>	<u>Unqualified</u>	<u>Total</u>	<u>% Qualified</u>
1973	1 610	494	2 112	76,6
1974	1 643	877	2 220	74
1975	1 644	719	2 363	69,6
1976	1 639	614	2 513	67,6
Percent Increase	8%	67%	19%	

Source: Central Statistical Office - Education Statistics 1973 to 1976.

Although the teacher training colleges are producing more teachers each year through regular and in-service courses, they are not coping with the pace of enrolment increases. The provisions of the plan have been, in this case, short of what was needed.

Continuation rates are shown in Table XV - . There has been an improvement in the flow in the system. In 1973 the Ministry of Education decided in favour of normal progression and the rates of continuation have improved somewhat since. However, there is still a bottleneck at the standard five level. Neither repetition nor dropout has been eliminated, but they have been kept to a minimum, taking into consideration the present situation in schools and the options within the system.

TABLE XV -
RATES OF CONTINUATION, PRIMARY SCHOOLS
(Percent of all pupils)

<u>Year of Course</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
1	100	100	100	100
2	79,5	83,7	83,6	82,5
3	71,1	77,4	75,8	73,2
4	59,6	66,5	62,6	60,9
5	46,6	43,3	40,8	39,7

RATES OF CONTINUATION, PRIMARY SCHOOLS (CONTD.)

<u>Year of Course</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
6	35,2	43,3	40,8	39,7
7	28,0	35,4	33,4	32,4

Source: Central Statistical Office - Education Statistics 1973 to 1976.

SECONDARY EDUCATION

The three major aims for secondary education were stated as follows:

- To make places in secondary schools available to all students who achieve the required entry qualification;
- To reorient the curricula at the secondary level to counteract the current non-technological bias and to enable school leavers to move more naturally into the employment opportunities which are open to them;
- To raise the quality of secondary education, improving performance at all levels and reducing the high incidence of repetition and dropout.

An analysis of quantitative developments in the secondary system shows it is even more satisfactory than that of primary. However, it is afflicted with the same problems of low quality and poor orientation. Enrolments during the period 1973 - 1976 have increased by 40 percent with an increase in the number of teachers of 61 percent (see Table XV -).

TABLE XV -
ENROLMENTS, TEACHERS, SECONDARY SCHOOLS

<u>Year</u>	<u>Number of Schools</u>	<u>Number of Pupils</u>	<u>Number of Teachers</u>
1973	64	12 459	580 22.7
1974	66	14 301	611
1975	67	16 227	739
1976	67	17 396	805 19.6
Percent increase	5%	40%	61%

Source: Central Statistical Office - Education Statistics - 1973 to 1976.

Unit costs make financial constraints become more evident at the secondary level. Yet the rate of pupils passing the Swaziland Primary Certificate Examination is now over 70 percent. Therefore every year more children qualify for further schooling. The National Education Commission, recognising that more and more children are completing their primary education at the age of 12 or 13 years, recommended a three-year post-primary programme. This in effect suggests ten years of basic education for all pupils. In the light of this the Ministry of Education began to give priority to the development of junior secondary schools as a natural follow up exercise to the achievement of universal primary education in 1985.

The rate of growth of secondary school facilities has been even more inadequate ^{than} that of primary schools. During the period of the second plan (1973 - 1977) the number of schools increased by less than 5 percent (see Table XV -). The provision for capital development was far below the needs of the system. Housing for secondary school teachers is inadequate as well. However, foreign aid and loans for the building programme and for equipment has permitted a better situation than exists in the primary schools.

Since 1973 the Ministry of Education has been looking for further financial support to develop the secondary school network, with the various communities taking a part in this effort. In 1975 the expansion and renovation of the Swazi National High School at Kwaluseni was completed. Construction of 5 new junior secondary schools was started in 1977 and construction of 5 more will start in 1978. Facilities were added to schools in 1977 with another 12 to follow. The siting of these schools was influenced by the report of the National Education Commission. During the period a correspondence education centre was organised to supplement secondary education provision.

Subject panels worked on curriculum improvement throughout the plan period in English, Science, Mathematics, Development Studies etc. Diversification of the curriculum has brought about some remarkable changes: Modern Agriculture, Elementary Technology and Home Economics have made some impressive progress in the system. In 1972 there were three schools offering technical subjects; in 1976 there were ten such schools and ten offering commercial courses.

During 1977 a Secondary Curriculum Unit was organised in order to speed up the process of reorientation and to insist on more fundamental changes in line with the social and economic development of Swaziland. The new unit will complement the Primary Curriculum Unit and will co-ordinate changes, ensuring a more homogeneous approach to curriculum development.

As in the case of primary schools, the total number of secondary school teachers has increased, but the level of qualification of the staff has dangerously decreased (see Table XV -). Again, teacher training colleges, as well as the second plan provisions, are far behind the pace of secondary school development; specific efforts have to be considered here to avoid jeopardising student qualifications and the curriculum reforms.

T A B L E XV -
TEACHER, QUALIFICATIONS, SECONDARY SCHOOLS

<u>Year</u>	<u>Qualified</u>	<u>Unqualified</u>	<u>Total</u>	<u>Percent Qualified</u>
1973	467	83	550	84,9
1974	400	131	611	78,6
1975	538	201	739	72,8
1976	685	230	805	74
Percent increase	40%	177%	61%	

Source: Central Statistical Office - Education Statistics - 1973 to 1976.

Continuation rates are shown in Table XV - . Normal progression has eased the flow of students in the system, yet the dropout and repeater situation is still far from acceptable.

T A B L E XV -
RATES OF CONTINUATION, SECONDARY SCHOOLS
(Percent of all students)

<u>Year of Courses</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
1	100	100	100	100
2	83,2	67,0	65,5	60,2
3	65,1	69,5	67,3	63,0
4	38,6	37,3	36,3	32,4
5	33,3	30,6	28,3	23,9
6	1,9	1,2	0,6	1,1

Source: Annual report Summary of the Ministry of Education - 1974

EXAMINATIONS

The Swaziland Primary Certificate and Junior Certificate pass rates have improved during the plan period (see Table XV -). This satisfactory achievement has its consequences; social demand for entry to junior secondary and senior secondary schools is increasing.

TABLE XV -
EXAMINATION RESULTS, PRIMARY AND JUNIOR CERTIFICATE

PRIMARY CERTIFICATE

<u>Year</u>	<u>Entrance</u>	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>Fail</u>	<u>Pass Rate %</u>
1973	7508	876	2045	1911	2676	64,4
1974	9157	311	2543	3185	3118	65,9
1975	8762	271	2832	3115	2544	71,0
1976	9006	819	3613	2303	2191	75,7

JUNIOR CERTIFICATE

<u>Entrance</u>	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>Fail</u>	<u>Pass Rate %</u>
2180	22	658	783	717	67,1
2850	62	1000	1043	725	74,6
3019	62	901	1417	619	79,5
3201	53	779	1457	992	89,8

Source: Annual Statistical Bulletin - 1976 - and The Annual Report of the Ministry of Education - 1976.

The record of results for the Cambridge Senior Certificate is not as good; although the total number of passes has increased during the period, the percentage of students passing with first, second and third class passes has heavily decreased, with the percentage of fourth class passes increasing (see Table XV -). This is of major concern to the Ministry of Education; it is suggested that the evolution of pass rates of the Cambridge Senior Certificate Examination indicates a qualitative decrease related to the shortage of qualified teachers and teaching facilities. The policy of non-selection for entrants into senior secondary schools has also contributed to lowering the quality of examination results and should be reversed.

T A B L E X V -
EXAMINATION RESULTS, O LEVEL CERTIFICATES 1968 - 1976

<u>Year</u>	<u>En- trance</u>	<u>1st</u>	<u>1st</u>	<u>2nd</u>	<u>2nd</u>	<u>3rd</u>	<u>3rd</u>	<u>4th</u>	<u>4th</u>	<u>Fail</u>	<u>Failing</u>
1968	240	33	13,7	61	25,4	06	35,0			60	25,0
1969	268 268	36	12,5	59	21,8	113 113	37,0			57	20,3
1970	314	34	10,8	68	21,7	114	36,3			98	31,2
1971	374	55	14,7	92	24,6	137	36,6			90	24,1
1972	684	94	7,9	131	19,2	244	35,7	176	25,7	79	11,5
1973	806	44	5,5	84	10,4	195	24,2	307	38,1	176	21,0
1974	1037	59	5,7	105	10,1	228	22,0	392	37,8	253	24,4
1975	1120 1120	56	4,9	111	9,8	248	21,8	450	39,5	255 255	24,0
1976	1251	58	4,6	140	11,2	270	22,2	733	58,6	42	3,4

Source: Annual Statistical Bulletin - 1968 to 1974 - and the Annual Report summary of the Ministry of Education - 1975 and 1976.

TEACHER TRAINING

Both William Pitcher and Nazarene Teacher Training Colleges have operated close to capacity during the past five years. However, as has been noted above, the enrolments in primary and secondary schools have risen at a proportionately greater rate than the output of qualified teachers (see Tables XV -).

Two major policy decisions were taken at the outset of the second plan: to institute an intensive five-year programme for upgrading 600 poorly qualified teachers and to phase out the Primary Lower Certificate by 1974. Both decisions have been acted upon. The in-service programme for primary school leavers achieved an output of 550 by the end of 1977. In addition, a further 600 teachers have been identified for upgrading and the programme has been extended.

It was anticipated in the second plan that all primary teachers will have at least a basic teaching qualification by 1978. However, the National Education Commission realised that this target would not be achieved. Consequently plans were laid for the extension of William Pitcher College to increase its output by 50 percent. Nazarene College is also expected to increase its output and plans for establishing a new primary teacher training college at Nhlanguano are well advanced.

The major concern, however, is more with the quality of teacher training and the serious shortfall of teachers within particular disciplines, especially mathematics and science. This latter problem was not solved during the second plan period. There are proposals for the University to become more involved by extending the scope of the present pre-entry science course offered on the Kwaluseni campus.

TABLE XV -
STUDENTS UNDERGOING TEACHER TRAINING

Year	Secondary Teacher Certificate	Primary Teacher Certificate	Primary Higher Certificate	Primary Lower Certificate	Upgrading Course	Domestic Science Course	Hons Economics Course	Total
1973	94	-	151	35	49	-	-	339
1974	83	153	23	22	98	-	-	381
1975	91	106	-	-	100	-	9	396
1976	112	225	-	-	100	-	10	451

Source: Central Statistical Office - Education Statistics - 1976.

Technical teachers are also in very short supply; plans have been formulated for the development of a teacher training course at the Swaziland College of Technology for technical teachers. Agriculture teachers are being prepared on the Luyengo campus of the University, as are Hons Economics Teachers.

VOCATIONAL/TECHNICAL EDUCATION

The Swaziland College of Technology (SCOT) trains middle-level technical and administrative personnel and craftsmen. Founded as a trade school in 1946, it has evolved over the years into a polytechnic offering a broad range of courses at the technician artisan levels. SCOT is now Government's chief vehicle for the training of people with the special skills needed for the nation's development. Its offerings are closely geared to the requirements of employers in the public and private sectors and to the future requirements for skilled manpower projected in the manpower survey.

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There are also a number of other institutions which offer technical training. Several Government ministries and departments and parastatal bodies provide specialised in-service instruction for their staff. Private industry is encouraged by tax concessions to train Swazi staff so as to localise as expeditiously as possible. There are also regional institutions in which Swaziland co-operates with other countries in the southern Africa region. A partial listing of Government and non-Government institutions which offer technical training follows:

<u>INSTITUTIONS</u>	<u>TYPE OF TRAINING</u>
University College, Luyengo campus	Agriculture extension
Farmer Training Centres	Cropping, animal husbandry
Multi-Country Posts and Telecommunications Training Centre, Malawi	Postal and telecommunications services
Swaziland Institute of Management and Public Administration	Management and public admin.
Institute of Development Management UBI	Management
Department of Extra-Mural Studies, UCS	Small business management, accounting
Ministry of Local Administration	Crafts for the handicapped
Public Health Service	Nursing and health services
Mananga Training Institute	Management

NON-FORMAL EDUCATION

Despite the rapid expansion of formal education facilities which has taken place since independence and which is planned to continue over the third plan period, there will still be large and increasing numbers of people, old and young, who have had the benefit of little or no schooling.

The second plan embraced the following major aim for non-formal education:

To develop systems of non-formal education and training for youths and adults in order to raise the ability of individuals, particularly those with limited formal education to contribute to rural development and transformation.

In 1974/75 the Ministry of Education devised a programme to serve out of school youth and adults. Seven Rural Education Centres were built adjacent to secondary schools in 1977. These centres are designed to open the schools to communities and various government agencies; all education efforts should be co-ordinated in the centre for the benefit of the rural areas in which they are situated, aiming at community learning programmes and general development.

The Sebenta National Institute promotes adult literacy and community development. A voluntary body, it receives Government support through the Ministry of Local Administration and is assisted also by the private sector and overseas organisations. Sebenta operates more than 700 literacy classes per annum, each run on a part-time basis for a period of 100 hours. Classes are held in schools, workplaces, markets, and other community buildings. More than 250 part-time instructors have been trained in Sebenta's method, which has been demonstrably successful in imparting literacy in a shorter time than is possible with other methods.

The Ocina Youth Service, established in 1969, trains youth for agricultural and other employment in rural areas. The training camp near Matsapha offers instruction in basic rural skills and youth leadership to 120 youths between the ages of 17 and 23, most of them with little or no formal education. These young men form the "Ocina Regiment" under the sponsorship of His Majesty. The 11-month course emphasises practical farming but also includes instruction in literacy, civics, and specific skills such as building, carpentry, farm mechanics, and horticulture.

SPECIAL EDUCATION

The Department of Community Development and Social Welfare in the Ministry of Local Administration, as part of an integrated programme to increase the well being of groups in need of special assistance, administers schools, training facilities, and workshops for handicapped children and adults and sponsors day care centres and nursery schools for the young children of working mothers. See Chapter XVI, Health and Social Development, for the health and welfare aspects of the integrated programme. The Swaziland Society for the Handicapped co-ordinates the efforts of voluntary organisations working in this field.

HIGHER EDUCATION

As a part of the University of Botswana, Lesotho and Swaziland (ULS) up to 1973, the University College of Swaziland shared the broad objectives of the regional institution, which were:-

1. To align the University's programmes closely with the national objectives
2. To achieve an increasing physical presence in each country.
3. To meet the manpower requirements of the three countries
4. To keep costs, especially recurrent and unit cost, to realistic and affordable levels.

After the breakup of ULS consequent on Lesotho's withdrawal from the regional arrangement, Swaziland and Botswana formed the University of Botswana and Swaziland in 1976, establishing two constituent colleges of equal status having complementary programmes consistent with the manpower requirements and policies of the two countries. Two campuses, one at Lyongo (formerly serving the Faculty of Agriculture of (ULS) and one at Kwaluseni constitute the University College of Swaziland (UCS) which in 1977/78 had an enrolment of 250.

In order to meet Swaziland's need for specialised high-level manpower it was hoped to achieve a ratio of 50 science and mathematics students to 40 humanities students. However, the actual ratio is nearer to 30/70, with a consequent overproduction of arts graduates and underproduction of science graduates; this reflects the preparation of Cambridge Overseas School Certificate holders who qualify for entrance to the University.

Recurrent costs and unit costs of University Education remained high. The staff envisaged in the ULS devolution plan doubled in a year and expenditure rose to an estimated E3 million in 1974/75 compared to a planned expenditure of less than E2 million. The situation improved after UCS was formed with Unit costs lowering towards the planned target.

ADMINISTRATION OF EDUCATION

The progress of educational reform and expansion have made demands on the administrative capacity of the Ministry of Education. The recommendations of the National Education Commission concerning policy, planning, and regulations have been implemented.

MS

The central and district administration of education has been strengthened. The Planning Section has been developed, but there is a need to develop the national staff further. The district administration has not yet reached the management capacity that is needed for the ultimate goal of a semi-decentralised setup envisaged by the Ministry. A senior staff member was recruited for personnel matters in 1976; yet taking into account the increase in teaching staff and the attendant problems, the establishment of a Teaching Service Commission is long overdue. Donor assistance provided technical expertise in 1977 as a first step towards organising administrative procedures for the recruitment and transfer of teaching staff in the field. A school building unit is being established, the nucleus of which was in operation in 1977. It is expected that greater efficiency will be achieved in the implementation of the school construction programme. Attention will also be given to the specific needs of the Ministry of Education's financial management.

FINANCIAL REVIEW

In the years before the second plan, expenditure on education expressed as a percentage of total Government expenditure grew steadily. In the years of the second development plan the trend was reversed. The Ministry of Education's recurrent expenditure fell from 10.1 percent of total to a low point of 9.2 percent of total in 1975/76 with an averaged 10.3 percent over the five year period. The subvention to the University accounted for 2.3 percent of the latter.

Average annual capital and recurrent expenditure per pupil at each stage in the educational ladder is shown in Table XV - below. These figures give some indication of the weighting in the provision of infrastructure, showing where the greater concentration of resources is applied — and where it is needed.

TABLE XV -
AVERAGE ANNUAL EXPENDITURE PER PUPIL, 1973/74 TO 1977/78
(Emalangeni)

	<u>Capital</u>	<u>Recurrent</u>
Primary	1,98	22,37
Secondary	65,20	143,79
Teacher Training	655,97	1 355,93
University	1 970,64	2 330,20

Source: Ministry of Education, Educational Planning Section.

During the plan period, the greatest share of the education budget was allocated to secondary schools. Yet from 1973/74 to 1977/78 recurrent expenditure on primary education rose from 33,6 percent of the total to 37,9 percent whereas expenditure on secondary education dropped from 43,3 percent to 30,7 percent. Allocation of capital funds to primary education grew modestly from 3 percent to 5,6 percent whilst the allocation to secondary education decreased from 70,2 percent to 59,7 percent.

A comparison of investment performance over the second plan period appears in Table XV - . It shows planned expenditure by level of education in relation to actual expenditure in constant 1977 prices. The fact that less was expended than planned reflects the implementation capacity of the Ministry of Works, Power and Communication. £18,2 million (in 1977 constant prices) was planned for the five year period, actual expenditure amounted to £13 million.

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TABLE XV -

Planned and Actual Capital Expenditure over the Second Plan Period (1973/74 - 1977/78) in constant - 1977 prices.

	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>	<u>TOTAL</u>
PRIMARY SCHOOLS						
Planned	145,911	180,966	100,535	345,690	399,787	1,073,895
Actual	94,634	147,955	355,117	230,912	387,793	1,217,421
SECONDARY SCHOOLS						
Planned	2,222,989	1,790,025	837,693	996,243	1,325,705	7,172,715
Actual	722,557	2,122,414	394,047	379,873	808,717	4,427,608
TEACHER TRAINING						
Planned	69,216	170,912	141,127	312,827	191,800	885,884
Actual	23,551	70,223	101,307	300,490	147,666	653,277
UNIVERSITY						
Planned	431,304	613,271	740,732	1,270,601	2,256,370	5,321,996
Actual	426,570	272,250	462,129	1,117,921	1,905,606	4,264,584
OTHER PROJECTS						
Planned	45,274	-	-	949,666	2,715,464	3,711,424
Actual	68,112	2,301	58,151	215,041	2,091,677	2,438,282
TOTAL						
Planned	2,914,606	2,755,174	1,629,147	3,776,313	6,800,186	18,155,516
Actual	1,336,434	2,615,191	1,379,612	2,347,267	5,421,479	12,999,173

DEVELOPMENT OBJECTIVES AND TARGETS

The demand for education remains a major social pressure. The aim for the future is to work towards universal primary education, and to offer the products of the primary system further education and training which will equip them for satisfying life and rewarding work. The Government intends to co-ordinate the efforts of all institutions working in the field of education and training to achieve these two broad objectives:

1. To cope with the strong and diversified demand for education
2. To improve the quality of education and training programmes at all levels.

In preparation for the third plan the Ministry of Education has been involved in a general review and appraisal of its management and policies.*

THE DEMAND FOR EDUCATION

After an analysis of the natural expansion of the education system, backed by recommendations in the National Education Commission's report, a continuous period of ten years of basic education is envisaged. To achieve universal primary education by 1985 requires a programme of capital expenditure and teacher training that will meet the increase in enrolments at the primary level. Increased pressure at the secondary level can be expected to result. Although large numbers of students enrolled under the primary expansion programme will not be entering secondary schools during the plan period, there will be increases in enrolment at the junior secondary level. This is expected to result from a steady trend towards a higher percentage passing the Swaziland Primary Certificate Examination, and from the increased efficiency which should follow the reform of the primary curriculum. It is intended to provide for the increased enrolment and to make appropriate adjustments in the curriculum so that a three-year Junior Secondary/post primary programme will round out the ten-year basic education which is needed for every child in Swaziland as the next major goal after universal primary education in 1985. The rapid expansion of this basic education programme supports Government's overall objective of social equity.

*The review was documented in two reports: Current Trends in Educational Policy (1976) and A Financial and Statistical Analysis of Swaziland's Educational System with Projections to 1985 (1977). These documents, together with the University of Botswana and Swaziland Development Plan 1977/77 - 1985/86, form the basis of the Ministry of Education's development strategy during the third plan period.

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However, for the post-Junior Certificate levels of education it is intended to focus on a manpower approach, necessitating strict planning of the in and out flows for all senior secondary, vocational, and higher education institutions. High School enrolments will increase little if at all, being limited to the first and second class passes of J.C.

THE QUALITY OF EDUCATION

Curriculum reform will continue to be a priority concern. A new Curriculum Development Centre has been established at the William Pitcher Teacher Training College. Emphasis will be on the ten-year basic education perspective and the co-ordination of primary and secondary curricula for this purpose. The primary Curriculum Unit will develop and pilot test courses for one primary level each year. The Secondary Curriculum Unit will focus on the junior secondary level, with a post primary approach. The aim is to provide a ten-year basic education programme for every child, countervailing the non-technical bias of the present curriculum and preparing the school leaver for actual conditions of life and work.

EXAMINATIONS will be scrutinised during the plan period. The present trend towards a national curriculum relevant to the specific needs of Swaziland raises the question of a national set of examinations, possibly linked to an international standard by negotiated equivalences. The development of aptitude tests and guidance should satisfy the social demand and manpower restrictions aspects of education policy. Following the outcome of curriculum development proposals, it is envisaged that the question of a Swaziland Schools' Examination Council will be raised during the third plan period.

TEACHER TRAINING

Development of teacher training is planned to be in line with the enrolments in the primary and secondary schools, the bulk of the demand being at the primary level during the period of the Plan. A new college is planned for in the southern district, and the localization of all expatriate teaching posts is envisaged by 1995.

At the same time in service programmes will be expanded to qualify primary school teachers and diffuse the on going curriculum reforms.

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RADIO EDUCATION: is intended to be closely intertwined with the present reform activities; mainly curriculum development and teacher training, with an extension to correspondence studies and adult education. This programme stems from the SED project which intends extending the VHF-FM network to five fairly large transmitters. This network will come into operation at the beginning of 1979. A 3 year pilot project has been worked out that will focus on the secondary curriculum and adult education.

CORRESPONDENCE EDUCATION: is recognised for the flexibility it will allow in meeting the social demand for education and equity, within the limits of the country's resources.

It is at present not envisaged to increase the fairly high enrolments at the J.C. level, but 'O' level courses are being written in collaboration with DEMB at the University. It is intended that SIEC begin to offer 'O' level courses, starting in 1979. This will coincide with the Ministry of Education's taking full responsibility for the SIEC complex.

The vocational training programmes, although remaining on the same campus, will be separated administratively from the correspondence activities.

VOCATIONAL AND TECHNICAL EDUCATION

Strategies for the development of vocational and technical education are based on the projections of the manpower survey (see Chapter V) which show the active labour force, now estimated at 175 000, increasing by 7000 per annum while the number of available jobs is growing at between 3000 and 4000 a year. Increasingly, the requirements will be for technically and professionally trained people.

The projections show that in 1982/83 there will be a substantial number of school leavers with formal qualifications no higher than Form 3 who will be either unemployed or working in unskilled jobs. However, the orientation of the school system is shifting in favour of providing the necessary background for entrants to technical courses. The demand for skilled workers will have increased by 50 per cent by 1982/83. So those young people who pursue technical courses will have a good chance of finding employment in skilled jobs.

In an effort to further reinforce the practical and technical bias in the school curriculum, the Ministry of Education will create during the period of the third Plan the first two of a series of vocational training centres in the districts. These centres will serve the development needs of rural areas with skilled and semi-skilled manpower, thus providing Junior Secondary school leavers with training for employment.

The Swaziland College of Technology (SCOT) plans to expand its programme so as to achieve an annual output of 400 persons trained in fitting, welding, plumbing, painting, bricklaying, joinery, and related skills, 100 typists, and 150 bookkeepers. The vocational training centres in the districts will release SCOT's facilities for the development of higher-level technician courses and an increase in the number of upgrading courses. The trade testing programme will be extended to include the majority of technical occupations in Swaziland. Adequate standards are to be determined and enforced. SCOT plans to establish a specially equipped workshop for the disabled where handicapped students will be trained in suitable technical and service skills according to their capabilities.

Improvements in the formal education system have resulted in the availability of larger numbers of 'O' level certificate holders who qualify for technician courses. Of SCOT's present enrolment of 530, two-thirds are in technician courses, with a planned output of 150 per year. It is intended to continue courses in the mechanical, electrical, and construction departments, to introduce a higher technical diploma level in the mechanical and electrical engineering departments, and to offer L I O B courses for students who have obtained ordinary diplomas. Technical and commercial teacher training will be extended to diploma level.

Specialised courses will be developed in the services and electrical departments. People will be trained to operate and maintain plant for rural development and road projects. A course in hotel management will be offered. Supervisory and junior management training will be offered. The apprenticeship scheme will be extended to cover all technician training.

NON FORMAL EDUCATION

For those who have not been reached by the formal school system the present system of non-formal education will continue to be expanded. The Ministry of Education co-ordinates and integrates the development of Rural Education Centres with other adult training programmes organised by various Ministries and agencies. The success of the enterprise is dependent on the success of this integrated approach. Some expansion is envisaged along with programmes developed for the urban sector of the population.

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Sabenta, the voluntary agency which spearheads the adult literacy campaign, intends to extend its reach. Quina, the youth training service, will add more programmes and develop its accommodation facilities. Small camps established in each of the districts will assist graduates of the course to become self-employed. At these camps demonstration farm units will be established.

To reduce illiteracy among the handicapped and train them for productive employment, it is intended to recruit and train special teachers and to provide accommodation, classrooms, and workshops for the handicapped. Statistics are to be compiled on the number of handicapped who could be absorbed into home reinforcement programmes.

To make it possible for mothers of young children to work, day care centres and nursery schools will be built and equipped and nurses and teachers trained to run them.

UNIVERSITY

The emphasis given to quality control at the senior secondary level should provide the University College of Swaziland with suitable candidates for its various programmes.

Development of UCB is planned in three phases. Phase I was the establishment (1971-1974) of a Part I centre offering the courses normally pursued in the first two years of a four year undergraduate university programme. Phase II (1975-1978) is the establishment of Part II programmes in the faculties of Agriculture, Humanities, and Professional Studies with concomitant infrastructural development. Phase III (1979-1982) will introduce Part II studies in the Faculty of Science and expand Part II studies in the Faculty of Professional Studies, creating a full university presence in Swaziland by 1982. The University intends to concentrate on producing graduates equipped to fill Swaziland's high level manpower needs and to institute development oriented research. The University will at the same time enhance its duties and reputation as a centre of advanced learning.

ADMINISTRATION

To cope with the rapid expansion of the system, a limited staff development programme will be introduced at the outset of the plan period, thus strengthening the administration of education at the centre as well as at the district level. Further development will be based on the results of a comprehensive management and organisation survey conducted by the Ministry of Education.

Action Programme, and Targets by the end of the Plan period

PRIMARY SCHOOLS :

It is intended to provide 2856 classrooms 2062 teacher's houses and other educational facilities, to accommodate 121533 pupils and 3414 teachers. A standard of 55 m² per 40 pupils for each classroom has been devised ; the pupil teacher ratio should be reduced to 35/1 with a pupil per qualified teacher ratio of 45/1.

SECONDARY SCHOOLS :

It is intended to provide educational services for 22466 secondary students. This entails the employment of 1143 teachers and provision of 739 general classrooms 329 teachers' houses plus other support facilities. In junior secondary schools a standard of 55 m² per 35 students for each classroom has been chosen, with the target of a pupil per qualified teacher ratio of 25 to 1.

CURRICULUM DEVELOPMENT :

Diversification of the curricula will continue to achieve a closer relationship with labour market opportunities. The Primary Curriculum Unit will develop a course study for one level each year, pilot testing it the following year. Since courses for the first two Grades have already been worked out, the entire primary curriculum will have been covered by the end of the plan period. The Secondary Curriculum Unit will develop a common core of subjects, including development studies Maths and Sciences, for junior secondary schools. Optional courses will also be offered.

This curriculum reform will give special care to elementary technology and agriculture courses programmes ; practical courses to prepare students for rural occupations or for vocational training will be added in 22 junior secondary schools, and agriculture will be introduced to 40 more primary schools, 12 secondary schools, and 3 vocational training centres.

The close coordination of the primary and secondary curriculum development will provide a rational ten-year basic education programme.

EXAMINATIONS

The Curriculum Centre in conjunction with ECCELS will be making proposals towards a new set of examinations consequent to the curricula changes. Aptitudes tests and guidance services will direct students into courses of study appropriate for them and supportive of the national development policies.

The entry to senior secondary schools will be restricted to holders of first and second class passes in the Junior Certificate Examination, subject to a decision by the Council of Minister. This decision will help to improve the quality of the pass rates in the Cambridge Overseas Schools Examination.

TEACHER TRAINING

A new teacher training college will be built at Nhlengano, and it is intended to improve facilities of existing colleges. The new college will enrol its first students in 1980/81 and will eventually have a yearly output of 200 teachers. The in-service programme will be extended to qualify 600 more primary school teachers by 1980, and will concentrate on the training of serving teachers in the use of the new curricula.

T A B L E
PRIMARY TEACHER SUPPLY

<u>Year</u>	<u>William Pitcher</u>	<u>Nazarene</u>	<u>New College</u>	<u>In-Service</u>	<u>Total</u>
1976	55	40		309	395
1977	71	51		250	372
1978	59	50		150	259
1979	59	50		300	409
1980	90	50		150	290
1981	90	50			140
1982	90	50	100		240
1983	90	50	100		320

Source: Ministry of Education and Institutions concerned.

University should reach an annual output of 50 graduates with secondary teaching qualifications by 1982/83. These programmes should raise the percentage of qualified primary school teachers to 77.1 per cent and qualified secondary school teachers to 87.1 per cent by 1983.

RADIO EDUCATION

Fifteen Junior Secondary programmes for Broadcasting will be developed at the Curriculum Centre, and from these, programmes for adult education will be evolved. Cassette copying equipment and radio receivers are envisaged for a limited number of schools. In any event radio education will be closely integrated with curriculum reform, teacher training and correspondence studies.

CORRESPONDANCE EDUCATION

The Ministry of Education assumes full responsibility for the Swaziland International Education Centre on the first of April 1978. The target enrolment of the J.C. courses will be kept around 1200 students and 'O' level courses introduced for about 1000 students.

VOCATIONAL AND TECHNICAL TRAINING

The facilities of the Swaziland College of Technology will be expanded to accommodate an increased output of 650 at the craft level and 150 at the techn. level. The Ministry of Education intends that two vocational training centres at Vuvulane and Entfonjeni will begin operations in 1980. Each will have a training capability of 90 students in a two year period.

The vocational courses of the Swaziland International Education Centre will then be separated from the correspondence activities and transferred into the Ezulwini Training Centre which will use and develop the existing facilities for the training of vocational and technical teaching staff of the Ministry of Education.

NON FORMAL EDUCATION

During the period of the Plan the Ministry of Education will establish a further 10 Rural Education Centres. Three Adult Education Centres will be created in urban areas, and a training programme for specialised local staff will be undertaken. This interministerial coordination effort in non formal education, under the Ministry of Education, will be evaluated during the third plan period. Sebenta's literacy programme will also be expanded to a population target of, and facilities will be provided for the development of the Goina youth training programme to an enrolment of 150 trainees. Eight additional instructors will be trained for Goina.

SPECIAL EDUCATION

It is intended to expand training and boarding facilities at the institutions for the deaf, the blind and the mentally retarded. The jurisdiction over the institutions for education of the handicapped will be transferred to the Ministry of Education. Day care centres and nursery schools should also be built and staffed (targets).

UNIVERSITY

The overall University College of Swaziland enrolment is expected to reach approximately 959 by 1982/83. Infrastructure will be provided to accommodate this enrolment and the expansion of Part II studies. It is intended to limit the academic staff establishment to 86 in 1982. The levels of internal efficiency at the University will be measured and monitored particularly in the areas of staff student ratios and unit costs together with indicative statistics measuring staffing work loads and class size.

Table indicates the projected full time enrolment at the UCS during the Plan period.

University College of Swaziland

Projections of Fulltime Enrolments by Faculty 1978/79 - 1982/83

<u>Faculty</u>	<u>1978/79</u>	<u>1979/80</u>	<u>1980/81</u>	<u>1981/82</u>	<u>1982/83</u>	<u>TOTAL</u>
Professional Studies						
Commerce	126	148	139	129	110	660
Law	32	44	49	53	57	234
Social & Economic Studies	30	40	60	81	85	304
<hr/>						
Totals						
- Degree	106	232	248	263	259	1198
- Diploma	40	48	48	40	40	240
<hr/>						
Humanities	89	87	95	101	105	477
Science	172	196	234	265	265	1132
<hr/>						
Agriculture						
- Degree	22	26	31	35	32	146
- Diploma/Certificate	232	292	270	270	270	1294
<hr/>						
Total Degree	479	541	608	664	681	2973
Total Diploma/Certificate	290	300	318	318	318	1834
<hr/>						
GRAND TOTAL	769	841	926	982	999	4807

Source: Development Planning Unit, University College of Swaziland, Luyengo.

Table refers to the UCS investment programme;

Kwajalein Campus

<u>Project</u>	<u>1978/79</u>	<u>1979/80</u>	<u>1980/81</u>	<u>1981/82</u>	<u>1982/83</u>	<u>TOTAL</u>
Student Hostels	632,000	440,000	-	-	340,000	1,412,000
Staff House	374,000	150,000	87,000	213,000	213,000	1,047,000
Extensions to Kitchen/ Refractory	164,000	-	-	-	-	164,000
OCMB (Classroom & Offices)	90,000	150,000	-	-	-	240,000
Multipurpose Auditor- ium	80,000	245,000	-	-	-	325,000
Geography Dept.	123,000	-	-	-	-	123,000
Classroom & Laborato- ries	-	205,000	-	-	-	205,000
Library Extensions	200,000	125,000	-	-	-	375,000
Additions & Student Union Buildings	68,000	-	-	-	-	68,000
Part II Science Labs.	-	400,000	725,000	725,000	-	1,850,000
Refugee Project	-	-	-	250,000	200,000	450,000
PABX Telephone System	36,000	-	-	-	-	36,000
External Works	40,000	45,000	60,000	70,000	-	215,000
Transport	10,000	10,000	10,000	10,000	10,000	50,000
Maintenance Extensions	-	-	50,000	-	-	50,000
Miscellaneous Works	-	-	-	20,000	30,000	50,000
	<u>1077,000</u>	<u>1920,000</u>	<u>932,000</u>	<u>1230,000</u>	<u>793,000</u>	<u>6,700,000</u>

Luyengo Campus

Science Laboratories	-	-	-	-	-	-
Library Extensions	134,000	-	-	-	-	134,000
Dairy Buildings	-	60,000	-	-	-	60,000
Road Improvements	-	60,000	-	-	-	60,000
Animal Clinic	60,000	-	-	-	-	60,000
Mulkema Water Supply	50,000	-	-	-	-	50,000
	<u>244,000</u>	<u>120,000</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>364,000</u>
TOTAL	<u>2111,000</u>	<u>1940,000</u>	<u>932,000</u>	<u>1230,000</u>	<u>793,000</u>	<u>7,064,000</u>

Source:

ADMINISTRATION

In 1978 a management and organisation consultant survey will be conducted for the Ministry of Education to determine staff establishment and development for the rest of the Plan period.

FINANCIAL PROVISIONS

Capital costs: costing and phasing of the investment necessary for the programmes described above are shown in Table XV - .

Recurrent Costs: The yearly percentage increase of the recurrent budget of the Ministry of Education in real terms, will be increased to 11% to make provision for the necessary additional support services.

IMPLEMENTATION SCHEDULE

<u>DATE</u>		<u>RESPONSIBLE ORGANIZATION</u>
April 79	PP submitted AID/W	USAID/S
May 79	PP approved	AID/W
June 79	EMU approved as contractor	AID/W
June 79	Grant agreement signed	USAID/COS
June 79	Tenders for housing construction	GOS
June 79	Tenders for Resource Center and TIDC Construction	GOS
July 79	TA contract signed	EMU/AID/W
July 79	4 vehicles ordered	EMU/PCU
Aug. 79	CPs met	GOS
Aug. 79	Contracts awarded for construction	GOS
Aug. 79	Equipment ordered	EMU
Aug. 79	Teacher Education specialist arrives	EMU
Aug. 79	Production specialist begins 2 year contract	EMU
Sept. 79	Construction commences	GOS
Sept. 79	2 Curriculum specialists arrive	EMU
Sept. 79	PERT completed and approved	EMU/USAID
Sept. 79	First detailed annual work plan completed and approved	EMU/USAID
Oct. 79	Evaluation specialist arrives	EMU
Nov. 79	4 vehicles arrive	EMU/PCU
Jan. 80	Grade 1 Science and siSwati distributed	PCU
Feb. 80	T.A. housing constructed and furnished	GOS
Feb. 80	2 Curriculum specialists arrive	EMU
Feb. 80	Construction of Curriculum Resource Center and TIDC completed	GOS/IBRD
Feb. 80	Curriculum Coordinator arrives	EMU
Feb. 80	Equipment arrives	EMU
May 80	First annual Evaluation completed	USAID/S
May 80	Second group of 4 vehicles ordered	EMU/PCU
Aug. 80	5 participants depart for U.S.	EMU
Sept. 80	4 vehicles arrive	EMU/PCU
Sept. 80	Second annual work plan completed and approved	EMU/USAID
Jan. 81	Grade 2 Science distributed	PCU
Jan. 81	Grade 2 siSwati distributed	PCU
Jan. 81	Grade 1 Math distributed	PCU
Jan. 81	Grade 3 Social Studies distributed	PCU
Jan. 81	Grade 1 English distributed	PCU
Jan. 81	Grades 1 & 2 Arts and Crafts distributed	PCU
May 81	Mid-project evaluation	USAID/S
July 81	Production specialist departs	EMU

<u>DATE</u>	<u>ACTION</u>	<u>RESPONSIBLE ORGANIZATION</u>
Aug. 81	5 participants return from U.S.	EMU
Aug. 81	5 participants depart for U.S.	EMU
Sept. 81	Evaluation Specialist departs	EMU
Sept. 81	Third annual work plan completed and approved	EMU/USAID
Dec. 81	Curriculum Specialist departs	EMU
Jan. 82	Grade 3 Science and siSwati distributed	PCU
Jan. 82	Grade 2 Math distributed	PCU
Jan. 82	Grade 4 Social Studies distributed	PCU
Jan. 82	Grades 2 & 3 English distributed	PCU
Jan. 82	Grades 3 & 4 Arts & Crafts distributed	PCU
Jan. 82	Grades 1 & 2 Music and Domestic Science distributed	PCU
Jan. 82	Grades 1 & 2 Agriculture, Religious Knowledge and Physical Education distributed	PCU
Jan. 82	Curriculum Coordinator departs	PCU
May 82	Annual Evaluation	USAID/S
Aug. 82	5 participants return from U.S.	EMU
Aug. 82	4 participants depart for U.S.	EMU
Sept. 82	Final work plan completed and approved	EMU/USAID
Jan. 83	Grade 4 Science and siSwati distributed	PCU
Jan. 83	Grade 5 Social Studies distributed	PCU
Jan. 83	Grades 4 & 5 English distributed	PCU
Jan. 83	Grades 5 & 6 Arts & Crafts distributed	PCU
Jan. 83	Grades 3 & 4 Music, Domestic Science, Agriculture, Religious Knowledge and Physical Education distributed	PCU
July 83	Teacher Education Specialist departs	EMU
Aug. 83	Last participants return from U.S.	EMU
Aug. 83	Remainder of T.A. team departs	EMU
Aug. 83	Final project evaluation	USAID/S

GOALLOGICAL FRAMEWORK

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>1. Accelerate the development of Swaziland's human resources within the framework of its national development goals by improving the quality of primary education and by reorienting its content towards the needs and circumstances of the Swazi environment.</p>	<p>1. Content of primary school level teaching and learning experience reflects practical skills, attitudes, and knowledge required in the rural agricultural environment of Swaziland.</p> <p>2. Primary school leavers are able to move more rapidly into existing employment opportunities.</p> <p>3. Pupil performance in primary schools is improved and the high incidence of repetition and dropout is reduced.</p> <p>4. Learning goals are determined by a broad-based consensus of Swazi leaders and citizens.</p>	<p>1. Attitude survey of national and local leaders and parents.</p> <p>2. Curriculum content analysis.</p> <p>3. Test results - comparison of baseline tests prior to introduction of new curriculum to results obtained after the introduction of the materials.</p> <p>4. Analysis of primary school efficiency data and manpower employment data.</p>	<p>1. Swaziland's leaders and citizens will remain committed to the development and utilization of a practical rather than restrictively academic education for its primary school age youth.</p> <p>2. Skills, attitudes, and knowledge identified and adopted for primary education by Swaziland's leaders and citizens are appropriate ones to enable a more efficient development of its human resources.</p> <p>3. Skills, attitudes, and knowledge identified and adopted for primary education can be translated into meaningful learning experiences.</p> <p>4. The proportion of trained to untrained primary school teachers will remain constant or improve.</p> <p>5. The Swazi economy can provide appropriate employment opportunities for the improved capacity of its human resources</p>

PURPOSE

LOGICAL FRAMEWORK

Narrative Summary

Objectively
Verifiable Indicators

Means of Verification

Important
Assumptions

1. Establish an institutionalized national capacity for developing primary curriculum reflective of Swaziland's national goal for education.

Conditions that will indicate purpose has been achieved: End of project status.

1. PCU recognized by WOE as contributor to development of policy with respect to primary curriculum and as principal vehicle for coordinating primary curriculum development.

2. PCU efforts lead to timely, economical and efficient preparation and utilization of new teaching/learning (T/L) materials.

3. New T/L materials are relevant, and accepted and supported by pupils, parents and teachers.

4. WOE through PCU has capability to analyze evaluation results and revise new curriculum materials as required.

5. WOE/PCU capable of measuring the overall effectiveness of the new curriculum.

1.a) PCU has officially recognized status within WOE-review documentation.

b) WOE provides qualified personnel (up to 27 professionals) for PCU operations.

c) WOE provision of adequate budgetary support for PCU and its operations.

d) GOE/WOE provides adequate salary and professional incentives to induce trained staff to remain within the PCU.

2.a) Survey of classrooms.

b) Results of the evaluation system.

c) Extent to which approved schedules for preparation, production, distribution of materials are met.

3.a) Survey of students, parents, and teachers.

b) Response of teachers during in-service training workshops and seminars at TIDCs.

c) Response of parents and local leaders at scheduled TIDC seminars.

d) Review of evaluation results.

Assumptions for achieving purposes:

1. That the GOE/WOE will continue to give high priority to strengthening the primary education system as indicated in the Third National Development Plan (1978-1982).

2. That persons with less than a university degree can be trained to design, test and write curriculum materials.

3. That the GOE will provide satisfactory arrangements to elicit and retain adequate participation of primary teachers in pre-service and in-service training in the use of the new curriculum.

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Narrative Summary

Objectively Verifiable Indicators

Means of Verification

Important Assumptions

6. MOE/PCU capable of training teachers in the use of the curriculum materials to enable the achievement of student outcomes.

- 4.a) Review of evaluation results.
- b) Review of PCU analysis of evaluation results.
- c) Review of results of follow-up evaluation.
- d) Evaluation of revised materials.

4. MOE/PCU will have responsibility for development and administration of the primary school leaver examination.

- 5.a) Attitude surveys of students/parents.
- b) Response of teachers at TIDC training seminars and workshops.

- 6.a) Review of evaluation system.
- b) Review of evaluation results.
- c) Undertake intense examination at random sample of students.
- d) Compare results of examination with those of evaluation.

- 7.a) Evaluation of pre-service and in-service teacher training programs.
- b) Review of evaluation results.
- c) Survey of teachers.

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OUTPUTS

LOGICAL FRAMEWORK

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<u>Outputs related to Institutional Operations:</u>	<u>Outputs related to Institutional Operations:</u>	<ul style="list-style-type: none"> 1.a) Direct observation. b) MOE Records. MOE organization diagram. PCU documents. c) Project evaluations. d) Survey of leadership within other offices concerned with curriculum development process. 2.a) Direct observations. b) Comparison of actual timing of preparation, production and delivery of materials with the schedule for these activities. 3.a) Direct observation of classrooms. b) Review of TIDC training records. c) Review of teacher training college records. d) Comparison of these records with Project schedule. e) Review of evaluation. 4.a) Direct observation of classroom and TIDC training operations. b) Review of PCU records. c) Review of TIDC records. 	<ul style="list-style-type: none"> 1. GOS will provide adequate financial support for curriculum development system. 2. GOS will provide necessary funds for production of curriculum materials for nationwide distribution. 3. GOS will ensure co-operation of teacher training colleges and other in-service and curriculum development units. 4. GOS will provide qualified personnel.
<ul style="list-style-type: none"> 1. A functioning curriculum development system for linking the curriculum units development activities of PCU at the primary level with those of other units working in curriculum development. 2. Functioning systems for the timely and efficient preparation, production, and distribution of new curriculum materials for all primary schools. 3. Functioning system for the timely and efficient carrying out of pre-service and in-service training, in cooperation with other units, for all primary teachers in the use of the new teaching/learning materials. 	<ul style="list-style-type: none"> 1. <u>Curriculum Development System:</u> Curriculum development activities of the PCU take place within an approved (by MOE) organizational relationship (see organizational chart in PP). 2. <u>Preparation/Production/Distribution Systems:</u> New teaching/learning materials prepared collaboratively by PCU staff and others; delivered and utilized in accordance with Section II.B. of the Project Paper. 3. <u>Teacher Education System:</u> A system established made up of appropriate MOE units for pre-service and in-service training of primary teachers in the use of PCU materials. 		

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OUTPUTS (Cont'd)

LOGICAL FRAMEWORK

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
4. A functioning evaluation system for measuring the effectiveness of new teaching/learning materials in achieving designated learning outcomes.	4. <u>Evaluation System:</u> An evaluation system will be able to supply required data throughout the duration of the Project.	4.d) Review of implementation schedule for the evaluation system. e) Comparison of actual implementation with scheduled implementation. f) Review of results with PCU/MOE/Contract/USAID personnel.	

OUTPUTS (Cont'd)

LOGICAL FRAMEWORK

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<u>Outputs Related to Institutional Infrastructure:</u>	<u>Basic Level Outputs:</u>	<u>Level Outputs:</u>	<u>Level Outputs:</u>
1. <u>Manpower Development</u>	1. <u>Manpower</u>	1.a) Ministry of Education records. b) PCU records. c) Observation. 2.a) AID records. b) Observation. 3.a) Observation. b) Mission records. c) PCU records. 4.a) Observation. b) Mission records. c) PCU records.	1. The GOS/MOE will provide suitable staff for training at the proper time to accomplish the phased training schedule. 2. Require recurrent budget will be provided by the GOS.
a) <u>PCU STAFF</u>	a) <u>Management</u> - PCU Director will be trained by 1979. b) <u>Designers</u> - Twelve Curriculum Design Specialists will be trained by 1983. c) <u>Production</u> - The materials production staff including a manager, a printer, an artist/photographer will be trained by 1981.		
Formal, in-service, and on-the-job training for the following PCU units:			
(1) Management (2) Materials Design and Preparation (3) Production (4) Teacher Education (5) Evaluation			
b) <u>Other Personnel</u>	d) <u>Teacher Education</u> - Two Teacher Educators will be trained by 1983. Eight Teacher Leaders will be trained by 1983. e) <u>Evaluation</u> - Two Evaluators will be trained by 1983. f) <u>Outside Writers</u> - up to five curriculum writers (outside the PCU) will be trained by 1981. g) <u>Curriculum Resources</u> - a Curriculum Resource Center Manager will be trained by 1983.		
(1) Curriculum Writers - in-service training for personnel outside the PCU selected to assist in materials writing.			
(2) Senior MOE staff responsible for the curriculum development process will be provided with specialized academic training.			

OUTPUTS (Cont'd)

LOGICAL FRAMEWORK

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
2. <u>Project Facilities/Equipment</u>	2. <u>Facilities Equipment</u> - see <u>Financial Analysis</u> for details.		
a) Curriculum development facilities:	3. <u>PERT Analysis</u> - The initial PERT-type analysis will be completed by the contractor not later than three months after the execution of the contract.		
(1) Office facilities for PCU (IBRD)*			
(2) Production facilities (IBRD)*			
(3) Curriculum Resource Center (IBRD)**			
b) Teaching Innovation and Dissemination Centers for four regions (IBRD)	4. <u>Annual Work Plans</u> - The initial work plan will be completed not later than three months following the contract execution.		
c) Six houses for T.A.(U.S.)*			
d) Three houses for T.A. (U.S.-2 built, 1 leased)**			
3. A life-of-project PERT-type management model (approved by AID and the GOS) of various activities required to achieve project purpose.			
4. A life-of-project set of work plans (approved by AID/GOS) derived from PERT-type model.			

* Completed in Phase One.
 ** To be built in Phase Two.

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INPUTS

LOGICAL FRAMEWORK

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>1. <u>AID (U.S.\$000s)</u> <u>Total AID: \$3,832.7</u></p> <p>a) Technical Assistance: Long-term - 27.8 py (\$2,446.1) Short-term - 4 py (\$284.0)</p> <p>b) Participant Training: U.S. - 13 py (\$195.8) Local - 30 py (\$33.8) Africa - 27 pm (\$138.2)</p> <p>c) Equipment and Commodities: 4 PCU components (\$338.9)</p> <p>d) Construction: Houses - 2 (\$70.00)</p> <p>e) Other: African Curriculum Organization membership fees (\$11.6) Rental of housing (\$11.8) External AID project evaluations (\$120.0)</p>	<p>Implementation Target (Type and Quantity):</p> <p>Implementation targets, time frame, and discussions are included in Financial Analysis and Supplementation Arrangements sections.</p>	<p>1. AID Project Agreements and PIO/T's.</p> <p>2. Implementation Plans.</p> <p>3. Project Evaluations.</p> <p>4. GOS Records and IBRD Records.</p>	<p>1. Recruitment and timely arrival of properly qualified sensitive specialists.</p> <p>2. Housing and facilities will be available on time.</p> <p>3. Equipment to be provided will arrive on schedule.</p>
<p>2. <u>GOS (U.S.\$000s)</u> <u>Total GOS: \$1,141.5</u></p> <p>a) Recurrent Budget: (\$828,000) Personnel Transport Provision for vehicle replacement Staff travel for conferences Part-time clerical assistance African Curriculum Organization membership fees</p>			

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INPUTS (Cont'd)

LOGICAL FRAMEWORK

Narrative Summary

Objectively Verifiable Indicators Means of Verification Important Assumption

- b) Capital Budget (\$313,500)
Curriculum materials production
Furniture for T.A. housing

3. IBRD (U.S. \$000s)
Total IBRD: \$496.9

- a) Equipment and Commodities:
Furnishings for Curriculum
Resource Center, TIDC and
offices (\$23.0)
Vehicles - 8 (\$66.8)
- b) Construction:
Curriculum Resource Center,
TIDC and offices (\$119.0)
- c) Capital Budget:
Materials production (\$288.1)

AID 1979-25 119-701

REPORT U-446

PROJECT APPRAISAL REPORT (PAR)

PAGE 1

1. PROJECT NO. 690-44-680-009	2. PAR FOR PERIOD: Feb. 1, 1977 to July 1978	3. COUNTRY SWAZILAND	4. PAR SERIAL NO. 78-1
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5. PROJECT TITLE

SWAZILAND PRIMARY CURRICULUM DEVELOPMENT PROJECT

6. PROJECT DURATION: Began FY 75 Ends FY 82	7. DATE LATEST PROP 12/23/74	8. DATE LATEST PIP	9. DATE PRIOR PAR Jan. 31, 1977
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10. U.S. FUNDING	a. Cumulative Obligation Thru Prior FY: 11,530	b. Current FY Estimated Budget: 1621	c. Estimated Budget to completion After Current FY: \$ to be determined!
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11. KEY ACTION AGENTS (Contractor, Participating Agency or Voluntary Agency)

a. NAME EASTERN MICHIGAN UNIVERSITY	b. CONTRACT, PASA OR VOL. AG. NO. AID/AFB-C-1172
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1. NEW ACTIONS PROPOSED AND REQUESTED AS A RESULT OF THIS EVALUATION

A. ACTION (X)			B. LIST OF ACTIONS	C. PROPOSED ACTION COMPLETION DATE
USAID	AID/W	HOST		
X	X	X	<p>Write PROP revision to reflect current status and any changes in the project based on review of external progress evaluation conducted February-March 1978.</p> <p>The issues to be addressed include:</p> <ol style="list-style-type: none"> 1. the organizational status of the PCU and its employees within the Swazi educational structure; 2. rescheduling of materials preparation; 3. in-service training of teachers; 4. training objectives; 5. the role of evaluation and revision; 6. the diffusion of the PCU materials into all Swazi primary schools; and 7. the cost of project extension and possibilities other donor assistance. <p>*Project Paper revision in process.</p>	JAN., 1979

D. REPLANNING REQUIRED

REVISED OR NEW:	<input checked="" type="checkbox"/> PROP	<input type="checkbox"/> PIP	<input type="checkbox"/> PRO AP	<input type="checkbox"/> PIG/T	<input type="checkbox"/> PIG/E	<input type="checkbox"/> PIG/P	E. DATE OF MISSION REVIEW SEP. 27, 1978
PROJECT MANAGER: TYPED NAME, SIGNED INITIALS AND DATE	MISSION DIRECTOR: TYPED NAME, SIGNED INITIALS AND DATE						
Ross Thomas, BRD	CT	09/07/78	Ted D. Morse, A/RD	DM	9/27/78		

AID 102925 (1070)	PROJECT NO.	PAR FOR PERIOD:	COUNTRY	PAR SERIAL NO.
PAGE 2 PAR	690-11-680-009	TO July 1979	SWAZILAND	78-1

II. PERFORMANCE OF KEY INPUTS AND ACTION AGENTS

A. INPUT OR ACTION AGENT CONTRACTOR, PARTICIPATING AGENCY OR VOLUNTARY AGENCY	B. PERFORMANCE AGAINST PLAN							C. IMPORTANCE FOR ACHIEVING PROJECT PURPOSE (X)					
	UNSATISFACTORY		SATISFACTORY			OUTSTANDING		LOW		MEDIUM		HIGH	
	1	2	3	4	5	6	7	1	2	3	4	5	
1. Eastern Michigan University					X								X
2.													
3.													

Comment on key factors determining rating

11.3. Comments

During this PAR period the contractor has made a major effort to upgrade the quality of the contract team and of the overall relationships of the university. The project has been moved directly under the Executive Vice President of EMU, minimizing the problems of factionalism within the university, and EMU has moved the former Chief of Party into a dynamic position as Campus Coordinator. The new COP is extremely well qualified

4. PARTICIPANT TRAINING					X									X
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Comment on key factors determining rating

Participant training is now on schedule, 8 participants have been in training or will depart for the US shortly. Five have completed training and now returned. Present schedule for return of remaining

5. COMMODITIES					X									X
----------------	--	--	--	--	---	--	--	--	--	--	--	--	--	---

Comment on key factors determining rating

Commodities are in place and are being fully utilized by PCU staff.

6. COOPERATING COUNTRY	a. PERSONNEL			X										X
	b. OTHER													

Comment on key factors determining rating

The GOS has given this activity high priority in its educational plans and during this PAR period has moved to a new active stance in meeting its problems. The former Director is now undergoing training in the US and is due to return summer 1979. The one disconcerting fact in what is clearly a new dedication to the project by the MOE is their unwillingness to solidify the position and status of a new Director by decision to place the former Director in another position on return. This has cost the project the services of the Assistant and now Acting Director who will soon move to the University College of Swaziland. Otherwise, the Ministry has now taken an active involvement in relating PCU to other Ministry activities and shown strength of purpose in utilizing the

7. OTHER DONORS				X										
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(See Next Page for Comments on Other Donors)

AID 1020-25(10-79) PAGE 3 PAR	PROJECT NO. 690-11-680-009	PAR FOR PERIOD: July 1979	COUNTRY SWAZILAND	PAR SERIAL NO. 78-1
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II. 7. Continued: Comment on key factors determining rating of Other Donors

The IBRD has made direct contributions to this project in the form of buildings for PCU headquarters, three Teaching Innovation and Distribution Centers and in various commodities. These have been adequate and suitable for the purposes of their acquisition.

III. KEY OUTPUT INDICATORS AND TARGETS

A. QUANTITATIVE INDICATORS FOR MAJOR OUTPUTS		TARGETS (Percentage/Rate/Amount)					
		CUMULATIVE PRIOR FY	CURRENT FY		FY 79	FY 80	END OF PROJECT
			TO DATE	TO END			
Prototype Materials	PLANNED	15	30	30	45	60	100
	ACTUAL PERFORMANCE	10	30				
	REPLANNED			30	45	60	100
Teacher Training	PLANNED	2	30	30	45	60	100
	ACTUAL PERFORMANCE	2	20				
	REPLANNED			20	50	70	100
Production Distribution	PLANNED	15	30	30	45	60	100
	ACTUAL PERFORMANCE	10	25				
	REPLANNED			30	45	60	100
Evaluation System	PLANNED	15	30	30	45	60	100
	ACTUAL PERFORMANCE	15	25				
	REPLANNED			30	45	60	100
B. QUALITATIVE INDICATORS FOR MAJOR OUTPUTS		COMMENT:					
1.	More Effective Teachers	Constant routine visits by PCU staff and spot check visits by USAID staff indicate that the major gain so far is in the quality of teaching at pilot schools. Materials have not yet had general distribution nationwide.					
2.	Better Prepared Students	COMMENT: While results are quite preliminary students respond well to the materials and teaching methods and in several cases have demonstrated for superior grasp of concepts relative to students in the control group.					
3.		COMMENT:					

AID 1020-28 (10-79)	PROJECT NO.	PAR FOR PERIOD:	COUNTRY	PAR SERIAL NO.
PAGE 4 PAR	690-11-680-009	July 1979	SWAZILAND	78-1

IV. PROJECT PURPOSE

A. 1. Statement of purpose as currently envisaged.

2. Same as in PROP? YES NO

To establish an institutionalized capacity for developing primary curriculum which reflects Swaziland's national goals for education.

B. 1. Conditions which will exist when above purpose is achieved.	2. Evidence to date of progress toward these conditions.
1. A professional curriculum development unit able to translate national goals and objectives into an effective primary curriculum.	1. The PCU is now fully operational in design work although not all sections are at optimum production. Prototype Grade I materials are being finalized for distribution and Grade II materials are being completed.
2. A facility for producing printed prototype materials prepared by the curriculum development unit.	2. The production unit is now generating new materials such as covers and art work and is up to date on pilot material production.
3. A system for distribution of curriculum materials to the primary schools.	3. Distribution to 16 pilot schools is now handled efficiently and plans are underway for distribution of initial materials to all schools in Swaziland.
4. A primary teacher corps trained in the use of newly developed curriculum materials.	4. A second workshop for headmasters is now scheduled to reinforce the previous training and emphasize the new curriculum materials.

V. PROGRAMMING GOAL

A. Statement of Programming Goal

Accelerate the development of Swaziland's human resources within the framework of its national development goals by making primary education more relevant to the Swazi environment.

B. Will the achievement of the project purpose make a significant contribution to the programming goal, given the magnitude of the national problem? Cite evidence.

V.B. While the desired effect is long term due to time necessary for primary students to mature and take their place in the human resource pool the project purpose will make a direct contribution to the programming goal. The change from passive learning to active participation in classroom studies will enhance the role perceptions of the student and prepare him for a more active and dynamic society. The emphasis on now necessary subjects, i.e. math and science, will prepare the student for an improved life in the limited local situation and qualify him or her to reach beyond the limits of tradition as the Swazi society develops and requires new attitudes, skills and capabilities. This preparation in the early years is vital if the potential of the human resources is to be developed at pace with modern economic conditions.

AID 1990-1 10-83	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT	<input type="checkbox"/> Worksheet <input type="checkbox"/> Issuance	PAGE 5 OF 5 PAGES	
CONTINUATION SHEET		1. Cooperating Country SWAZILAND	2.a. Code No.	
FORM SYMBOL		TITLE OF FORM	2.b. Effective Date	2.c. <input type="checkbox"/> Original OR No. Amendment
PAR		PROJECT APPRAISAL	2. Project/Activity No. and Title 690-11-680-009 Swaziland Primary Curriculum Development Project	
Indicate block numbers.	Use this form to complete the information required in any block of a PIO or PAA form.			

11.1

Comments

to fit the mid-project needs of PCU and has revitalized the entire local situation.

4. Participant Training

three now in training is September 1978, April 1979 and June 1979. Two more participants are scheduled for departure September 1979 and January 1980.

11.6 Cooperating Country

resources of PCU effectively. Whether this is temporary due to the outside evaluation remains to be seen but indications are good. The problem of completing successive grade materials on schedule remains to be solved and that lies partly in the pursue of the Ministry. This will be addressed by the coming PROF effort.

EQUIPMENT AND COMMODITY LIST, SPECIFICATIONS AND 1979 COSTS¹

(per PCU function)

<u>QUANTITY</u>	<u>DESCRIPTION</u>	<u>COST (₹)</u>
<u>Management</u>		
(1) @ ₹790	IBM Selectric II typewriter or equal - 50/60 Hz, dual pitch, half backspace lever, correcting, primary print element.	790
(2) @ ₹250	3M Wollensak cassette tape recorder or equal - 50/60 Hz, plug-in microphone, model No. 2620.	500
	Sub-total	1,290
<u>Teacher Education (for the 4 TIDCs)</u>		
(4) @ ₹350	Kodak carousel slide projector or equal - 50/60 Hz, 80 slide tray, 2 x 2 in. mounts, model No. S-AV 1000.	1,400
(4) @ ₹250	3M Wollensak cassette tape recorder or equal - 50/60 Hz, plug-in microphone model No. 2620.	1,000
(4) @ ₹ 790	IBM Selectric II typewriter or equal - 50/60 Hz, dual pitch, half backspace lever, correcting, primary print element.	3,160
(4) @ ₹275	3M overhead projector or equal - 50/60 Hz, 10 x 10 in. surface, model No. 566.	1,100
(4) @ ₹900	Kodak Pageant movie projector or equal - 50/60 Hz, hand threading, model No. AV 162 TR.	3,600
(4) @ ₹ 75	Kodak film strip adaptor or equal - 50/60 Hz, must fit carousel slide projector.	300
(12) @ ₹ 50	Transformer - 110/220 volt, 500 watt.	600

¹All equipment is based on 1979 costs and will be purchased in FY 79.

<u>QUANTITY</u>	<u>DESCRIPTION</u>	<u>COST (₺)</u>
₺4,000 (₺1,000 for each TIDC)	Supplemental reading books for children.	4,000*
₺6,000 (₺1,500 for each TIDC)	Specimen sets for graded textbooks.	6,000*
₺6,000 (₺1,500 for each TIDC)	Professional books for teachers.	6,000*
₺4,000 (₺1,000 for each TIDC)	Teaching aids.	4,000*
₺12,800 (₺800 per year for each TIDC)	General supplies - construction paper, oak tag, cardboard, wire mesh, wood, plaster of paris.	12,800*
	Sub-total	43,960

Production

(1) @ ₺3,500	Stapler/stitching machine - 220/380 volt, 3-phase, 50 Hz, stitching thickness: clenched 0-1 in., stabbed up to 1.5 in., stitching speed; 160-225 staples per minute.	3,500
(1) @ ₺3,200	Folding machine - sheet size: 17.5 x 22.5 in., 220-380 volt, 3-phase, 50 Hz, 2 parallel folds and 2 cross folds at right angle.	3,200
(1) @ ₺ 525	Kodak registration punch system or equal - punch plus pin bars: small and large low pin, small and large high pin.	525
(1) @ ₺ 150	Kodak registration printing frame or equal - accepts films 6.5 x 8.5 in. to 11 x 14 in.	150

*Source and origin waiver requested for these items. Waiver is based on 1979 costs plus 10 percent inflation per annum and 5 percent contingency (see Annex 5). These items will be purchased evenly throughout the four years.

<u>QUANTITY</u>	<u>DESCRIPTION</u>	<u>COST (\$)</u>
<u>Production cont.</u>		
(1) @ \$ 400	Dry mounting press - 11 x 14 in., 220/240 volt (Example: Seal Inc., New Haven, Conn.).	400
(1) @ \$ 700	Layout and light stripping table - 1 m. long, .75 m. high, .75 m. wide, 220/240 volt, adjustable rulers and folding legs.	700
(1) @ \$5,900	Process camera for shooting line and half-tone films plus flash attachment, extra lens, and pro- cessors for proofing - max. size of original: 19 x 27 in., max. size of reproduction: 19.5 x 23.5 in., 220 volt. (Example: Eskofot 5060 Computer Repro Camera and Eskofot 531 Processor for Proofing Materials.)	5,900
(1) @ \$ 500	Industrial vacuum cleaner - heavy-duty, 220/240 volt.	500
(1) @ \$ 850	Art or drafting filing cabinet - 10-drawer: drawers 2 in. deep, cabinet: 37 in. high, 54 in. wide, 36 in. deep.	850
(1) @ \$ 75	Stand for above item - 2.5 in. high.	75
(1) @ \$ 700	Art or drafting filing cabinet - 8-drawer: drawers 2 in. deep, cabinet: 33 in. high, 54 in. wide, 36 in. deep.	700
	Spare parts for above items and existing PCU equipment for in-house maintenance and repair. (Includes U-Bix Maintenance Kit for U-Bix copy unit).	8,000
	Printing materials and supplies for production of pilot-test materials @ \$36,000/year.	144,000 ⁺
	Miscellaneous supplies	2,000 ⁺
	Sub-total	170,500

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<u>QUANTITY</u>	<u>DESCRIPTION</u>	<u>COST (\$)</u>
<u>Materials Design and Preparation</u>		
(1) @ \$ 900	Kodak Pageant movie projector or equal - 50/60 Hz, hand threading, model No. AV 126 TR.	900
(1) @ \$ 350	Kodak carousel slide projector or equal - 50/60 Hz, 80 slide tray, 2 x 2 in. mounts, model No.S-AV 1000.	350
(1) @ \$ 75	Kodak film strip adaptor or equal - 50/60 Hz, must fit carousel slide projector.	75
(2) @ \$ 250	3M Wollensak cassette type recorder or equal - 50/60 Hz, plug-in microphone, model No. 2620.	500
(1) @ \$ 250	Opaque projector.	250
(1) @ \$ 275	3M overhead projector or equal - 50/60 Hz, 10 x 10 in. surface, model No. 566.	275
(1) @ \$ 790	IBM Selectric II typewriter or equal - 50/60 Hz, dual pitch, half backspace lever, correcting, primary print element.	790
(5) @ \$ 50	Projection stand carts, various sizes.	250
(1) @ \$ 50	World globe.	50
(150) @ \$ 2	Bookends.	300 ⁺
	General supplies for Curriculum Resource Center - catalog card stock, book order packets, labels, pockets, charge cards, mending supplies, signs, booklets, other library-type forms and supplies, stationery, etc.	6,000 ⁺
	7,000 new books and non-print media items @ \$10/item	70,000 ⁺
	Sub-total	79,740
	TOTAL	295,490
	7% procurement fee on U.S. procured items	2,827
		<u>\$298,317</u>

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JUSTIFICATION FOR PRODUCTION EQUIPMENT PROCUREMENT

1. Power Stapler

The PCU Production Unit has completed the printing of 125 jobs since production got under way in November 1977. Printing of over 3,000,000 impressions was completed on these jobs. Stapling of every publication must be done. Presently all books for the pilot schools are stapled with three staples. This is a very time consuming job and takes up a large portion of production time with the present hand stapler. Furthermore, the present stapler breaks down and becomes jammed after stapling as few as 50 books. Spare parts and constant maintenance on this machine have been very costly. With a power stapler, our efficiency will be greatly increased. Also, the cost of wire vs staples is less expensive.

2. Folding Machine

The format of our publications presently is A-4. We have had several requests to change this to saddle-stitch with a fold in the center. This would be more convenient for the children to carry and/or store. Also, the length of the lines would be shorter and thus easier to read.

We have also had several requests from departments of the William Pitcher College to print booklets with a fold but have not been able to complete the jobs as it was impossible to fold a run of 5,000 by hand. We printed three Pre-School series (run of 200) and folded them by hand, which was very time consuming.

3. Registration Punch and Pins

The PCU is starting to do color work where registration is critical. Accuracy in registration is guaranteed with the use of about a 16" three-hole punch for each film. These films in turn are then exposed on a metal plate and placed on registration pins. This is standard equipment for a print shop of our size and really should have been procured with the original set of equipment.

4. Art Storage Cabinet

The Art Department presently stores flats in an office filing cabinet. These are often rolled, when they should actually be stored flat. A good quality steel cabinet

typical of what is standard equipment in any art department is urgently needed.

5. Dry Mounting Press

In making exhibits and mounting photographs and other materials, a professional-type dry mounting press is very important. Seal Inc. of Stanford, Conn., makes a variety of these presses. For our purposes an 11 x 14" model would be quite satisfactory. This would also be most useful in the Art Department for mounting original art work and making camera-ready materials.

6. Layout and Light Stripping Table

The PCU has one of these tables and someone is working on it constantly. If PCU has any corrections or changes to make in flats or have another person making original paste-ups, this requires taking all the work off the table and holding up work. As PCU expands and the Ministry of Education hires additional personnel, an additional table will be needed.

7. Process Camera

Semiautomatic-type making adjustments for exposure, reduction and enlargements. The flash unit is incorporated in the camera and proofs can be shot of flats before making plates and runs on the press. Present camera does not have these facilities and PCU has not been able to obtain quality when shooting halftones. Also, the size of present camera (11 x 14" image) does not permit shooting for larger 1850 press.

8. Processor for Proofing Materials

Required to process proof sheets after exposure in the Process Camera.

9. U-Bix Maintenance Kit

Consists of a complete set of tools and measuring devices to service the U-Bix copy unit. Presently, it costs the PCU 32.00E (\$36.80) to service the U-Bix after six masters have been used (800 exposures per master). The Advisor could do this job while he is here and a Swazi technician should be trained on maintaining and servicing the U-Bix before the Advisor's tour of duty is completed.

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HOUSEHOLD FURNITURE

For existing houses built during Period One:

<u>QUANTITY</u>	<u>DESCRIPTION</u>	<u>COST (\$)</u>
(2) @ \$400	Air conditioner	800
(6) @ \$ 50	Exhaust fan for kitchen	300
(6) @ \$200	Window screens	1,200
	Sub-total	2,300

For 2 houses to be built and 1 to be leased:

(6) @ \$400	Air conditioner ⁺	2,400
(3) @ \$350	Stove	1,050
(3) @ \$525	Refrigerator	1,575
(3) @ \$ 50	Exhaust fan for kitchen	150
(3) @ \$200	Window screens	600
	Sub-total	5,775

TOTAL \$ 8,075

+ One air conditioner per occupied bedroom.

JOB DESCRIPTION

POST: CHIEF OF PARTY (1 person - 4 years)

1. Responsible to: Executive Vice President/Campus Coordinator, Eastern Michigan University.
2. Supervisory responsibilities:
 - a. responsible for all professional administrative matters for the EMU contract team and management of:
 - technical assistants
 - personal secretary
 - imprest cash/accounts
 - project reports
 - liaison with donor agencies
 - hiring process of staff
 - external evaluation preparation
 - b. responsible for the following functions or opportunities relative to the local Swazi staff:
 - plan and supervise the participant training program
 - attend relevant meetings of GOS officials to advise them on conceptualizing and implementing the new primary school curriculum
 - advise on the total curriculum effort particularly where a subsystem interconnects with PCU
3. Responsibilities in preparing the PCU Director to function effectively in performing the following tasks:
 - a. be responsible for conceptualizing primary curriculum development activities and policies and make recommendations to government based on professional expertise and documentation;
 - b. determining day-to-day work priorities for the PCU staff within the general work priorities set down by the Ministry of Education through the Senior Inspector Primary;

- c. recommending to the Senior Inspector Primary any addition or reassignment of PCU personnel;
- d. preparation and administration of yearly budgets for the PCU, making budgetary decisions, and signing papers related to budgetary control and payment of accounts;
- e. supervising the accomplishment of the following tasks of the PCU:
 - (i) preparation and updating of a new primary school syllabi;
 - (ii) design, preparation and securing new curriculum materials required by new syllabi;
 - (iii) introduction of new curriculum materials into pre-service and in-service teacher training courses;
 - (iv) production of trial materials for use by pilot schools;
 - (v) further training of PCU staff (formal and informal) in consultation with the Chief Inspector Primary;
 - (vi) planning of appropriate evaluation devices for new curriculum materials; and
 - (vii) liaison with other appropriate institutions, e.g. teacher training colleges, printing firms, UBS, Regional Testing Center, Educational Broadcasting Services, etc.
- f. functioning as Executive Secretary of the Primary Curriculum Panel;
- g. responsible for making decisions and signing papers on all matters affecting the professional and technical standards of the PCU;
- h. liaison with technical assistance advisors who may be assigned to advise in planning and development of new curriculum materials and their implementation into primary schools; and
- i. upon request of Management, teach University courses and/or informal training classes.

4. Qualifications:

- a. Experience - Extensive experience as a chief executive officer of a primary school, school district, curriculum project or similar educational institution. Must demonstrate superior ability to conceptualize, plan and supervise and must have the ability to teach these skills to a counterpart.

Curriculum experience at primary school level necessary. Experience in Africa or developing countries developing primary school curriculum is preferred but not mandatory.

Desire a person of high integrity and mature behavior who is task oriented and can work as an integral part of a team.

- b. Training - Doctors degree in educational leadership with experience in primary school curriculum.

JOB DESCRIPTION

POST: CURRICULUM COORDINATOR (1 person - 2 years)

1. Responsible to: Director of PCU/EMU Chief of Party.
2. Supervisory responsibilities: Responsible in cooperation with Chief Curriculum Designer for the overall development of the primary curriculum. Supervision of AID Curriculum Specialists and short-term advisors working in the Curriculum Resource Center.
3. Overall responsibilities: In cooperation with the Chief Curriculum Designer, plan and monitor a schedule of design activities, coordinating it with (i) the required interaction of Teacher Educators in providing workshops and other training activities, (ii) Evaluation in providing testing and feedback service, (iii) Production, and (iv) Management.
4. Specific responsibilities: The Curriculum Coordinator, in cooperation with the Chief Curriculum Designer, will perform the following tasks:
 - a. develop a coordinated plan for curriculum development in the primary schools of Swaziland;
 - b. develop and maintain up-to-date syllabi in all subjects of the primary curriculum;
 - c. assist in planning and supervise schedules of all design units;
 - d. assist in the research and formulation of a design for modules and lessons in the various subject areas;
 - e. coordinate editing and final development of all modules before presentation to the PCU Director;
 - f. supervise the Curriculum Resource Center and personnel as well as assist in obtaining materials from other African and non-African programs;
 - g. oversee the movement of curriculum materials through the illustration and printing process and set priorities for this movement;

- h. attend and chair meetings of all subject areas development teams;
- i. call and attend all Primary Subject Panels;
- j. member of all National Subject Panels as well as the Curriculum Coordinating Committee;
- k. develop and maintain communication with all other agencies involved in curriculum development in Swaziland;
- l. develop and maintain communications with the Africa Curriculum Organization (ACO) and with curriculum development centers throughout Africa;
- m. visit pilot schools, when possible, to informally evaluate the curriculum materials being used in these schools;
- n. be the contact person for all matters pertaining to the illustration and printing units;
- o. insure uniform and appropriate illustrations for primary school children and, to this end, he shall assist in the development of charts, seat work, supplementary materials, etc.;
- p. in collaboration with the teacher education component, direct and/or assist with workshops for teachers and administrators in curriculum and materials design;
- q. cooperate with the teacher education component in the development of the TIDCs;
- r. assist the teacher education component in the training of Teacher Leaders to thoroughly understand all developed curriculum materials;
- s. use feedback from the teacher education component to facilitate the redesign or the rewriting of educational materials;
- t. cooperate with the Evaluation Unit in the development of testing materials;
- u. use feedback from the Evaluation Unit with the curriculum designers when redesigning or rewriting curriculum materials;

- v. keep the Director of PCU informed of any problems which are interfering with the development of curriculum materials;
- w. upon request of Management, teach University courses and/or informal training courses;
- x. report to the PCU Director and EMU Chief of Party on a regular basis as to the functioning of the curriculum section;
- y. the Curriculum Coordinator should assume the responsibilities of the Chief of Party in his absence; and
- z. other responsibilities as may be deemed appropriate by the Director of PCU or the Chief of Party.

5. Qualifications:

- a. Experience - Several years experience directing the overall activities of a major curriculum effort in an educational institution dealing with primary education. The experience must involve conceptualization skills, directing the work of a curriculum staff, knowledge of primary curriculum trends/successful practices. Must have the ability to work closely with technical assistants and counterparts in the conceiving of the necessary tasks, supervising and directing their work and supervising the many interrelated aspects of the development of primary curriculum materials. Previous experience in a developing country preferred.

Desire a person of high integrity and mature behavior who is task oriented and can work as an integral part of a team.

- b. Training - Advanced degree in curriculum development with emphasis in child psychology.

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JOB DESCRIPTION

POST: CURRICULUM SPECIALIST (4 persons - 3 for 4 years
and 1 for 2 years)

1. Responsible to: Reports to the Chief Curriculum Designer/Curriculum Coordinator and ultimately responsible to the Director of PCU and EMU Chief of Party.
2. Supervisory responsibilities: Work daily with the Swazi Curriculum Design Specialists in demonstrating skills of curriculum development and to give continual feedback and assistance in their practice of these skills.
3. Overall responsibilities: Assist the Swazi Curriculum Design Specialists in (i) designing and maintaining the process of curriculum development, (ii) developing a plan and maintaining a schedule of design, (iii) cooperating with the Teacher Educators in providing workshop and other training activities, (iv) providing the Evaluation Unit with testing and feedback services, and (v) participating in material approval.
4. Specific responsibilities: The Curriculum Specialist will assist the Swazi Curriculum Design Specialist in each of the following tasks:
 - a. develop an integrated curriculum plan for the subject area/s of his/her assignment and taking cognizance of other primary school subjects in the plan;
 - b. further develop and maintain an up-to-date syllabus;
 - c. plan and maintain a schedule of work for the designing process;
 - d. utilize feedback to help develop efficient methods for research and formulation of designs in the modules and lessons;
 - e. edit and develop final products for all publications in his/her subject area/s;

- f. recommend African and non-African curriculum materials for the Curriculum Resource Center;
- g. attend all team meetings in his/her subject areas and cooperate in other subject area meetings when needed;
- h. attend all Primary Subject Panels, approval panel meetings and National Subject Panels in the subject area;
- i. in cooperation with the Chief Curriculum Designer and Curriculum Coordinator, help to develop and maintain communications with other agencies involved in curriculum development in Swaziland as well as agencies throughout Africa and the U.S.;
- j. visit pilot schools on a scheduled basis to informally access the effectiveness of the primary school curriculum materials;
- k. in collaboration with other units, direct and/or assist with workshops for classroom teachers, Teacher Leaders and administrators in curriculum and materials design;
- l. upon request of Management, teach University courses and/or informal training classes;
- m. assist the Curriculum Design Specialists to use feedback from the Evaluation Unit in their re-designing or rewriting of educational materials;
- n. collaborate with the Chief Curriculum Designer, Curriculum Coordinator and the Evaluation Unit in the development of testing material;
- o. keep the Chief Curriculum Designer and Curriculum Coordinator informed of any problem which is interfering with the development of curriculum materials;
- p. continue to develop and prepare materials in the absence of any Curriculum Design Specialists by working directly with the Chief Curriculum Designer and Curriculum Coordinator;
- q. the Chief of Party shall appoint a Curriculum Specialist to assume the responsibilities of the Curriculum Coordinator in his/her absence; and

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- r. other responsibilities as may be deemed appropriate by the Director of PCU or the Chief of Party.

5. Qualifications:

- a. Experience - Several years experience in actual preparation of primary school materials which features success in analysis of intellectual skills, readiness, stages of cognitive development and other major dimensions of the learning process. Must be familiar with a wide selection of available curriculum materials and methods appropriate to a developing country as well as alternative teaching and learning strategies. Prefer a person who has prepared primary curriculum materials by developing syllabis, grade level objectives, lessons and modules, teacher guides, supplemental material, illustrations and other aspects of materials development.

Desire a person of high integrity and mature behavior who is task oriented and can work as an integral part of a team.

- b. Training - Advanced degree in curriculum development and/or child development.

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JOB DESCRIPTION

POST: PRODUCTION SPECIALIST (1 person - 2 years)

1. Responsible to: Director of PCU/EMU Chief of Party.
2. Supervisory responsibilities: Until Production Manager is appointed by the GOS, the advisor shall supervise the Production Unit and staff. The supervisory responsibility shall be gradually assumed by the new Production Manager.
3. Responsibilities in preparing the Production Manager and other Production Unit staff to perform effectively the following tasks:
 - a. coordinate the flow of materials through the Production Unit in a systematic well organized manner;
 - b. be able to operate all equipment in the Production Unit so as to train the Swazi staff in effectively operating, and providing routine maintenance on the equipment;
 - c. supervise seven to 14 employees in all departments of the Production Unit. Personnel will be assigned to work in or to be trained in one or more of the following sections: art, photography, paste-up and stripping, plate making, photolithography, printing, collating, binding and packaging;
 - d. work with the Curriculum Coordinator and the design and preparation component personnel during the planning and implementation stages of writing and preparation of publications and other materials;
 - e. participate in regularly held general staff meetings, meetings with the Curriculum Coordinator, the design staff and special production planning meetings;
 - f. submit cost estimates and prepare invoices for completed jobs that are produced for agencies other than the PCU;
 - g. establish a stock control 'CARD-EX' system and order expendable materials and supplies on a regular basis in order to facilitate and keep production on schedule in all sections;

- h. prepare the materials for distribution by having them properly wrapped and labeled. Notification should then be given to the responsible components so actual distribution will get under way. Also, arrange for and implement an organized system of storage of the excess materials;
 - i. follow the established procedure of filing original art work and typesetting on all jobs completed at the Production Unit;
 - j. prepare and implement a system of identifying and proper storage of film flats to enable the Production Unit to efficiently make re-runs on any job;
 - k. maintain production records, submit monthly and other reports as requested in order to keep administrative staff aware of commitments and fully abreast of progress and any problems occurring in the Production Unit. Also, conduct Production Unit staff meetings;
 - l. prepare budgets and submit requests for new equipment. Also, order parts required to keep the equipment operating properly;
 - m. make recommendations for, assist in the design, and supervise and coordinate the operation of a Ministry of Education Multi-Media Production Center;
 - n. work closely with personnel in the Curriculum Resource Center of the PCU by supplying the Center with samples of all materials produced and cooperating with any requests they may have for the Production Unit;
 - o. upon request of Management, teach University courses and/or informal training classes; and
 - p. other responsibilities as may be deemed appropriate by the Director of PCU or the Chief of Party.
4. Qualifications:
- a. Experience - At least ten years experience in directing and supervising a well equipped printing/illustration and photo shop. Prefer a person who has had experience in developing countries

and/or has displayed success in working with counterparts. Should have broad background of large-scale production that applies modern technology in photography, typesetting, layout and stripping, plate making, printing, collating and binding.

Desire a person of high integrity and mature behavior who is task oriented and can work as an integral part of a team.

- b. Training - Degree or certificate in printing-production management including knowledge of modern technology and supervision skills.

JOB DESCRIPTION

POST: TEACHER EDUCATION SPECIALIST (1 person - 4 years)

1. Responsible to: Director of PCU/EMU Chief of Party.
2. Supervisory responsibilities: None, except acting in the absence of Teacher Educators.
3. Overall responsibility: Assist the Teacher Educators in (i) the supervision of the TIDC, (ii) the design and implementation of in-service education program for teachers on the new curriculum materials, and (iii) the coordination of all training programs so as to coincide with the introduction of the new materials at each grade level.
4. Specific responsibilities: The Teacher Education Specialist will assist the Teacher Educators in each of the following tasks:
 - a. the development of a coordinated plan of in-service education for teachers related to the redesigned curriculum materials so as to ensure implementation of those materials;
 - b. the supervision of the Teacher Leaders and of the individual plans for in-service programs at each of the TIDCs;
 - c. the coordination of all in-service efforts related to the curriculum materials by other agencies including William Pitcher College and UBS;
 - d. the management of the orientation/training sessions on the new materials for persons who will be responsible for training the teachers on the new materials;
 - e. the management of the orientation/training sessions on the new materials for the primary school headmasters;
 - f. the management of the orientation/training sessions on the new materials for personnel who are responsible for the pre-service education of primary school teachers at the teacher training colleges;
 - g. the redesign of pre-service programs at the various colleges and UBS to reflect the new materials;

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- h. the organization of end-of-term evaluation workshop for pilot school teachers, Teacher Leaders and curriculum design staff;
- i. the development and monitoring of the conceptual framework of the TIDCs;
- j. the coordination of EMU-sponsored credit and non-credit course offerings;
- k. the development of effective relationships with UBS relative to transfer of credit between the two institutions, cooperative programs, etc.;
- l. to teach selected courses as assigned by the EMU Chief of Party;
- m. to assist in the development and revision of curriculum materials in selected subject areas as assigned by the EMU Chief of Party;
- n. upon request of Management, teach University courses and/or informal training classes;
- p. other responsibilities as may be deemed appropriate by the Director of PCU or the Chief of Party; and
- o. assist in the planning and implementation of the countrywide distribution of PCU materials.

5. Qualifications:

- a. Experience - Extensive experience in teacher training. Prefer a person who has devised training based on specific needs of teachers. Must have experience in teacher centers and knowledge of their function. Prefer a person who has designed teacher training materials and who has planned and conducted teacher workshops designed to meet curriculum and instructional improvement needs of teachers. Person should have skills in training people who work with a third party in a field setting.

Desire a person of high integrity and mature behavior who is task oriented and can work as an integral part of a team.

- b. Training - Doctors degree in teacher education, instructional psychology or educational psychology.

JOB DESCRIPTION

POST: EVALUATION SPECIALIST (1 person - 2 years)

1. Responsible to: Director of PCU/EMU Chief of Party.
2. Supervisory responsibilities: None
3. Responsibilities in preparing the Evaluators to perform effectively the following:
 - a. evaluate the effectiveness of PCU materials as used in pilot schools by directing the administration, scoring and analysis of (i) annual exams based on those materials of students who have used the materials, and (ii) periodic questionnaires completed by teachers who use the materials regarding their judgements on the value of the materials;
 - b. share the annual examination results with other PCU components (design, production, etc.) in a useful fashion;
 - c. provide information for the purposes of decision-making and task improvement to other PCU components and related groups, as follows:
 - (i) Management: quantity of PCU outputs; effectiveness of outputs; characteristics of those using materials; and interactions between the various components of PCU and the entire education system involved in the testing of pilot materials.
 - (ii) Materials design and preparation: effectiveness of materials; and teachers', students' and district administrators' reactions to materials.
 - (iii) Production: quantity and production deadlines; and adequacy of production quality.
 - (iv) Teacher Educators and teachers: testing and feedback procedures; requests for additional materials; and record-keeping in regard to materials.
 - (v) Students and parents: educational progress, examination-taking skills; and feedback procedures.

- d. preparation and implementation of program plans for the evaluation component of the Project;
- e. preparation of summary reports of previous testing;
- f. design and administration of end-of-term tests in each subject for each grade;
- g. planning the implementation and scoring of tests;
- h. working with all other PCU staff (curriculum writers, management, production, teacher education staff) to successfully complete the above tasks;
- i. upon request of Management, teach University courses and/or informal training classes; and
- j. other responsibilities as may be deemed appropriate by the Director of PCU or the Chief of Party.

4. Qualifications:

- a. Experience - Several years experience in the practical application of evaluation techniques to educational instruction and/or curriculum. Needs to have expertise in developing tests that capture the essence of the curriculum. Must have the knowledge and capability of assessing the processes as well as the quality of the curriculum. Must know and teach to counterparts planning skills and a variety of technical skills including identification, selection and/or originating suitable devices for pre/post assessment, school leaving exams, etc.

Desire a person of high integrity and mature behavior who is task oriented and can work as an integral part of the team.

- b. Training - Advanced degree in educational research, evaluation or instructional psychology.

EXAMPLES OF SHORT-TERM CONSULTANTS
(4 PERSON YEARS)

EXAMPLE ONE:

- 10-week consultant in language arts.
- will assist the siSwati designer in the following tasks:
 - A. revision of the Teachers' Edition for Grade 1 siSwati.
 - B. creation of a supplementary reader, Asifundze, for Grade 1 children.
 - C. preparation of a sample module for Grade 3.
 - D. revision of the Teachers' Edition for Grade 2 siSwati.
 - E. work on scope and sequence charts for the siSwati program for Grades 1-7

EXAMPLE TWO:

- 3-week consultant in maintenance of production equipment.
- will train the PCU printers, collators and plate-makers in the operation, care and maintenance of the three printing presses, the collators, varitype and other production equipment.

EXAMPLE THREE:

- 12-week consultant in operation and function of Teacher Innovation and Dissemination Centers.
- will train the Teacher Educator and four Teacher Leaders how to maximize the TIDC in each of the districts. Will assist each Teacher Leader (on the TIDC sites) in organizing and planning strategies for introducing the new curriculum to the teachers of the district.

EXAMPLE FOUR:

- 8-week consultant in primary school science.
- will accomplish the following by working closely with the PCU Science Designer:
 - A. revising the old scope and sequence for Grades 1-7.
 - B. revising the Grade 1 modules.
 - C. write a new version of the Grade 1 module, "Matter and Energy".
 - D. write a draft of the Grade 2, "Health and Human Body".
 - E. prepare grade level objectives for Grades 3 and 4.
 - F. prepare a detailed outline of Grade 3 modules.

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5C(1) - COUNTRY CHECKLIST

Listed below are, first, statutory criteria applicable generally to FAA funds, and then criteria applicable to individual fund sources: Development Assistance and Security Supporting Assistance funds.

A. GENERAL CRITERIA FOR COUNTRY

1. FAA Sec. 116. Can it be demonstrated that contemplated assistance will directly benefit the needy? If not, has the Department of State determined that this government has engaged in consistent pattern of gross violations of internationally recognized human rights?

Yes, it can be so demonstrated. Swaziland has not, to our knowledge, engaged in a consistent pattern of gross violations of human rights.
2. FAA Sec. 491. Has it been determined that the government of recipient country has failed to take adequate steps to prevent narcotics drugs and other controlled substances (as defined by the Comprehensive Drug Abuse Prevention and Control Act of 1970) produced or processed, in whole or in part, in such country, or transported through such country, from being sold illegally within the jurisdiction of such country to U.S. Government personnel or their dependents, or from entering the U.S. unlawfully?

No such determination has been made.
3. FAA Sec. 620(b). If assistance is to a government, has the Secretary of State determined that it is not controlled by the International Communist movement?

Yes.
4. FAA Sec. 620(c). If assistance is to government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) debt is not denied or contested by such government?

(a) No.
(b) No.
5. FAA Sec. 620(e) (1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities?

No.

6. FAA Sec. 620(n), 620(i); App. Sec. 107, 114. Is recipient country a Communist country? Will assistance be provided to the Socialist Republic of Vietnam, Cambodia, Laos, Cuba, Uganda, Mozambique, or Angola?
- (a) No.
- (b) No.
7. FAA Sec. 620(i). Is recipient country in any way involved in (a) subversion of, or military aggression against, the United States or any country receiving U.S. assistance, or (b) the planning of such subversion or aggression?
- (a) No.
- (b) No.
8. FAA Sec. 620(i). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction, by mob action, of U.S. property?
- Security and protection measures appear to be adequate and reasonable
9. FAA Sec. 620(i). If the country has failed to institute the investment guaranty program for the specific risks of expropriation, inconvertibility or confiscation, has the AID Administrator within the past year considered denying assistance to such government for this reason?
- No.
10. FAA Sec. 620(o); Fishermen's Protective Act, Sec. 5. If country has seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters,
- No such actions.
- a. has any deduction required by Fishermen's Protective Act been made?
- b. has complete denial of assistance been considered by AID Administrator?
11. FAA Sec. 620(q); App. Sec. 501. (a) Is the government of the recipient country in default on interest or principal of any AID loan to the country? (b) Is country in default exceeding one year on interest or principal on U.S. loan under program for which App. Act appropriates funds, unless debt was earlier disputed, or appropriate steps taken to cure default?
- (a) No.
- (b) No.
12. FAA Sec. 620(s). "If contemplated assistance is development loan (including Alliance loan) or security supporting assistance, has the Administrator taken into account the percentage of the country's budget which is for military expenditures, the amount of foreign exchange spent on military equipment and the amount spent for the purchase of sophisticated weapons systems?" (An affirmative answer may refer to the record of the taking into account, e.g.: "Yes as reported in annual report on implementation of Sec. 620(s)." This report is prepared at the time of approval by the Administrator of the Operational Year Budget.
- N/A

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Upward changes in the Sec. 620(s) factors occurring in the course of the year, of sufficient significance to indicate that an affirmative answer might need review, should still be reported, but the statutory checklist will not normally be the preferred vehicle to do so.)

13. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption? No.
14. FAA Sec. 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the AID Administrator in determining the current AID Operational Year Budget? Payments all up to date.
15. FAA Sec. 620A. Has the country granted sanctuary from prosecution to any individual or group which has committed an act of international terrorism? No knowledge of any such action.
16. FAA Sec. 666. Does the country object, on basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. there to carry out economic development program under FAA? No.
17. FAA Sec. 667, 670. Has the country, after August 3, 1977, delivered or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards? Has it detonated a nuclear device after August 3, 1977 although not a "nuclear-weapon State" under the nonproliferation treaty? No.
18. FAA Sec. 901. Has the country denied its citizens the right or opportunity to emigrate? No.

B. FUNDING CRITERIA FOR COUNTRY

1. Development Assistance Country Criteria

- a. FAA Sec. 102(c), (d). Have criteria been established, and taken into account, to assess commitment and progress of country in effectively involving the poor in development, on such indexes as: (1) small-farm labor intensive agriculture, (2) reduced infant mortality, (3) population growth, (4) equality of income distribution, and (5) unemployment.

Being satisfactorily considered.

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b. FAA Sec. 104(d)(1). Is appropriate, is this development (including Sahel) activity designed to build motivation for smaller families in programs such as education in and out of school, nutrition, disease control, maternal and child health services, agricultural production, rural development, and assistance to urban poor?

c. FAA Sec. 201(b)(5), (7) & (8); Sec. 208; 211(a)(4), (7). Describe extent to which country is:

- (1) Making appropriate efforts to increase food production and improve means for food storage and distribution.
- (2) Creating a favorable climate for foreign and domestic private enterprise and investment.
- (3) Increasing the public's role in the developmental process.
- (4) (a) Allocating available budgetary resources to development.
(b) Diverting such resources for unnecessary military expenditure and intervention in affairs of other free and independent nations.
- (5) Making economic, social, and political reforms such as tax collection improvements and changes in land tenure arrangements, and making progress toward respect for the rule of law, freedom of expression and of the press, and recognizing the importance of individual freedom, initiative, and private enterprise.
- (6) Otherwise responding to the vital economic, political, and social concerns of its people, and demonstrating a clear determination to take effective self-help measures.

Country currently undertaking such actions through the Rural Development Area Program and Cooperatives movement.

The GOS encourages private enterprise and investment.

Decentralized planning is a key ingredient of the RDAP.

(a) Performance is satisfactory.

(b) Country maintains a small army. There is no intervention in the affairs of other nations.

GOS is taking satisfactory steps in these areas.

GOS supports a development policy aimed at the rural poor.

d. FAA Sec. 201(b), 211(a). Is the country among the 20 countries in which development assistance loans may be made in this fiscal year, or among the 40 in which development assistance grants (other than for self-help projects) may be made?

Yes.

e. FAA Sec. 11f. Will country be furnished, in same fiscal year, either security supporting assistance, or Middle East peace funds? If so, has Congress specifically authorized such use of funds, or is assistance for population programs, humanitarian aid through international organizations, or regional programs?

Yes.

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2. Security Supporting Assistance Country Criteria This is a DA Project.
- a. FAA Sec. 502B. Has the country engaged in a consistent pattern of gross violations of internationally recognized human rights? Is program in accordance with policy of this Section? N/A
- b. FAA Sec. 531. Is the Assistance to be furnished to a friendly country, organization, or body eligible to receive assistance? N/A
- c. FAA Sec. 533(c)(2). Will assistance under the Southern African Special Requirements fund be provided to Mozambique, Angola, Tanzania, or Zambia? If so, has President determined (and reported to the Congress) that such assistance will further U.S. foreign policy interests? N/A
- d. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? N/A
- e. App. Sec. 113. Will security assistance be provided for the purpose of aiding directly the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? N/A
- f. FAA Sec. 620B. Will security supporting assistance be furnished to Argentina after September 30, 1978? N/A

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5C(2) - PROJECT CHECKLIST

Listed below are, first, statutory criteria applicable generally to projects with FAA funds, and then project criteria applicable to individual fund sources: Development Assistance (with a sub-category for criteria applicable only to loans); and Security Supporting Assistance funds.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? IDENTIFY. HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT.

1. App. Unnumbered; FAA Sec. 653(b); Sec. 671
 - (a) Describe how Committees on Appropriations of Senate and House have been or will be notified concerning the project; (a) Project was included in FY 79 Congressional Presentation.
 - (b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than \$1 million over that figure) (b) Yes.
2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$100,000, will there be (a) Yes.
engineering, financial, and other plans necessary to carry out the assistance and (b) Yes.
(b) a reasonably firm estimate of the cost to the U.S. of the assistance?
3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance? None required.
4. FAA Sec. 611(b); App. Sec. 101. If for water or water-related land resource construction, has project met the standards and criteria as per *the Principles and Standards for Planning Water and Related Land Resources dated October 25, 1973*? N/A
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified the country's capability effectively to maintain and utilize the project? N/A
6. FAA Sec. 209, 619. Is project susceptible of execution as part of regional or multi-lateral project? If so why is project not so executed? Information and conclusion whether assistance will encourage regional development programs. If assistance is for newly independent country, is it furnished through multi-lateral organizations or plans to the maximum extent appropriate? No.

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7. FAA Sec. 601(a); (and Sec. 201(f) for development loans). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.
8. FAA Sec. 601(b). Information and conclusion on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).
9. FAA Sec. 612(b); Sec. 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized to meet the cost of contractual and other services.
10. FAA Sec. 612(d). Does the U.S. own excess foreign currency and, if so, what arrangements have been made for its release?
11. ISA 14. Are any FAA funds for FY 78 being used in this Project to construct, operate, maintain, or supply fuel for, any nuclear powerplant under an agreement for cooperation between the United States and any other country?

Project will not encourage U.S. private trade and investment. Technical assistance, training and some commodities will be procured in the U.S.

The GOS will contribute at least 25% of total project costs to cover local currency expenditures.

No.

No.

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec. 102(c); Sec. 111; Sec. 281a. Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production, spreading investment out from cities to small towns and rural areas; and (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions?

(a) In the long run, students who study under the more relevant curriculum will be better informed and will be better prepared to participate in the country's economic progress.

(b) N/A.

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b. FAA Sec. 103, 103A, 104, 105, 106, 107. Is assistance being made available: [include only applicable paragraph -- e.g., a, b, etc. -- which corresponds to source of funds used. If more than one fund source is used for project, include relevant paragraph for each fund source.]

(1) [103] for agriculture, rural development or nutrition; if so, extent to which activity is specifically designed to increase productivity and income of rural poor; [103A] if for agricultural research, is full account taken of needs of small farmers;

N/A

(2) [104] for population planning or health; if so, extent to which activity extends low-cost, integrated delivery systems to provide health and family planning services, especially to rural areas and poor;

N/A

(3) [105] for education, public administration, or human resources development; if so, extent to which activity strengthens nonformal education, makes formal education more relevant, especially for rural families and urban poor, or strengthens management capability of institutions enabling the poor to participate in development;

Making formal education more relevant is the very heart of the project. The project strengthens the capacity of the Primary Curriculum Unit to carry out the continuing process of curriculum development and revision.

(4) [106] for technical assistance, energy, research, reconstruction, and selected development problems; if so, extent activity is:

N/A

(a) technical cooperation and development, especially with U.S. private and voluntary, or regional and international development, organizations;

(b) to help alleviate energy problems;

(c) research into, and evaluation of, economic development processes and techniques;

(d) reconstruction after natural or manmade disaster;

(e) for special development problem, and to enable proper utilization of earlier U.S. infrastructure, etc., assistance;

(f) for programs of urban development, especially small labor-intensive enterprises, marketing systems, and financial or other institutions to help urban poor participate in economic and social development.

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(5) [107] by grants for coordinated private effort to develop and disseminate intermediate technologies appropriate for developing countries.

c. FAA Sec. 110(a); Sec. 208(e). Is the recipient country willing to contribute funds to the project, and in what manner has or will it provide assurances that it will provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or has the latter cost-sharing requirement been waived for a "relatively least-developed" country)?

Yes. Assurance of 25% GOS contribution will be obtained during Grant Agreement negotiations.

d. FAA Sec. 110(b). Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to Congress been made, and efforts for other financing, or is the recipient country "relatively least developed"?

N/A

e. FAA Sec. 207; Sec. 113. Extent to which assistance reflects appropriate emphasis on: (1) encouraging development of democratic, economic, political, and social institutions; (2) self-help in meeting the country's food needs; (3) improving availability of trained worker-power in the country; (4) programs designed to meet the country's health needs; (5) other important areas of economic, political, and social development, including industry; free labor unions, cooperatives, and Voluntary Agencies; transportation and communication; planning and public administration; urban development, and modernization of existing laws; or (6) integrating women into the recipient country's national economy.

- (1) Project will have long-run indirect effect via student exposure to revised curriculum.
- (2) N/A
- (3) N/A
- (4) N/A
- (5) N/A
- (6) Women make up the majority of primary school teachers. Additionally, female students will benefit from the new, more relevant curriculum.

f. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government.

Project emphasizes making the country's primary curriculum more culturally and economically relevant in order to better prepare graduates for a responsible and productive life.

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g. FAA Sec. 201(b)(2)-(4) and -(8); Sec. 201(e); Sec. 211(a)(1)-(3) and -(8). Does the activity give reasonable promise of contributing to the development: of economic resources, or to the increase of productive capacities and self-sustaining economic growth; or of educational or other institutions directed toward social progress? Is it related to and consistent with other development activities, and will it contribute to realizable long-range objectives? And does project paper provide information and conclusion on an activity's economic and technical soundness?

Yes. See Economic, Technical and Social Analyses in PP.

h. FAA Sec. 201(b)(6); Sec. 211(a)(5), (6). Information and conclusion on possible effects of the assistance on U.S. economy, with special reference to areas of substantial labor surplus, and extent to which U.S. commodities and assistance are furnished in a manner consistent with improving or safeguarding the U.S. balance-of-payments position.

With the exception of some commodities and two technical assistance positions, assistance will be of U.S. source and origin.

2. Development Assistance Project Criteria (Loans only)

N/A

a. FAA Sec. 201(b)(1). Information and conclusion on availability of financing from other free-world sources, including private sources within U.S.

b. FAA Sec. 201(b)(2); 201(d). Information and conclusion on (1) capacity of the country to repay the loan, including reasonableness of repayment prospects, and (2) reasonableness and legality (under laws of country and U.S.) of lending and relending terms of the loan.

c. FAA Sec. 201(e). If loan is not made pursuant to a multilateral plan, and the amount of the loan exceeds \$100,000, has country submitted to AID an application for such funds together with assurances to indicate that funds will be used in an economically and technically sound manner?

d. FAA Sec. 201(f). Does project paper describe how project will promote the country's economic development taking into account the country's human and material resources requirements and relationship between ultimate objectives of the project and overall economic development?

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e. FAA Sec. 202(a). Total amount of money under loan which is going directly to private enterprise, is going to intermediate credit institutions or other borrowers for use by private enterprise, is being used to finance imports from private sources, or is otherwise being used to finance procurements from private sources?

f. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete in the U.S. with U.S. enterprise, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan?

3. Project Criteria Solely for Security Supporting Assistance

N/A

a. FAA Sec. 531. How will this assistance support promote economic or political stability?

b. FAA Sec. 533(c)(?). Will assistance under the Southern African Special Requirements Fund be used for military, guerrilla, or paramilitary activities?

4. Additional Criteria for Alliance for Progress

N/A

[Note: Alliance for Progress projects should add the following two items to a project checklist.]

a. FAA Sec. 251(b)(1), -(8). Does assistance take into account principles of the Act of Bogota and the Charter of Punta del Este; and to what extent will the activity contribute to the economic or political integration of Latin America?

b. FAA Sec. 251(b)(8); 251(h). For loans, has there been taken into account the effort made by recipient nation to repatriate capital invested in other countries by their own citizens? Is loan consistent with the findings and recommendations of the Inter-American Committee for the Alliance for Progress (now "CEPCIES," the Permanent Executive Committee of the OAS) in its annual review of national development activities?

The Standard Item checklist has been reviewed for this project.

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October 26, 1978

TO : Dr. William Kromer
FROM : J.D. Mulhern
RE : PCU ACADEMIC CREDIT ARRANGEMENTS WITH UBS AND EMU

Although I do not have a copy of the minutes of our meeting with Dean Futsoa and her colleagues from U.B.S., the following items constitute my best recollection of the understandings developed during that meeting:

1. P.C.U. will plan an academic program of course offerings far enough in advance so that Dean Futsoa will have an opportunity to include appropriate ones under the U.B.S. class schedule, with U.B.S. academic credit. These courses will be primarily on the Advanced or Graduate level and may be taught by U.B.S. staff, E.M.U. staff or a combination of both and will be under the academic jurisdiction of U.B.S. with respect to standards, etc.
2. Courses planned and offered under this arrangement will consist primarily of courses in areas that fulfill special needs within P.C.U.
3. P.C.U. should not offer duplicate courses with E.M.U. credit of those offered at U.B.S. except as warranted by special circumstances. In all cases prior consultation with Dean Futsoa should take place.
4. It is understood that P.C.U. staff or others who through P.C.U. are taking a course with U.B.S. credit and who wish to apply the credit toward a UBS degree must be a matriculating U.B.S. student and/or meet U.B.S. academic regulations pertaining to transfer credit.
5. P.C.U. may continue to offer some primary education open to both undergraduate and graduate students. However, students who wish to transfer this graduate credit toward an U.B.S. graduate degree must fulfill U.B.S. academic regulations pertaining to transfer of the credit.

6. P.C.U. will continue to make EMU undergraduate courses on primary education available to PCU staff in order to assist them to complete an E.M.U. degree.
7. U.B.S. credit earned by students under this arrangement will constitute EMU residency credit for students who wish to transfer it to EMU.
8. Dean Mulhern will draft a document and submit it to Dean Putsoa prior to January 1, 1979 which will cover possible student and faculty exchange programs between EMU and UBS. This will include a graduate fellowship program.
9. The EMU Chief of Party will assess the willingness of the EMU advisory staff to serve as tutors for thesis, supervised field projects and supervised professional experience (for PCU staff members only) and send resumes to Dean Putsoa as the need arises.
10. The P.C.U. Director will designate Miriam Nxumalo as the PCU representative on the U.B.S. Teacher Education Coordinating Committee.

Further:

Dr. William Kromer is granted authority by Dean Mulhern to continue negotiations on his behalf with Dean Putsoa on these and other matters pertaining to cooperation between the two institutions.

October 16, 1978

TO : Mr. Raymond Matsonila
Dr. W. Kruger

FROM : Dr. J. Milham

TOPIC: CORRESPONDENCE COURSES

Correspondence courses enjoy a long tradition in American education although their degree of acceptability has varied considerably. The success of the USAP programme at the University of Wisconsin sponsored by the Department of Defence brought undergraduate college courses to CI's throughout the world. The course format proved its value in the self-pacing dimension and the transportability of the programme. Further, the respectable status of the University enabled students to transfer the credit to even the most prestigious colleges and universities. Eastern Michigan University, like a number of other American universities, adopted a policy during the World War II period that enabled students to enrol for correspondence credit in any courses listed in the catalogue except those which required a supervised laboratory or practical. However, unlike most American universities, EMU has retained that policy and it is still possible to enrol in EMU courses through the correspondence route. It must be noted that there has not been much demand for this type of instruction and the University will have to review the current practice in light of the current faculty union contract.

Therefore, it is entirely feasible for a student who expects to receive an EMU degree to enrol for up to 25% of their undergraduate course programme through correspondence. Whenever possible the student should take credit courses at U.S.S. for the science area because EMU accepts the U.S.S. credit. In this way, a completed programme at William Pitsoer and a combination of some on-site EMU courses and EMU correspondence courses will enable a student to complete his EMU degree programme in Swaziland in selected academic major areas.

It is recommended that:

1. Provision be made in each EMU student's baccalaureate programme to maximise the use of correspondence course credit up to 30 semester hours.
2. Provision be made by EMU to revitalize the correspondence programme for use with the Swazi students.

Memorandum

From: PCU Management

To: Dean, Putsoa
Faculty of Education
University College of Swaziland

Date: 10th January, 1979

Our Ref:

Your Ref:

SOME IDEAS CONCERNING A MASTER'S DEGREE IN EDUCATION
OFFERED BY UES FOR PCU STAFF, INSPECTORATE AND OTHER
EDUCATORS WITH A BACHELOR'S DEGREE (in response to
our meeting of January 4, 1979)

Programme Emphasis:

1. Leadership (Supervision/Management)
2. Curriculum

Admission Requirements:

Suggest current regulations as written on pages 8-99 in the catalogue.

Use of Expanded Faculty:

It is envisioned that the faculty (instructors) for this new MA programme shall consist of the following:

1. Faculty of Education, University College of Swaziland - The members of this faculty, under the leadership of the Dean, will study and recommend the new programme, put into place the operational features, advise students, determine admission, teach classes, supervise and mark papers and thesis, authorise/recommend PCU Technical Assistants as instructors, authorise/recommend the hiring of part-time instructors and other duties as may be deemed necessary by the Dean of Education.
2. Technical Assistants, Primary Curriculum Unit - These educators assigned to advise the PCU are permitted and encouraged by their contractor to teach University classes in their speciality especially at the graduate level. Each Technical Assistant is hired because they have a special expertise in Curriculum or Educational Leadership. Most have come from Faculties or Colleges of Education and possess an advanced graduate degree in their speciality. The Technical Assistants come from both the United States and African Countries for a two-year term of service. It is understood that the Dean and Faculty of Education shall judge the qualifications of these potential instructors, request those who are desired to teach a specific class, and otherwise control the quality of instruction. It is also understood that no payment need to be made to secure the teaching services of the Technical Assistants because teaching is a normal expectation of them. However, the Director of PCU/Chief of Party reserve the right to authorise the scheduled time for the teaching insuring that it does not conflict with the priority duties of the person.
3. Part-time Instructors - (as already provided in the Catalogue)

.../2.

SOME THOUGHTS ABOUT THE PROGRAMME OF STUDY FOR THE
MA IN LEADERSHIP AND CURRICULUM.

One possibility is to originate a set of relevant classes in addition to the papers and thesis currently in practice. Some decision would need to be made concerning the proportion between class work and papers/thesis. A programme containing 30 units (?) of class work plus a thesis may be desirable or perhaps a lesser amount of class work with increased writing of papers would be preferred.

The following classes may be appropriate although they may need to be grouped into only a few, more general classes.

- Educational Leadership

Theories and models of administration and leadership relative to leader behaviour and the effect on the school programme. The process and function of leadership is explored which include current practices and concepts of educational administration.

- The Organization of Finance of Education

Organization of Swaziland schools; authority, function and relationships of Ministry of Education to grantee, donors, community schools, District Education Office and other educational units. Organization within districts and within schools. Examines the basic economic and fiscal policies and practices for the funding of education including Government support, community support and donor support. School budgets, accounting systems, procurement systems are also explored.

- The Primary School Headmaster

The study of the Headmasters role in improving curriculum and instruction, school-community relations, special services, buildings and equipment, pupil relations, supervision of staff and innovative practices.

- Supervision of Instruction

Development of those attitudes and skills necessary for school personnel as they plan and maintain effective, positive instructional programmes. Fundamental issues identified and conflicting positions investigated.

- Evaluating Educational Services

Problems, principles and procedures involving the assessment and evaluation of pupil learning, curriculum and curriculum materials, school facilities, school equipment and school personnel. Evaluation methods and instruments will be developed, applied and analysed.

- Developmental Reading in the Primary Classroom

Objectives, approaches, materials and techniques for reading in the Primary School classroom. Also reading skills functional in the subject areas and critique of current methods will be covered.

- The Primary Curriculum

Introduction and indepth study of the current Primary curriculum with emphasis upon the reform of that curriculum resulting from the work of the curriculum units. Fundamentals of curriculum development, basic determinants and the role of the teacher will be dealt with.

- Improving Instruction

Identification of basic learning principles and techniques appropriate to the primary age child. Educational implications of historical, developmental and curricular research. Types of organisation of classroom activities and programmes. Uses of direct and vicarious experiences, instructional techniques and materials to develop and expand learning. Adjusting teaching method and style to the subject and lesson objectives.

- The Community-centered Classroom

An action orientated class in which students will develop teaching techniques and resources as part of an integrated curriculum in which the community can be used as a learning laboratory. Emphasis will be placed upon creating an open learning environment which will promote an understanding of Swazi culture but relate it to the multi-culture of the world.

- Internship in Educational Leadership/Curriculum

Provides an opportunity for the graduate student to develop administrative skills (or curriculum skills) by working under the direction of an experienced school, district or ministry administrator. Student and adviser must outline the potential learnings and arrange for a qualified administrator to provide the experience. The student must complete a log and a descriptive paper of what was learned.

- Independent Study in Leadership or Curriculum

An intensive study of a problem, concept or programme under the direction of a University faculty member. The study must relate directly to the students programme emphasis.

The foregoing ideas are merely suggestions from PCU management. It is anticipated that the Dean, Faculty of Education and other University authorities will proceed to use whichever ideas have merit in designing the Master's Degree.

Please feel free to contact us if you desire additional input.

Most sincerely,

R. Magagula

B. Kromer

WAIVERS

PRIMARY CURRICULUM DEVELOPMENT PROJECT

(645-0009)

I. WAIVERS REQUIRED

- A. Procurement source and origin waiver to permit the procurement of construction materials estimated at \$35,000 from countries included in A.I.D. Geographic Code 935 (Special Free World) instead of from A.I.D. Geographic Code 000 (U.S. only) and local sources.
- B. Procurement source and origin waiver to permit the procurement of equipment and commodities estimated at \$314,000 from countries included in A.I.D. Geographic Code 935 (Special Free World) instead of from A.I.D. Geographic Code 000 (U.S. only) and local sources.
- C. Waiver of the policy set forth in Handbook 1 Supplement B in favor of competitive procurement of technical services.

II. WAIVER JUSTIFICATIONS

A. A procurement source and origin waiver for construction materials is requested for the following reasons:

- (1) It would be impractical to purchase items from the U.S. in the small quantities needed;
- (2) cost savings; and
- (3) possible delay in project implementation.

Under this project, AID will finance the construction of two houses for the technical assistance team. The cost of construction materials and supplies is estimated at \$35,000, or one-half the total building cost of \$70,000. Such items as the following will have to be procured from Code 935 sources:

- (a) Electrical fittings and wire;
- (b) pipe, plumbing fittings, and sanitary equipment;
- (c) iron or steel manufactured goods;
- (d) re-bar and other steel forms; and
- (e) building supplies including hardware and fittings.

It would not be practical to purchase U.S. items in the small quantities needed when private dealers in Swaziland are equipped only to service and repair equipment made in the Republic of South Africa or the United Kingdom.

Additionally, the shipping and delivery costs involved with such small quantities would cause the total price to substantially exceed prices for comparable items procured in

South Africa. The long lead time required to procure from the U.S. could impede project implementation since it is imperative to construct the houses as soon as possible in order to quickly field the technical assistance team.

B. A procurement source and origin waiver is requested for the purchase of certain commodities and supplies to be used by the Primary Curriculum Unit. Routinely ordered supplies will be purchased from the Republic of South Africa. As the supplies are usually ordered in relatively small quantities to meet a tight production schedule, it would be impractical to purchase them in the U.S. Additionally, since the intent of this activity is to make the primary curriculum more relevant, the PCU must have the flexibility to purchase certain books and resource materials from countries other than the U.S. In total, a waiver for commodities, and supplies estimated at \$314,000 is requested. Specific items for which source and origin will be Code 935 are marked by + in Annex M (equipment and commodity list).

C. Justification for Non-competitive Procurement
Eastern Michigan University (EMU)

Swaziland Primary Curriculum Development Project
(645-0009)

Eastern Michigan University (EMU) has served as contractor for the first four years of the Primary Curriculum Project and USAID/Swaziland recommends that EMU be retained as project contractor for the remaining four years.

EMU staff have experience in the training of educators, both in the U.S. and in Africa. Faculty members have served overseas as exchange and visiting professors, Fulbright Scholars, directors of academic programs and as technical advisors on A.I.D. projects. This overseas experience provides a cadre of professionals at EMU who are sensitive to the socio-economic and cultural realities of developing countries, as well as being recognized as experts in the field of education/curriculum development.

The most cogent, and obvious, reason for negotiating only with EMU is the University's successful implementation of the first half of the Project. While the Project has not been without problems, EMU has made notable progress in the areas of organization, training and the establishment of functioning working relationships with counterparts within the Primary Curriculum Unit (PCU), other Ministry of Education personnel, and other donors. With the close counterpart relationships that have been established in the past year of the Project, design and development of new curricula is moving at a faster pace and there are noticeable improvements in the quality of materials developed.

In addition to the substantial experience of the technical assistance team currently in Swaziland, the present EMU Campus Coordinator served for three years as Chief of Party for the Primary Curriculum Development Project. This experience is rare and invaluable in that the responsible contract backstop at EMU has first-hand knowledge of the Project and the country and, therefore, is better able to service the in-country team. This experience is also useful in the Coordinator's role in selecting new long- and short-term technical advisors for the Project.

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Also, the experience gained over the past four years has greatly enhanced EMU's capacity to support and backstop the Project, as evidenced by the timely provision of experienced, highly qualified, long-term advisors and short-term consultants. This is partially the result of an EMU action of a year ago in which the Project was made a special University project reporting to the Executive Vice President instead of the School of Education. This level of understanding and dedication to the importance of this Project could not be expected of a new contractor for a substantial time period and the Project would suffer in the delay.

The original PROP proposed a time schedule for curriculum development and dissemination that was overly ambitious and optimistic. The mid-project evaluation and subsequent revision of the Project reveals that the overall GOS primary curriculum development process will take longer than originally envisaged, perhaps as much as 2 years after A.I.D. assistance, and even this schedule depends on the additional project inputs by A.I.D., the PCU and the IBRD. Therefore, timing has become a critical factor. While institutional development in the PCU is proceeding satisfactorily, the production phase in the Project is now the critical element. EMU now has the support of the MOE and PCU staff that is necessary to move the Project at a faster pace. In addition, the experience of the past four years has provided insights into the curriculum development process in Swaziland that have resulted in more realistic expectations and have provided the basis for an on-going modification of PCU's project approach to fit the situation. It is critical that the development, testing, production and dissemination of new curricula proceed as rapidly as possible; therefore, it is essential that EMU continue as Project contractor. Selection of another contractor would mean a hiatus in effective contractor presence of at least six months. During this period, the PCU would be without technical advice and assistance in the development of new materials. Additionally, the selection of a new contractor would necessitate a project familiarization process, country orientation, and establishment of new working relationships and methods that would essentially stop project implementation for another 4-6 months. This 10-12 month cessation in the development of curricula would dispirit the PCU staff as well as seriously jeopardize the success of the Project.

Finally, there are strong cost considerations that militate in favor of negotiating only with EMU. If the contract is competitively awarded, EMU's position with respect to on-board and potential project personnel and experience would give them a decided advantage over other proposers. In all likelihood, EMU would be awarded the contract and the money

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and staff time expended during the competitive procurement process would be wasted. In the unlikely event that another contractor is selected, A.I.D. would be forced to pay the EMU phase-out costs and duplicate the sizable start-up costs (e.g., orientation programs, domestic travel, international travel, and household effects shipment for T.A. personnel). In addition to the substantive justification for retaining EMU, these cost factors argue in favor of non-competitive procurement.

Also, EMU has recently made arrangements with the University College of Swaziland providing for transfer of UCS credit towards an EMU degree and EMU acceptance of correspondence course credit for up to 30 semester hours. These arrangements will enable PCU staff to receive more in-country training while continuing their work at PCU and, at the same time, minimize the time and work lost while participants are training in the U.S.

Successful implementation of the Project requires that the present momentum be maintained. It is unlikely that the PCU, at its present stage of institutional development, could accommodate a change in direction or a long period of uncertainty that would occur with a change in contractor. Therefore, USAID/S recommends that we negotiate only with EMU on a non-competitive basis to provide the services required for the final four years of the Project (see attached memorandum).

UNITED STATES GOVERNMENT

Memorandum

TO : CPDO, Mr. E. Morris

DATE: 2/8/79

FROM : A/DIR: Ted D. Morse *TDM*

SUBJECT: Insert to PCU Project Paper

During my recent home leave, at my own expense, I visited Eastern Michigan University (EMU) for two reasons. One was to expose myself to the current thinking on American campuses regarding our foreign policy, economic development and southern Africa. Secondly, I wanted to judge the depth of interest and commitment on the EMU campus before recommending proprietary procurement of EMU services under the extension of the PCU project. Following are my impressions on the latter point from which you can extract information for the PP, if appropriate.

Summary: Based on 3 days of intensive on-campus meetings and working breakfasts, luncheons and dinners with the Swazi participants, EMU faculty and administrators, I am convinced that their capacity and commitment to implementing the EMU/PCU project is substantive, continues and is possible. End Summary

At the policy level, I met three times with the Acting President and then separately with a member of the Board of Regents. The A/President has visited the PCU project in Swaziland (at the time of the project evaluation), and is very supportive of EMU's efforts. He has had the project transferred to his office (Vice President) to give it the broadest support by all elements of EMU. His understanding of the project and the issues involved substantiate a keen interest and constant monitoring. The Board of Regent representative confirmed the Board's continuing support for this project which will include defending home campus involvement and expenditures before the State Legislature. He is appointed by the Governor of Michigan. The Lt. Gov. of Michigan is the former EMU President and stated his continuing support to the project at the highest political levels in the state.



Mr. E. Morris (cont'd.)

EMU has assigned Mr. Lou Poretta as campus backstop officer for the contract. He brings to this responsibility 4 years of experience in Swaziland as the Chief of Party on the project. We could not ask for stronger or better organized on-campus support. EMU has freed him from his academic responsibilities for the next year to spend full time backstopping this project. This will enable him to attend, in detail, to the new contract negotiations, recruitment of new and replacement staff, personal monitoring of participant progress and managing contract-financial matters.

In a meeting with the Dean of Education, and then several other meetings with education faculty members, I was most impressed with their continuing interest and commitment to see this project to completion. The Dean schedules faculty assignments in a way to free staff members for long- and short-term contract assignments in Swaziland. At the President's dinner one evening, EMU faculty members who have worked on this project (over 25 of them) gathered; they represent the single greatest collection of expatriate expertise on Swaziland education any place in the world; given EMU's credible performance on this project, it makes good sense to continue to tap this resource.

During addresses to an open forum and an Afro-American study class, I gathered the strong impression that the students and non-educational faculty members also support EMU's institutional (and sometimes personalized) commitment to African development at a time when this is very much in U.S. vogue. Others, like the Vice President for academic affairs, told me he supported the contract because it provided reciprocal benefits to EMU staff that carried over into the classroom with enriched examples from Swaziland.

CC: REDSO/EA:SNorton
USAID/S:RThomas
AID/W: AFR/SA
AFR/DR/SAP

INITIAL ENVIRONMENTAL EXAMINATION

Project Location	Swaziland
Project Title	Primary Curriculum Development (645-0009)
Funding	FY79-83 \$3,833,000
Life of Project	FY75-83 \$5,985,000
IEE Prepared by	Stafford Baker, REDSO/EA
Environmental Action Recommended Date	Negative Determination January 23, 1979
Concurrence	<u>Julius E. Coles</u> Julius E. Coles Director
Date	<u>April 5, 1979</u>
Assistance Administrator's Decision	Approved _____ Disapproved _____ Date _____

I. PROJECT DESCRIPTION

Perhaps the most fundamental and crucial constraint to Swaziland's economic development is its inadequate human resources. This is evidenced by the large proportions of expatriates holding key technical and professional positions throughout the country, by the shortage of skilled Swazi craftsmen and by the generally low productivity of Swazi labor, both in the factory and on the farm. The low quality of education offered in Swaziland does nothing to alleviate this condition. The present education system suffers from inadequate numbers of qualified teachers, a shortage of classrooms and facilities and an outmoded curriculum that is not culturally or economically relevant to the goals of Swazi national development.

The Primary Curriculum Development Project, underway since 1975, aims to improve the quality and reorient the content of primary education curriculum in the country thereby making primary education more responsive to the needs and circumstances of the Swazi environment. During Phase One of the Project, significant progress has been made towards establishing an institutional capacity within the Ministry of Education (MOE) for developing primary curriculum reflective of Swaziland's goals for education. A Primary Curriculum Unit (PCU) has been established; the Unit has been staffed by 15 professional and 15 support staff from the MOE; assistance is being provided by 6 U.S. technical advisors; and 6 PCU staff are in or have completed B.A. or M.A. degree programs in the U.S. The PCU is now a recognized and integral component of the MOE.

A recent evaluation of Phase One activities indicated a need for modification of planned project inputs and outputs if the project purpose was still to be achieved. The PROP revision is the resulting plan for Phase Two (1979 - 1983) of the approved eight-year project. Additional Swazi staff, U.S. advisors, participant training, commodities and facilities are proposed. To support the additional U.S. advisors, construction of two staff houses is planned. The IBRD will assist Phase Two activities by constructing a Curriculum Resource Center and a Teacher Innovation and Dissemination Center.

II. DISCUSSION OF IMPACTS

A. Land Use

The two USAID-financed houses will be constructed on the campus of the William Pitcher Teacher Training

College in Manzini. The actual sites will be in areas designated for housing on the master plan for development of the campus. Electrical and water services and traffic access are already developed for the campus.

B. Water Quality

Proper landscaping and drainage structures where required will be included in the housing construction contract.

C. Atmospheric

Dust and noise from construction activities for the two houses will be minimal and temporary.

D. Natural Resources

The Project will have no impact on natural resources.

E. Cultural

One of the Project's purposes is to develop curriculum culturally relevant to Swaziland.

F. Socio-economic

The goal of the Project is to accelerate development of Swaziland's human resources. This is intended to positively impact on economic/employment patterns by increasing labor productivity and reducing dependency on expatriate technical assistance.

G. Health

The Project will have no impact on the health environment.

H. General

The Project will have no international, controversial or larger program impacts.

III. RECOMMENDATION FOR ENVIRONMENTAL ACTION

Phase Two of the Project entails the strengthening of MOE institutional capacity for developing primary education curriculum. The small construction component of the Project will have no adverse impacts on the environment.

The Project will have positive impacts on human resources and socio-economic patterns in the country. Therefore, it is believed that no further environmental investigations are required and a Negative Determination is recommended.

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IMPACT IDENTIFICATION AND EVALUATION FORM

<u>Impact Areas and Sub-areas</u>	<u>Impact Identification and Evaluation</u>
A. LAND USE	
1. Changing the character of the land through:	
a. Increasing the population.....	N
b. Extracting natural resources.....	N
c. Land clearing.....	N
d. Changing soil character.....	N
2. Altering natural defenses.....	N
3. Foreclosing important uses.....	N
4. Jeopardizing man or his works.....	N
5. Traffic Access.....	N
6. Land Use Planning.....	N
B. WATER QUALITY	
1. Physical state of water.....	N
2. Chemical and biological states.....	N
3. Ecological balance.....	N
C. ATMOSPHERIC	
1. Air additives.....	N
2. Air pollution.....	L
3. Noise pollution.....	L
D. NATURAL RESOURCES	
1. Diversion, altered use of water.....	N
2. Irreversible, inefficient commitments....	N
E. CULTURAL	
1. Altering physical symbols.....	N
2. Dilution of cultural traditions.....	N
F. SOCIOECONOMIC	
1. Changes in economic/employment patterns..	M
2. Changes in population.....	N
3. Changes in cultural patterns.....	N

G. HEALTH

- 1. Changing a natural environment..... N
- 2. Eliminating an ecosystem element..... N

H. GENERAL

- 1. International impacts..... N
- 2. Controversial impacts..... N
- 3. Larger program impacts..... N

TECHNICAL ASSISTANCE

Sub-item Expenditures by Fiscal Year

(U.S. \$000s)

Sub-item	1979	1980	1981	1982	1983	TOTAL (Rounded)
Advisors ¹ (27.8 person- year for 9 people) ²	57.8 (.7)	651.0 (8.2)	759.6 (8.8)	519.3 (5.6)	458.4 (4.5)	2446(27.8)
Short-term consultancies ³ (48 person- months)	13.0 (4)	69.8 (14)	76.1 (14)	68.0 (9)	57.1 (7)	284(48)
Rounded TOTAL	71	721	836	587	515	2730

- ^{1/} Based on 1979 T.A. costs of \$80,000 per year plus 8 percent inflation per annum for the 7 advisors from EMU (includes 5-6 percent salary increase as stated in the EMU contract with the Professors Association). The 2 other advisors (6 person-years) will be TCNs from Africa with T.A. costs based on a 1979 figure of \$50,000 per year plus 10 percent inflation per annum (one 4-year year beginning in FY 1979 and one 2-year tour beginning in FY 1980). See following table for detailed cost analysis.
- ^{2/} See bar chart for technical advisors arrival and departure dates in section III.F.
- ^{3/} Based on 36 person-months of U.S. short-term consultancies for 2 to 4 months duration (9 person-months per year based on 1979 costs of \$6,000 per month plus 8 percent inflation per annum); 6 person-months of local consultancies for 1 to 3 months duration e.g. computer programming consultancies for Evaluation Unit (2 person-months per year starting in 1979 and based on 1979 costs of \$500 per month plus 10 percent inflation per annum); and 6 person-months of other African country consultancies for 2 to 4 months duration (3 person-months per year starting in 1980 and based on 1979 costs of \$3,000 per month plus 15 percent inflation per annum).

TECHNICAL ADVISOR	FY 79 Jul-Sep	FY 80	FY 81	FY 82	FY 83	TOTAL
Chief of Party	(3) Jul	(12)	(12)	(12)	(11) Aug	50 mo
Curriculum Coordinator		Feb (8)	(12)	(4) Jan		24 mo
Curriculum Specialist	(1) Sep	(12)	(12)	(12)	(11) Aug	48 mo
Curriculum Specialist (TCN)	(1) Sep	(12)	(12)	(12)	(11) Aug	48 mo
Curriculum Specialist	Jan	(9)	(12)	(12)	(11) Aug	44 mo
Curriculum Specialist (TCN)	Jan	(9)	(12)	(3) Dec		24 mo
Evaluation Specialist		(12)	(12) Sep			24 mo
Teacher Education Spec	Oct (2)	(12)	(12)	(12)	(10) Jul	48 mo
Production Specialist	Aug (2)	(12)	(10) Jul			24 mo
	Aug					334 mo

COST (U.S. \$000s)	U.S. ADVISORS	U.S. ADVISORS	U.S. ADVISORS	U.S. ADVISORS	U.S. ADVISORS
	\$80.0/yr \$ 6.7/mo	\$86.4/yr \$ 7.2/mo	\$93.3/yr \$ 7.8/mo	\$100.8/yr \$ 8.4/mo	\$108.8/yr \$ 9.1/mo
	TCN \$50.0/yr \$ 4.2/mo	TCN \$55.0/yr \$ 4.6/mo	TCN \$60.5/yr \$ 5.0/mo	TCN \$ 66.6/yr \$ 5.5/mo	TCN \$ 73.2/yr \$ 6.1/mo

CALCULATIONS	U.S. ADVISORS	U.S. ADVISORS	U.S. ADVISORS	U.S. ADVISORS	U.S. ADVISORS
	8 mo X 6.7 = \$53.6	77 mo X 7.2 = \$554.4	82 mo X 7.8 = \$639.6	52 mo X 8.4 = \$436.8	43 mo X 9.1 = \$391.3
	TCN 1 mo X 4.2 = \$ 4.2	TCN 21 mo X 4.6 = \$ 96.6	TCN 24 mo X 5.0 = \$120.0	TCN 15 mo X 5.5 = \$ 82.5	TCN 11 mo X 6.1 = \$ 67.1

TOTAL	\$57.8(9)	\$651.0(98)	\$759.6(106)	\$519.3(67)	\$458.4(54)	334 mo \$2446.1
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PARTICIPANT TRAINING

A.I.D. Sub-items Expenditures by Fiscal Year

(U.S. \$000s)

Sub-item	1979	1980	1981	1982	TOTAL (Rounded)
U.S. training ¹ (13 calendar years for 13 people)	-	83.6 (5)	92.0(5)	20.2(3)	196(13)
Local training ² (30) person-years)	9.0(9)	11.0(10)	8.5(7)	5.3(4)	34(30)
Short-term staff ³ training in Africa (27 person-months)	15.9(4)	32.0(7)	42.0(8)	48.3(8)	138(27)
Rounded TOTAL	25	127	142	74	368

1/ Based on academic year 1979/80 cost of \$1,100 per month and \$2,000 round trip air fare plus 7 percent inflation per annum.

2/ Based on 1979 local costs of \$1,000 for tuition, books, and correspondence courses plus 10 percent inflation per annum. 13 of 30 person-years for U.S.-training-bound students (5 in 1979, 5 in 1980 and 3 in 1981); 4 of 30 person-years for M.A. degrees in Swaziland as per Annex R (1 in each year); and 13 of 30 person-years for non-degree training for 7 professional and 6 PCU support staff (3 in 1979, 4 in 1980, 3 in 1981 and 3 in 1982).

3/ Based on 1979 travel and per diem costs plus 15 percent inflation per annum for 27 PCU professional staff attending two training workshops or seminars for a two-week duration. For example, training would be at the Pan African Institute in Nigeria, the East African Management Institute in Tanzania, etc.

EQUIPMENT AND COMMODITIES

A.I.D. Sub-item Expenditure by Fiscal Year
(U.S. \$000s)

Sub-item	1979	1980	1981	1982	TOTAL (Rounded)
<u>PCU functions:</u> ¹					
Management	1.4	-	-	-	1
Production	62.7	40.2	44.2	48.6	196
Teacher Education	20.1	9.0	9.9	10.9	50
Materials Design and Preparation	22.7	20.9	23.0	25.3	92
Rounded TOTAL	107	70	77	85	339

^{1/} The 4 PCU components costs are based on 1979 local and U.S. costs plus 10 percent inflation per annum. See Annex 0 for detailed equipment and commodities list including 1979 costs. All equipment will be purchased in 1979 while books, teaching aids, spare parts, printing materials, services and general supplies will be purchased equally throughout the four years. The cost of all equipment which will be procured in the U.S. through a procurement agent includes a 7 percent procurement fee (see Annex 0 for identification of these goods).

CONSTRUCTION AND OTHER COSTS

A.I.D. Sub-item Expenditures by Fiscal Year
(U.S. \$000s)

Sub-item	1979	1980	1981	1982	1983	Total (Rounded)
<u>Construction</u>						
Houses for T.A.(2) ¹	70.0	-	-	-	-	70
<u>Other</u>						
African Curriculum Organization Member ship Fees ²	5.8	2.5	2.5	-	-	11
Rental of Housing ³	-	5.6	6.2	-	-	12
External AID Project Evaluations	-	-	60.0	-	60.0	120
TOTAL (Rounded)	76	8	69	-	60	213

- 1/ See Engineering Analysis and IEE, Annex T. Additional furniture for T.A. housing above that which is provided by the GOS will be provided by the implementing contractor. See Annex O for additional household furniture requirement. Vacant housing will be made available to short-term consultants.
- 2/ 1979/80 membership fees to be paid in full by AID; 1980/81 and 1981/82 fees to be shared with the GOS; and 1982/83 fees to be paid in full by the GOS.
- 3/ One house will be rented in 1980 for two years in order to accommodate an additional technical advisor on a two-year contract. Figures based on 1979 costs for rentals in Manzini of \$425 per month plus 10 percent inflation per annum.

DRAFT PROJECT AUTHORIZATION AND REQUEST
FOR ALLOTMENT OF FUNDS

PART II

Name of Country: Swaziland
Name of Project: Primary Curriculum Development
Number of Project: 645-0009

Pursuant to Part I, chapter 1, section 105 of the Foreign Assistance Act of 1961, as amended, I hereby authorize a grant to Swaziland (the "Cooperating country") of not to exceed seven hundred thousand United States dollars (\$700,000) (the "Authorized amount") to help in financing certain foreign exchange and local currency costs of goods and services required for the project as described in the following paragraph.

The Project will assist the Government of Swaziland in efforts to accelerate development of Swaziland's human resources through institutionalization of a capacity to develop, produce and effectively disseminate primary curriculum reflective of Swaziland's education needs. To this end, A.I.D. assistance will be utilized to finance technical, construction and other services, commodity procurement, participant training, and certain other costs.

I approve the total level of A.I.D. appropriated funding planned for this Project of not to exceed three million eight hundred thirty-three thousand United States dollars (\$3,833,000) (The "Grant"), including the funding authorized above, during the period FY 1979 through FY 1983. I approve further increments during that period of grand funding up to \$3,133,000, subject to the availability of funds in accordance with A.I.D. allotment procedures.

I hereby authorize the initiation of negotiation and execution of the Project agreement by the officer to whom such authority has been delegated in accordance with A.I.D. regulations and delegations of authority subject to the following essential terms and covenants and major conditions; together with such other terms and conditions as A.I.D. may deem appropriate:

A. Source and Origin of Goods and Services

Goods and services, except for ocean shipping, financed by A.I.D. under the Project shall have their source and origin in the Cooperating country or in the United States except as A.I.D. may otherwise agree in writing and except as stated in paragraph D below. Ocean shipping financed under the Grant shall be procured in the United States, except as A.I.D. may otherwise agree in writing.

DWD

B. Prior to any disbursement, or the issuance of any commitment documents under the Project agreement, the Grantee will furnish in form and substance satisfactory to A.I.D., evidence that other donor support for the Project will be forthcoming in an adequate amount and on a timely basis.

C. The Grantee will covenant substantially as follows:

1. It will provide all required qualified professional and support personnel on a timely basis.

2. It will establish positions within the Primary Curriculum Unit (PCU9 for professional and support personnel in accordance with a schedule to be included as part of the amplified description of the Project contained in the Project agreement. To this end, the Grantee will submit to A.I.D., within 90 days from the date of the agreement or such later date as A.I.D. may agree in writing, evidence satisfactory to A.I.D. that positions scheduled to be established by December 31, 1979 have been or will be established by that date. Unless A.I.D. otherwise agrees in writing, similar evidence satisfactory to A.I.D. will be submitted for positions scheduled to be established by December 31, 1980 and December 31, 1981. Timing for submission of this evidence will be specified in PILS.

3. It will establish a curriculum materials approval procedure to expedite the materials approval process and which may involve the participation of other representatives in the Swazi educational system aside from the Ministry of Education. The Grantee will submit periodic reports indicating, generally, the nature of the procedures being developed and the progress being made toward their establishment. PILS will specify in greater detail the timing and content of these reports.

4. It will establish a fund or take such other actions as may be necessary to assure that vehicles will be made available to the PCU to replace vehicles financed by other donors. Unless A.I.D. otherwise agrees in writing, the mechanism for vehicle replacement will be established by the beginning of Swaziland's 1980 budget year and A.I.D. may from time to time, request the Grantee to submit evidence that, to the maximum extent possible, funds made available through such mechanism will be available and adequate to replace project vehicles on a timely basis.

5. It will make available on a timely basis qualified personnel to undertake participant training. Upon their return from training outside Swaziland, participants will be returned to positions with the PCU or such other positions as A.I.D. may agree to which are commensurate with the nature and level of training received. Unless otherwise agreed to by A.I.D. the Grantee's

normal bonding requirements for persons receiving training outside Swaziland will be applicable.

C. The following waivers to A.I.D. regulations, as justified in Annex Q of the Project paper, are hereby approved:

1. The policy set forth in Handbook 1 supplement B in favor of competitive procurement is waived to allow negotiation, without solicitation of competitive proposals, with Eastern Michigan University for technical services.

2. The requirement set forth in Handbook 1 supplement B that commodities procured with Grant funds have their source and origin in the U.S. is waived to permit procurement of approximately \$35,000 of construction materials and \$314,000 on project commodities which have their source and origin in countries included in A.I.D. Geographic Code 935 (Special Free World). Exclusion of procurement of these materials and commodities from free world countries other than the cooperating country and countries included in Code 941 would seriously impede attainment of U.S. foreign policy objectives and objectives of the foreign assistance program.

**COMPARATIVE ASSESSMENT OF THE HYPOTHETICAL IMPACT OF THE PCU PROJECT
ON THE VALUE OF OUTPUT OR THE PRODUCTIVITY OF PRIMARY EDUCATION**
(000 except as specified)

ANNEX U

Model A; GSD Curriculum ^{1/}	GD I			GD II			STD I			STD II			STD III			STD IV			STD V			Value of Educational Sector Output	
	No.	W	Value	No.	W	Value	No.	W	Value	No.	W	Value	No.	W	Value	No.	W	Value	No.	W	Value		No.
Y1	15.1	1	15.1	12.7	1	12.7	12.0	1	12.0	10.6	1	10.6	9.3	1	9.3	8.2	1	8.2	8.1	1	8.1	76.0	76.0
Y2	15.4	1	15.4	12.6	1	12.6	12.4	1	12.4	11.3	1	11.3	10.3	1	10.3	9.3	1	9.3	8.7	1	8.7	82.0	82.0
Y3	17.2	1	17.2	14.2	1	14.2	13.2	1	13.2	12.1	1	12.1	10.6	1	10.6	9.7	1	9.7	9.0	1	9.0	86.0	86.0
Y4	17.6	1	17.6	14.7	1	14.7	14.2	1	14.2	12.7	1	12.7	11.3	1	11.3	9.8	1	9.8	9.2	1	9.2	80.5	80.5
Y5	18.7	1	18.7	15.5	1	15.5	14.6	1	14.6	13.4	1	13.4	11.8	1	11.8	10.2	1	10.2	10.2	1	10.2	94.4	94.4
Y6	19.7	1	19.7	16.5	1	16.5	15.4	1	15.4	13.8	1	13.8	12.4	1	12.4	10.7	1	10.7	10.7	1	10.7	96.2	96.2
Y7	20.6	1	20.6	17.4	1	17.4	16.4	1	16.4	14.5	1	14.5	12.8	1	12.8	11.2	1	11.2	11.2	1	11.2	104.1	104.1
SUM			125.3			104.6			68.2			88.4			75.5			69.1			67.1	631.2	631.2
Model B; Transition to New Curriculum 1/																							
Y1	15.1	1.4	21.1	12.7	1.00	12.7	12.0	1.0	12.0	10.6	1.0	10.6	9.3	1.0	9.3	8.2	1.0	8.2	8.1	1.0	8.1	76.0	82.0
Y2	15.4	1.4	21.0	12.6	1.55	21.1	12.4	1.0	12.4	11.3	1.0	11.3	10.3	1.0	10.3	9.3	1.0	9.3	8.7	1.0	8.7	82.0	96.1
Y3	17.2	1.4	24.1	14.2	1.55	22.0	13.2	1.7	22.4	12.1	1.0	12.1	10.6	1.0	10.6	9.7	1.0	9.7	9.0	1.0	9.0	86.0	109.9
Y4	17.6	1.4	24.6	14.7	1.55	22.8	14.2	1.7	24.1	12.7	1.8	22.9	11.3	1.0	11.3	9.8	1.0	9.8	9.2	1.0	9.2	89.5	124.7
Y5	18.7	1.4	26.2	15.5	1.55	24.0	14.6	1.7	24.8	13.4	1.8	24.1	11.8	1.9	22.4	10.2	1.0	10.2	10.2	1.0	10.2	94.4	141.9
Y6	19.7	1.4	27.6	16.5	1.55	25.6	15.4	1.7	26.2	13.8	1.8	24.8	12.4	1.9	23.6	10.7	1.95	20.6	10.7	1.0	10.7	99.2	159.4
Y7	20.6	1.4	28.8	17.4	1.55	27.0	16.4	1.7	27.9	14.5	1.8	26.1	12.8	1.9	24.3	11.2	1.95	21.8	11.2	2.0	22.4	104.1	178.3
SUM			175.4			155.2			149.8			131.9			111.8			89.9			78.3	631.2	892.2
Model C; Transition to New Curriculum 2/																							
Y1	15.1	1.4	21.1	12.7	1.55	19.7	12.0	1.7	20.4	10.6	1.8	19.1	9.3	1.9	17.7	8.2	1.95	16.0	8.1	2.0	16.2	76.0	130.2
Y2	15.4	1.4	21.0	12.6	1.55	21.1	12.4	1.7	21.1	11.3	1.8	20.3	10.3	1.9	19.6	9.3	1.95	18.1	8.7	2.0	17.4	82.0	100.6
Y3	17.2	1.4	24.1	14.2	1.55	22.0	13.2	1.7	22.4	12.1	1.8	21.8	10.6	1.9	20.1	9.7	1.95	18.9	9.0	2.0	18.0	86.0	147.3
Y4	17.6	1.4	24.6	14.7	1.55	22.8	14.2	1.7	24.1	12.7	1.8	22.9	11.3	1.9	21.5	9.8	1.95	19.1	9.2	2.0	18.4	89.5	153.4
Y5	18.7	1.4	26.2	15.5	1.55	24.0	14.6	1.7	24.8	13.4	1.8	24.1	11.8	1.9	22.4	10.2	1.95	19.9	10.2	2.0	20.4	94.4	161.8
Y6	19.7	1.4	27.6	16.5	1.55	25.6	15.4	1.7	26.2	13.8	1.8	24.8	12.4	1.9	23.6	10.7	1.95	20.9	10.7	2.0	21.4	99.2	170.1
Y7	20.6	1.4	28.8	17.4	1.55	27.0	16.4	1.7	27.9	14.5	1.8	26.1	12.8	1.9	24.3	11.2	1.95	21.8	11.2	2.0	22.4	104.1	178.3
SUM			175.4			162.2			166.9			159.1			149.2			134.7			134.2	631.2	1081.7
Model D; Transition to New Curriculum 2/																							
1980	22.5	1.4	31.5	19.0	1.00	19.0	18.1	1.0	18.1	16.2	1.0	16.2	14.2	1.0	14.2	12.1	1.0	12.1	12.2	1.0	12.2	113.5	123.3
1981	23.4	1.4	32.8	19.9	1.55	30.8	18.9	1.0	18.9	17.0	1.0	17.0	15.0	1.0	15.0	12.8	1.0	12.8	12.8	1.0	12.8	119.0	140.1
1982	24.4	1.4	34.2	20.7	1.55	31.1	19.8	1.7	33.7	17.8	1.0	17.8	15.7	1.0	15.7	13.5	1.0	13.5	13.5	1.0	13.5	124.5	160.5
1983	25.3	1.4	35.4	21.5	1.55	33.3	20.6	1.7	35.0	18.6	1.8	33.5	16.5	1.0	16.5	14.2	1.0	14.2	14.2	1.0	14.2	130.1	182.1
1984	26.3	1.4	36.8	22.4	1.55	34.7	21.4	1.7	36.4	19.4	1.8	34.9	17.2	1.9	32.7	14.9	1.0	14.9	15.0	1.0	15.0	135.6	205.4
1985	27.2	1.4	38.1	23.2	1.55	36.0	22.3	1.7	37.9	20.2	1.8	36.4	17.9	1.9	34.0	15.6	1.95	30.4	15.7	1.0	15.7	141.2	228.5
1986	28.0	1.4	39.2	24.0	1.55	37.2	23.0	1.7	39.1	21.0	1.8	37.8	18.5	1.9	35.2	16.0	1.95	31.2	16.5	2.0	33.0	147.0	252.7
SUM			245.0			223.1			219.1			193.6			163.3			129.1			116.4	910.9	1202.6

W Weighting coefficient to reflect gains or additional value of education to individual. See Table I of this section.
1/ Primary School attendees and structure equivalent to estimated 1972 to 1977 pattern.

2/ Primary School attendees and structure equivalent to projected 1980 to 1986 pattern as presented in GOS Financial and Statistical Analysis of Swaziland's Educational System with Projections to 1986.

2/13

ENGINEERING ANALYSISA. Introduction

Revision of the Project inputs include four additional U.S.-provided technical advisors for the Primary Curriculum Unit. Due to the phasing of the advisors, it has been decided to accommodate the extra advisors by building two additional staff houses (six were constructed for Phase One of the Project) plus the phased leasing of two other houses in Manzini.

B. Site Selection

The two houses will be constructed adjacent to the existing six which are on the campus of William Pitcher College in Manzini. Electrical and water supply services are available and traffic access is assured by the existing roads.

C. Design

The design for the existing six houses will be utilized to assure equal housing for the U.S.-provided staff. The houses have a shared wall to minimize road frontage space requirements. The design (three bedrooms, one bath, living-dining room, kitchen, attached garage and maid quarters) has proved to be acceptable to the current U.S. occupants.

D. Specifications

Construction techniques and materials are standard for senior staff housing in Swaziland. Features include concrete foundations and floors, concrete block walls, steel door and window frames, wood roof trusses and corrugated metal roofing.

E. Implementation Plan

The Ministry of Works, Power and Communications (MOW) will prepare tender documents based on the plans and bills of quantities that they have on file for this design. A contract for construction will be awarded to a private contractor with the MOW providing overall architectural and engineering supervision. The time required for construction is estimated by the MOW to be:

	<u>Time</u>	<u>Planned Dates</u>
Tender and Award	2 months	April to May 1979
Construction	<u>7 months</u>	June to December 1979
Total	9 months	

AID will reserve the right to approve the bid documents prior to tendering and to concur with contractor selection prior to award of contract.

F. Costs

The costs for each house is estimated by the MOW to be 26,600 E. (U.S. \$30,650) for construction contracted to begin in April 1979. Current inflation on building costs is approximately 1% per month. These estimates are based on recent MOW contract awards.

April 1979 cost (each)	\$30,650
Inflation to June 1979 (2%)	\$ 600
Sub Total	\$31,250
Contingency @ 12%	\$ 3,750
Total for one house	\$35,000
Total for two houses	\$70,000

G. Reimbursement Procedure

Fixed Amount Reimbursement (FAR) procedures will be used for the construction activities. The actual amount will be specified by AID after consultation with the MOW and when the actual date of contract award can be estimated. The amount will not exceed the U.S. \$35,000 estimate. Reimbursement will be made when AID engineers have certified that the houses are satisfactorily completed to the agreed specifications.

H. 611(a) Requirements for Construction

FAA 611(a) requirements for adequate planning and reasonable cost estimates for AID-financed construction activities is considered met by this engineering analysis.

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MINISTER OF
MINE AND ENERGY

Director of Mines and Geology

MEMORANDUM

13th October, 1977

TO: THE MINISTER

FROM: THE DIRECTOR OF MINES AND GEOLOGY

SUBJECT: MINING

RE: MINING

MINING

Reference is made to the report of the Director of Mines and Geology dated 13th October 1977, which is attached hereto for the information of the Minister. The report deals with the possibility of mining of the phosphate deposits in the phosphate belt and the potential resources.

The report also deals with the possibility of mining of the phosphate deposits in the phosphate belt and the potential resources.

- 1. The report also deals with the possibility of mining of the phosphate deposits in the phosphate belt and the potential resources.
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- 11. The report also deals with the possibility of mining of the phosphate deposits in the phosphate belt and the potential resources.
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- 15. The report also deals with the possibility of mining of the phosphate deposits in the phosphate belt and the potential resources.

[Redacted line]

[Redacted line]

SWAZILAND



- 2 -

GOVERNMENT

Ref: E.1/31

Ministry of Education,
P.O. Box 39,
Mbabane.

2nd April, 1979.

Mr. Ross F. Thomas,
U.S. Agency for International
Development,
P.O. Box 750,
Mbabane.

ACTION! HRSC ✓
INFO! Cont. APO
Due Date: 4/17/79

Dear Mr. Ross,

The Ministry of Education studied the Biennial External Evaluation Report by the Pacific Consultants in the name of Charles Dove and Nathaniel Sims and we have been very much concerned about the problems that were raised. The Ministry has also taken great pains to study the recommendations and we have pledged ourselves to take all the necessary corrective measures to ensure that the project becomes a success. Organisational changes have been undertaken and there is now a direct link between the Primary Curriculum Unit and the Headquarters staff of the Ministry. Communication links have also been revised in an attempt to have closer contact with, be conscious of and identify the nature of the problems attendant to the Primary Curriculum Project so that relevant action can be taken timeously to resolve them. During the past six months regular meetings have been held among the Aid officers concerned with human resources development, the Primary Curriculum Unit and Members of the Headquarters staff of the Ministry of Education. These meetings have been found to be extremely useful in resolving most of the problems accruing from the Project. Consequently, the meetings have been continued and will still be continued.

The Ministry is perfectly conversant with the contents of the new project document and she feels it her duty or obligation to expend the necessary resources in support of the Primary Curriculum Unit. The Ministry is also extremely concerned about the success / the project since the objectives of the Swaziland Government is to achieve Universal Primary Education by 1985 and Curriculum development is a sine qua non of this objective. The significance of the curriculum that is being developed by PCU is its responsiveness and pertinence to the needs of Swazi Society. A relevant curriculum is the central factor to the

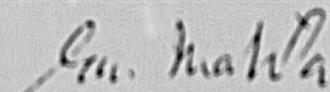
realization/....

247

realization of the economic, social and cultural rights indispensable to the dignity and free development of the Swazi Nation. Government has therefore, an obligation to support the Primary Curriculum Project in order that she may achieve some of her major goals and objectives.

The Ministry of Education formally requests continuation of the aid from AID in support of the Primary Curriculum Unit Project.

Yours sincerely,



G.M. MABILA
PERMANENT SECRETARY.

GM/RAD.



ACTION: A/DIR
 cc: ADI, ADI, DEWD, DHD
 Doc Date: 11/1/78

Department of Economic Planning & Statistics,
 P. O. Box 60,

MEMORANDUM

6th October, 1978

Our letter of 20/9/78 (111/78)

The Regional Development Officer,
 MSAID,
 P. O. Box 240,
 MCHINGA.

Dear Sir,

MSAID TO SWAZILAND PROJECTS

Some time in September 1978, you sent us a table of project-requests for MSAID Assistance in 1979 and 1980 and requested us to make a priority ranking of the projects already in the pipeline and to add new project proposals.

Below, is the priority ranking we are suggesting and new project proposals:-

1.	Rural Development Area: Infrastructure	1460
	Water	016
2.	Rural Infrastructure: Diseases	007
	Water	
3.	Healthcare (Special) Development	0020
	Personnel and Training	
4.	Lower Income Shelter	0003
5.	Institute for Development Research	0004
	Priority Curriculum	0009
	Water	0003
	University College: Swaziland	0003
	Cooperative and Marketing	0051
	Swaziland Manure Production	0010
10.	Produce Marketing	0006
11.	Rural Education Centre	0001
<u>See Project Proposals</u>		
1.	W. H. and Maud's Hospital - 1st Phase	£2,000,000
2.	Swaziland Rehabilitation Centre for the Disabled at Swaziland College of Technology	£10,000
3.	Phakhe Hospital Extension	£1,500,000

Yours faithfully,

E. RUTSHI

for: PERMANENT SECRETARY.

Handwritten note:
 11/1/78
 2/1/78

SWAZILAND



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GOVERNMENT

Ref: E.1/31

Ministry of Education,
P.O. Box 39,
MBABANE.

2nd April, 1979.

Mr. Ross F. Thomas,
U.S. Agency for International
Development,
P.O. Box 750,
MBABANE.

ACTION! H&CC ✓
INFO! Cont. APO
Dnr Rals: 4/17/79

Dear Mr. Ross,

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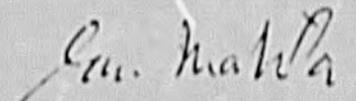
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Yours sincerely,


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PERMANENT SECRETARY.

GMM/RAD.