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BOTSWANA

PRIMARY EDUCATION IMPROVEMENT PROJECT

PROJECT NUMBER 633-0222

1981-1986

FINAL REPORT

Sponsored by

United States Agency for International Development

and

The Government of Botswana

Under Contract With

The College of Education

Ohio University

Athens, Ohio 45701

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I. INTRODUCTION: PROJECT BACKGROUND

A. Primary Education in Botswana in 1980-81

The Economic Survey of 1965, conducted shortly before the day of independence in September 1966, drew "attention to the poor state of education in Botswana, and the serious consequences this had for localisation of the civil service, and for the economic, social and cultural development of the country."¹ During the early phases of the Transition Development Plan the government expressed a desire to achieve universal primary education as soon as possible; however, initially feeling the need to concentrate resources on the secondary and tertiary levels of education.²

By the late 1970's it was generally accepted that the results of primary education were seriously inadequate and that increased attention needed to be given to education at the primary level.

A 1976 survey, which drew heavily upon the experiences gained over almost a decade in a six-subject survey conducted in some 20 countries by the International Association for the Evaluation of Educational Achievement (IEA), assessed the outcome of instruction in terms of student achievements at various levels in reading and mathematics and--at the secondary level--in science. It showed that the performance of Botswana students at both primary and secondary level tended to be unacceptably low in comparison with other tested developing countries, as well as developed countries. Moreover, it was a matter of general agreement that unsatisfactory performance at the higher

¹Edwin K. Townsend Coles, Education in Botswana (Botswana Macmillan, 1986, 7).

²Coles, 7.

levels of education was largely the result of an inadequate preparation of students in basic literacy and numeracy skills.

Since there had been a great shortage of trained and educated Batswana at the time of independence in 1966, the subsequent supply of trained Batswana for all aspects of national need was considerably inferior to the demand. This has provided the better trained and more able citizens with employment opportunities at comparatively elevated and well-remunerated levels in the public and private sectors. In this situation, teaching had been generally the destination of less capable students, and among teachers, primary school teaching provided a considerably lower salary and therefore represented a lower priority. In a general situation of shortages of trained personnel and a primary education system that had been expanding at about 9% per annum, the staffing of primary schools had fared poorly.

To reverse this trend, the government of Botswana (GOB) recognised that steps had to be taken to make primary education in Botswana a more attractive career and to up-grade the professional qualifications of primary school teachers and administrators. Salary increases made in response to the Transition Development Plan were a step in the right direction, but major efforts had to be made to introduce qualitative improvements, especially at the teacher training level where the multiplier effect had the greater potential. Botswana's then three primary teacher training colleges (PTTC) were heavily dependent on expatriate staff (about 50%), which both the GOB and supporting donor agencies wanted to see reduced. The localisation of the PTTC staffs and the establishment of a fourth PTTC placed a heavy priority on the upgrading of Batswana educators to

staff the facilities of the PTTCs.

B. Primary Education as a GOB Priority

In recognition of this problem, the Ministry of Education (MOE) was dedicated to the task of increasing the access, efficiency and relevance of the basic education provided to Botswana children. It had the objective of making primary education universal and expanding the percentage of school-age population enrolled at the secondary level.

Increasing the access, efficiency and relevance of primary education was seen as a major complex undertaking. Fortunately, Botswana had conducted various studies of these areas. The principal documents on which the expansion and improvement of primary education was based were the National Development Plan V (1979-85), and more specifically, the Reports of the National Commission on Education (NCE), Education for Kogisano, approved by the GOB in August 1977, which set educational policy and strategy through 1985, and the Supplementary Report of the National Commission on Education dated July 1979.

The following quote enunciates the policy established in the Botswana National Development Plan 1979-85 (p.107):

"The GOB attaches the highest priority within education to the primary education sector. First, in the interests of equality of opportunity and of developing the potential of all children, the Government seeks to provide universal access to primary education. Secondly, since primary education lays the foundation for further education and training and for productive employment, the government seeks to improve its quality and relevance.

In the long term primary education will form the first part of a basic education system available to all children. However, during this Plan period it will not be possible to provide access to junior secondary education for all primary school leavers, so for about half of the children completing Standard 7 primary education will be terminal. Hence the primary education sector must continue to make provision both for those who will be accepted for secondary education and for those who will not have further formal education."

The need for further development of primary teacher education in Botswana stemmed from a projected increase of 40% in the primary school enrollment, from 167,000 in 1980 to 220,000 in 1985. This projected increase, set forth in the 1979-85 National Development Plan, was based on the assumption that Botswana would continue to progress toward its official goal of universal primary education and was consistent with available population data.

It was predicted that the cadre of primary teachers would need to be increased from approximately 5,000 in 1980 to 6,800 in 1985. The Planning Division of the MOE projected that enrollment increases in primary teacher training courses would increase from 700 in 1979 to 1,300 by 1984, a growth of almost 90%. Although it appeared that this increase in primary teacher trainers would help to satisfy the projected need for 6,800 primary teachers by 1985, it was noted that more than 1,800 of these primary teachers would be unqualified.

Concerns over the provision of individualised instruction to pupils with special problems, higher rates of success in language mastery and improved performance on externally set examinations were related to the quality of the primary teaching cadre. A qualified teacher

in every classroom constituted a first step toward providing an equitable approach to these concerns.

The stated aim of the GOB, with regards to primary education, required support for primary teacher education, for curriculum and development and for in-service programmes that would affect the teachers and children in the schools.

The Ministry of Education, the Teacher Training Colleges and the University of Botswana, then the University College of Botswana (UCB), faced a severe shortage of the manpower needed to carry out the government plan for improving primary education. The Faculty of Education at the University had a predominantly expatriate staff and the TTCs at Lobatse, Serowe and Francistown had staffs that were about 50% expatriate. In all cases, the teaching staffs were already heavily committed to teaching the courses in existing programmes, in supervising teaching practice, in serving on national curriculum panels and in assisting with in-service activities.

The need to establish a programme for the preparation of teacher college tutors and to support the extension and implementation of far-reaching efforts in curriculum development and in-service education was clearly defined.

C. GOB and USAID Strategy

The GOB policies for education in the 1979-85 National Development Plan period were as follows:

(1) to increase educational opportunities and reduce inequalities as far as resources permit;

(2) to contribute to the balanced development of the country by seeking to satisfy manpower requirements for all sectors; and

(3) to promote personal qualities such as respect for national

education and the implications for future planning and action. In January, 1980, a Project Identification Document (PID) was completed and sent to AID/W for the purpose of collaboration on a project which would provide technical assistance to the GOB in the areas of primary pre-service and in-service education improvement. The PID, which was subsequently reviewed and approved by AID/W in March of 1980, set forth an initial plan for the establishment and implementation of a primary education improvement project. Under a cooperative agreement with AID, Ohio University in Athens, Ohio, was selected to complete the project design in the form of a Project Paper and to provide the AID-financed institutional and technical assistance to implement the project.

II. CONTRACTOR STATEMENT OF WORK: PLANNED/REVISED

The purpose of this section of the report is two fold: (1) to present the essence of the contract between USAID and the Institutional Contractor regarding the work which was to be accomplished under PEIP and (2) to show how the statement of work was modified during the course of project implementation.

Original Statement of Work

A planning project paper was developed as a result of the cooperative efforts of the OU planning team, representatives of the GOB and staff of USAID/B. This paper defined the purposes of the Primary Education Improvement Project (PEIP), the inputs required to achieve the objectives of the project and the outputs expected. These elements of plan are summarised in the following sections of this report.

A. Purposes

The two major purposes which were established required the

contractor (OU) with the support of USAID to assist the GOB -

(1) to establish in the University College of Botswana (UCB) a permanent capacity to provide pre-service training through (a) the creation of a four-year professional Bachelor of Education degree programme, and (b) a two-year diploma programme to up-grade senior primary school staff for whom a degree is not appropriate;

(2) to strengthen the capacity of the Ministry of Education (MOE), in cooperation with the UCB to organise and implement effective in-service programmes for supervisory staff and teachers involved in primary education.

By the end of the project it was anticipated that there would be:

(1) A functioning Department of Primary Education as a new entity in the UCB.

(2) Botswana graduates of the UCB with BEd degrees or two-year diplomas in primary education, qualified to serve as TTC tutors, head teachers, MOE officers and in other leadership positions.

(3) Botswana trained in the U.S. to the masters degree level in appropriate fields of primary education to supplement and replace U.S. project staff at the UCB.

(4) An institutional base established for the systematic and effective in-service training of head teachers, deputy heads, and senior teachers in the 480 primary schools, and for the development of staff of the TTCs and the Inspectorate.

Furthermore, it was anticipated that, over the five-year period of the project, approximately 80 Botswana would be trained in primary education to diploma and degree levels, the exact number in each would depend on the mix of students in the two programmes. The majority of the Botswana who completed the BEd degree were slated for positions

as tutors in the Teacher Training Colleges for the first 5-10 years following establishment of the programme at UCB. As the TTCs become locally staffed with trained persons, it is expected that graduates will begin to move into leadership positions as head teachers, deputy heads, inspectors, and specialists in MOE positions.

It was assumed that once the training programmes were established there would be an annual output of 23-30 Batswana from the programmes.

B. Scope of Work

The plan, as designed, obligated the Contractor (OU), working closely with the GOB, to work for the accomplishment of the PEIP objectives through the provision of long and short term technical assistance personnel, through implementing all project funded long and short term participant training, and by procuring project-financed commodities.

1. Technical Assistance - Long Term

The Ohio University was designated to provide 25 person years of long term technical assistance over the life of the project and 60 person months during the first twelve-month contract period. Four members of the U.S. team (the Curriculum/Supervision/Administrator, Reading Specialist, Math-Science Specialist and the TESL Specialist) were to be assigned to UCB. Their responsibilities were established by the OU Chief of Party in coordination with the Dean of the UCB Faculty of Education. The team's In-service Education Specialist was to be assigned to the MOE and work directly for the Chief Education Officer (CEO) but remain under the administrative guidance of the Institutional Contractor Chief of Party.

The contractor was assigned the responsibility to recruit

and nominate specialists to fill positions that are discussed below. Nominations were to be forwarded to USAID/B for concurrence and reference to the relevant institution in Botswana. The OU agreed to comply with all applicable AID regulations regarding personnel matters and to provide appropriate documents regarding compliance with equal opportunities requirements.

The required specialists and their qualifications were projected as follows:

(a) Team Leader and Specialist in Curriculum and Supervision

Qualifications: An earned doctorate and experience in teaching at a variety of levels - primary and tertiary. Experience in administration of educational projects in developing countries desired.

(b) In-service Education Specialist

Qualifications: An earned doctorate and experience in teacher education at various levels. Experience in educational administration/supervision desirable. Experience in positions requiring coordination between educational agencies desirable.

(c) Reading/Language Arts Specialist

Qualifications: Earned doctorate with specialisation in the teaching of developmental and remedial reading and language arts subjects. Primary and tertiary teaching experience required.

(d) Math/Early Childhood Education Specialist or Math/Science Specialist

Qualifications: Earned doctorate with specialisation in the teaching of primary school mathematics and either early childhood education or science. Primary and tertiary teaching

experience required. (Note: Throughout the life of the project, this position was filled by a mathematics/science specialist.)

(e) English/Teaching English as a Second Language Specialist

Qualifications: Earned doctorate with specialisation at the primary level in English/TESL. Primary and tertiary teaching experience required.

It was assumed that one of the three positions - Reading Language Arts, Math/Early Childhood or Science, English/TESL - would also serve as Chairperson of the Primary Education Department at UCB.

2. Technical Assistance - Short Term Consultants

The project plan provided for the contractor to supply 37 person months of short term consultant services during the life of the project. (The Project Paper projected 44 person months, 37 to be supplied by OU and seven person months for an independent evaluator outside the Institutional Contractor.) Approximately 5.5 person months were to be required during the first 12 months of project implementation.

It was understood at the beginning of the project that projections of future needs for short term technical assistance would be made but that these were tentative. In the implementation of the project specific needs would arise which would dictate the qualifications and term of service required of the consultants selected.

3. Participant Training for Selected Batswana

The project provided for a total of 16 participants (ten long term and six short term) for a total of 198 person months. Participants for training in the U.S. and third countries were to be selected by the MOE and/or UCB in consultation with USAID/B

and the project team.

Schedules for out-of-country training for the participants were arranged to allow each to return from training for appropriate orientation to the position assumed before the conclusion of the project in 1986.

4. Commodities

The design of the commodity budget was dictated by three major areas treated within the scope of PEIP. These areas were (1) the establishment of both a degree and a diploma program at UCB; (2) the needs of TTCs for a variety of materials and equipment treating primary education; and (3) the requirement of a wide range of equipment, consumable and reference materials for use in the various factors of the in-service education program.

The OU was assigned the responsibility for procuring project-financed commodities in the United States and Botswana. The commodities to be procured were grouped into three categories: (1) books/references/publications for UCB and the TTCs; (2) audio-visual equipment and teaching aids to provide instructional supports to UCB, TTCs and in-service activities; and (3) supplies, maintenance and communications.

5. Construction (not a responsibility of the Institutional Contractor)

The plan provided that two units would be constructed at UCB in support of the project and without which the University could not absorb the new primary education programmes. An agreement was worked out whereby AID and the GOB would each finance 50% of the total costs of (1) a Primary Education Centre and (2) a 84-bed hostel to house the BEd and Diploma candidates.

C. Administration of PEIP

The administrative plan for the Primary Education Improvement Project was designed to maintain a cooperative effort among the Ministry of Education (MOE), University College of Botswana, Ohio University (funded contractor) and USAID. The OU was designated to administer the contract through the College of Education of Ohio University. A OU-based project coordinator in cooperation with appropriate Ohio University staff was assigned the responsibility to recruit specialists for assignment to the project team, bear responsibility for maintaining records as required for periodic audit, and assure that fiscal procedures were consistent with institutional practices. The MOE has overall responsibility for primary education in Botswana and therefore assumed the responsibility to provide overall coordination of the project in consultation with all agencies involved in the project.

Modifications to the Statement of Work

The PEIP plan as developed originally required a few changes as it was being implemented between 1981 and 1986.

A. Primary Education Department Chairperson Designate

At the initiation of the project in 1981, the decision was made that the person selected as Chief of Party of the OU team would serve as Chairperson of the Primary Education Department at UCB rather than one of the specialists in Reading/Language Arts, Math/Early Childhood or Science, or English/TESL. It was felt that greater efficiency and a higher level of coordination of activities would be achieved with the Chief of Party serving as Chairperson of this newly developed department at UCB.

B. Technical Assistance - Long Term

As a result of a recommendation by the external evaluator, Dr. Patrick Lynch, in his report of October, 1982 a Teaching Competency Specialist was added to the technical assistance team and assigned to the UCB. This position, of 18 months duration, required the following qualifications: earned doctorate with a specialisation in primary teacher education and extensive experience in working directly with primary school teachers in the improvement of instruction.

C. Technical Assistance - Short Term

The support provided to PEIP by the addition of the Teacher Competency Specialist as a long term position (18 months) reduced the requirement for short term technical assistance. The original plan allowed the contractor 37 person months; with the modification in long term assistance only 31.4 person months of short term consultancy was needed.

D. Short Term Participant Training

The project design had proposed six short term participants; however, only two short term participants were provided study.

III. A SUMMARY OF PROJECT INPUTS AND OUTPUTS

This section of the report provides a brief description of project inputs and outputs. Further explanations of many of the project components will follow. At this point it is well to reemphasize the fact that PEIP was a cooperative effort and that there were inputs by each of the participating agencies. In addition, there was the input of time and effort of many persons which cannot be reflected in a summary such as this. However, the participation and cooperation of

these persons and groups contributed greatly to the outputs of the projects.

A. Financial Contribution by USAID

The following listing enumerates the projected and actual expenditures made from the funds provided in the USAID/Ohio University contract. The amounts cover the period from June 15, 1981 through August 31, 1986. (Note: orders placed in August 1986 are not included in the amounts given below.)

Financial Inputs June 15, 1981 - August 31, 1986*

	<u>Planned Contract Budget</u>	<u>Actual Expense</u>
1. Salaries	1,696,336	1,492,148
2. Benefits	302,619	387,989
3. Overhead	1,402,335	1,256,604
4. Travel & Trans.	386,308	359,360
5. Allowances	232,984	105,275
6. Other Direct Costs	49,210	28,082
7. Participant Training	339,237	257,503
8. Equip., Mat., Supplies	270,552	222,685
	<hr/>	<hr/>
TOTALS	4,679,489	4,109,646

*In the Ohio University accounting system, employees share of retirement benefits is charged to the "Benefits" account. Thus, the actual benefits paid by the contract is less than this amount and the actual salaries paid is greater than indicated.

B. Summary of Project Inputs - USAID Contribution

1. Technical Assistance - Long Term

<u>Planned</u>	<u>Actual</u>
a. Team Leader and Specialist in Curriculum and Supervision	a. Team Leader and Specialist in Curriculum and Supervision
b. In-Service Education Specialist	b. In-Service Education Specialist
c. Reading/Language Arts Specialist	c. Reading Language Arts Specialist
d. Math/Early Childhood Education Specialist or Math/Science Specialist	d. Math/Science Specialist
e. English/Teaching English as a Second Language Specialist	e. English/Teaching English as a Second Language Specialist
	f. Teacher Competency Specialist

Planned: 25 person years Actual: 24.6 person years

See Table 1 for a listing of persons who filled these positions.

2. Technical Assistance - Short Term

Planned: 37 person months Actual: 13 consultants for a total of 31.4 person months

See Table 6 for a listing of persons who filled these positions.

3. Participant Training - In United States

<u>Planned</u>	<u>Actual</u>
10 Batswana participants to U.S. for 2 year MS degree in Primary Education	10 Batswana received M.Ed degrees in primary education and/or supportive areas
Short term courses in U.S. and third countries, 18 person months	2 Batswana completed short term courses in U.S. for a total of 12 person months

TABLE 1
PEIP LONG TERM TECHNICIANS 1981 - 1986

<u>Name</u>	<u>Contract Duration With PEIP I</u>	<u>Specialisation</u>
Dr. Don Knox	July 15, 1981 thru June 30, 1984	Team Leader/Specialist in Curriculum/Supervision
Dr. James Steele	July 26, 1981 thru August 13, 1983	Math/Science
Dr. Iva Zajicek	July 26, 1981 thru December 31, 1984	Reading/Language Arts
Dr. Tom Helms	August 1, 1981 thru June 30, 1983	In-Service Education
Ms. Janet Ramsay	August 24, 1981 thru September 30, 1984	English/Teaching English as a Second Language
Dr. Luther Haseley	August 15, 1983 thru August 31, 1986	In-Service Education
Dr. Marion Blue	August 15, 1983 thru July 19, 1985	Math/Science
Dr. Ray LeGrand	January 3, 1984 thru June 28, 1985	Teacher Competency
Dr. Max Evans	May 27, 1984 thru August 31, 1986	Team Leader/Specialist in Curriculum/Supervision
Ms. Peggy Wrhel	August 12, 1984 thru February 14, 1986	English/Teaching English as a Second Language
Dr. Gordon Behm	July 1, 1985 thru August 31, 1986	Math/Science

TOTAL PERSON YEARS = 24.6

4. Commodities

<u>Item</u>	<u>Planned</u>	<u>Actual</u>
Books, Reference Materials	\$108,000	\$ 95,178
Instructional Aids and Equipment	88,000	87,507
Supplies	43,000	40,000
TOTALS	\$239,000	\$222,685

5. Construction - (USAID contribution not included in USAID/Ohio University Contract)

<u>Planned</u>	<u>Actual</u>
USAID support of 50% of the cost of construction Primary Education Centre and Hostel	Construction of Primary Education Centre and Hostel
TOTALS \$715,000	Not Available

C. Financial Contribution by GOB

	<u>Planned</u>	<u>Actual</u>
Technical Services	\$521,000	Not available
In-Service Education	294,000	P400,000 (estimate)
Participant Training	480,000	Not available
Support to U.S. Team	70,000	Not available
Vehicles	82,000	P48,456
Construction	906,000	Not available
Operations	280,000	Not available
Other Costs (supplies, printing, clerical costs)	100,000	Not available

D. Summary of Project Outputs

Below is a summary of the planned outputs which were established for PEIP in 1981 and the actual outcomes which were achieved by 1986.

<u>Planned</u>	<u>Actual</u>
1) A functioning Department of Primary Education as new entity with UCB.	1) A functioning Department of Primary Education as a new entity with UB.
2) A cadre of Botswana UCB graduates with BEd degrees qualified as TTC tutors, head teachers, inspectors and MOE officials in primary education.	2) A total of 42 UB graduates with BEd degrees qualified as PTTC tutors and education officers in 1986.
3) A diploma program to provide Botswana supervisors, head teachers, deputy heads, and senior teachers with increased professional skills.	3) By 1986 33 UB graduates at diploma level qualified as teachers, head teachers and education officers with increased professional skills
4) Botswana trained in U.S. at MS degree level in primary education to replace U.S. project staff (localisation).	4) By 1986 a total of 10 Botswana trained in U.S. at MS degree level in primary education have returned to replace U.S. project staff. In addition, two Botswana have returned from study in short term courses.
5) Institutional base established for systematic and effective in-service training of head teachers, deputy head teachers and senior teachers at 480 primary schools.	5) Institutional base for in-service education designed and accepted by the MOE; partially implemented for the delivery of in-service education programmes to teachers and administrators in the primary schools and to education officers.

The outcomes achieved in the project have provided a base for the establishment of new goals for 1986-91 which include a plan (a) to implement a graduate program with a specialisation in primary education at the University of Botswana; (b) to assess and improve the curricula and instruction at the TTCs; (c) to upgrade the preparation of a

majority of the Botswana members of the Department of Primary Education at UB to the PhD level, and (d) to localise and increase the in-servicing of practicing teachers through a decentralised operation functioning out of regional education centres.

IV. OVERALL ACCOMPLISHMENTS OF THE CONTRACT

This section of the report will be divided into summary statements related to the major areas of accomplishment achieved by PEIP. In this way it is felt that a clearer picture of the project plan, implementation and products will be given.

A. A Department of Primary Education at the University of Botswana

The development of a functioning Department of Primary Education at the University of Botswana, staffed by Botswana, had been achieved at the contract's termination. The developmental process will be briefly discussed under the following heading: role of the contractor staff, the BEd and Diploma courses of study; the selection and training programmes for participants; and the transfer of departmental responsibilities from the contractor staff to the Botswana staff.

1. Role of the Contractor (Ohio University) Team

Four contract specialists, each with different areas of expertise, were appointed to the staff of the University of Botswana in July/August, 1981. They were dual responsibilities; namely, for establishing a new department of primary education and for participating in the development of an in-service education network. (Note: The Chief of Party was designated as Head of the Department of Primary Education (DPE), an

assignment which continued throughout the project).

Approximately 60 percent of each technician's time was devoted to departmental work with the remainder being given over to in-service education activities.

The first intake into the primary education programme was in August, 1981; however, a majority of the instruction for the students during the first year was handled by university lecturers in other departments. This allowed the contract team to focus on the design of the Diploma and BEd programmes and to participate in in-service activities.

A short term teacher education consultant assisted with the design of the programmes, an activity which was marked by a high degree of consultation within the Faculty of Education and with the MOE. Less than eight months after the arrival of the Chief of Party in Botswana, the Diploma and BEd programmes had been designed, including the governing regulations and course outlines, and had been approved by the Senate of the University of Botswana and Swaziland.

2. The Diploma and BEd Programmes

The rationale of the Diploma and BEd programmes was stated as follows in the written presentation to the University of Botswana and Swaziland Senate:

The programmes in Primary Education are designed to prepare educational leaders who will assist the Government of Botswana to increase the access, efficiency and relevance of primary education. Those Botswana who graduate with BEd degrees in primary education will be qualified to serve as Teacher Training College Tutors and those who graduate with the two-year diplomas will serve as head teachers, Ministry of Education Officers and in other leadership positions.

The Undergraduate programmes in Primary Education include

a broad base of general education, knowledge in various subject matter areas, an intensive preparation in methodology of primary education and guided field/clinical experiences which combines educational theory with classroom practice and research.

The major orientation and thrust of the Primary Education Curriculum design is guided by the following principles:

- A. The undergraduate programmes in Primary Education are designed to give students broad knowledge, skills and effective teaching knowledge for training and assisting preservice and in-service teachers of Standards 1-7.
- B. A goal is to educate prospective tutors and educational leaders to be able to provide instruction on an individual basis, or in small or large group settings.
- C. Special emphasis is given to training tutors and educational leaders to utilise effectively a wide variety of instructional modes such as learning stations, independent study projects, and multi-media approaches.
- D. In addition to specific methods courses in teaching specific content areas, the programmes are designed to prepare the tutors and educational leaders in basic classroom management, school administration and human relations skills.

The general provisions for the programme includes the following:

1. In the first year, all students take the same courses.
2. At the end of year one, the students are sectioned into the Diploma and BEd programmes on the basis of their academic records and interviews by staff. (Note: For the first three years of the programme, the sectioning of students was done at the time of admission to the university on the basis of admission test scores. From 1984 onwards, sectioning was done at the end of year one. The students' first year academic performance and preference for either the diploma or BEd programmes were the major criteria used for making the assignment.)
3. The students accepted into the BEd programme choose a teaching field from the following options: English/Reading/Setswana; Mathematics/Science/Health; or Social Studies/Religious Studies/ Practical Arts. Guidance can be substituted for one of the areas within a teaching option.
4. Students who do well in the Diploma programme (high credit or distinction) may be recommended by the DPE for transfer to the BEd programme.

3. Admission Requirements and Procedures

Admission to the Department of Primary Education required that applicants fulfill the provisions of the Mature Age Entry Scheme and have at least two years experience as (a) a primary school teacher, (b) a PTTC tutor or (c) an education officer. (Note: the Mature Age Entry Scheme requires, among other things, that applicants should be at least 25 years of age, possess a junior certificate, have completed their full-time schooling five years previously, be able to show that they have undertaken further studies, and pass an entrance examination).

The entrance examination, prepared by the Research and Testing Unit in the MOE, is supplemented by a written interview which is marked by the staff of the English Department. Oral interviews were also conducted during the first two years; however, the practice was discontinued. The Admissions Committee for the university rank orders the candidates on the basis of the entrance examination marks and sends the names of all students who have met the entrance requirements to the MOE. The MOE then reviews the list of eligible candidates and selects those which it will support with bursaries.

Some concern has been registered in the PEIP Advisory Committee regarding the Admissions procedures. This has lead to the appointment of a committee in the DPE which will review this matter and report to the University Admissions Committee during the 1986-87 academic year.

4. Staffing of the Department

An early task of the contract team was to assist in recruiting participant candidates who could later assume roles in the DPE as lecturers. The fields of specialisation for which participants were selected to staff the DPE were:

1. Teaching English as a Second Language
2. Reading/Language Arts
3. Science
4. Mathematics
5. Administration/Supervision
6. Social Studies
7. Early Childhood Education
8. Media

The contract team participated with MOE and University officials in the selection process. Most of the participants completed Masters degrees in the U.S. and then joined directly the DPE. The first to return was in January 1984; three more arrived in mid-1984; one in January, 1985; two in July/August, 1985; and the last in August, 1986.

Upon arrival as staff members in the department, the new lecturers assumed teaching responsibilities but with a somewhat reduced load. There was usually a period of overlap between the arrival of each Motswana member of staff and the departure of the counterpart contract team member. Most counterpart relationships were positive ones. In order to facilitate the development of cooperative relationships, exchanges of correspondence between the contractor specialists and their Batswana counterparts studying in the U.S. was encouraged.

5. The Transfer of Departmental Responsibilities

During the first two and one-half years of the project, the DPE staff consisted exclusively of contract team members. By August, 1985, however, seven of eight teaching posts in the DPE were filled by Batswana, and three Ohio University contract team members continued as a part of the teaching force. Of the 22 courses taught by the staff of the DPE during the first semester of the 1985-86 academic year, 19, or 86 percent, were conducted by the Batswana staff. By design, the DPE staff taught a significant number of courses in other departments. It appears that the extent of outside teaching may reach 50 percent in the years ahead.

As the Batswana staff returned and the contract team decreased in numbers, the Batswana assumed ever-increasing responsibilities for the operation of the department and several already serve in significant faculty and university roles. Among such service responsibilities are those of faculty tutor, membership on faculty and university committees, and leadership roles on departmental committee.

In its relatively brief existence, the DPE has been extensively involved in primary education developmental activities outside the university. Most Batswana staff have willingly participated in conducting workshops for primary school teachers alongside their U.S. counterparts and several have responded to requests for workshops submitted by education officers and head teachers. The DPE staff members have participated on several primary curriculum panels established by the MOE, thus

having an opportunity to share their expertise and to influence curricular decisions.

The four PTTCs are related to the University of Botswana through an Affiliation Agreement which requires that the University be an active participant in setting and moderating examinations, approving curricula and awarding certificates to successful completers of the PTTC programmes. Prior to the establishment of the DPE, the responsibility for implementing this relationship rested in other departments in the Faculty of Education. As the DPE gains a more mature status, the work associated with the PTTC affiliation is shifting to staff members in the Primary Education Department. This linkage thus provides the DPE with rather direct, formal opportunities to work with the primary teacher training colleges in the country in the upgrading of their programmes.

The educational system in Botswana has become increasingly aware of the important contribution which research can make to wise decision making in policy, curricular and instructional matters. Research initiatives have been undertaken by several of the DPE Botswana staff since their return from MEd studies, and one has had a proposal funded from UB research funds. The need for further development of research skills in the DPE staff has been recognised and responded to in the design of the second phase of PEIP.

The Botswana members of the DPE staff have responded very positively to opportunities for continuing study. Two have attended short courses in Norway, and all have indicated an

interest in doctoral studies. The first of the MEd graduates has completed two years of probationary service with the university and has returned to the U.S. to study for the PhD degree. At least four more will be studying for advanced degrees in a primary education-related discipline under PEIP II.

The University of Botswana requires that Botswana staff serve a minimum of a two-year probationary period before being considered for an appointment with tenure. All staff having served the probationary period (four) have been recommended for and granted tenure.

As noted earlier, since the establishment of the DPE, a member of the contract team holding the rank of professor has served as head of the department. The goal of the contractor is to localise this position as soon as a Botswana staff member qualified for appointment. This should occur well before the end of the second phase of PEIP.

6. The DPE Student Body

Since the establishment of the DPE in 1981, 183 students have been admitted to the Diploma and BEd programmes. Slightly over 60 percent of them were females. The intake target for each year was 30 students with the exception of 1986, when it was recommended by the MOE that the number admitted be increased up to 40. (The increase is in keeping with PEIP II goals of gradually increasing the intake annually to 50 students.) The design of PEIP I established an intake into the Diploma and BEd programmes respectively of 10 and 20 students; however, the regulation which permits Diploma students to be transferred to the BEd programme has

resulted in fewer Diploma graduates and more BEd graduates.

The failure rate of students has been relatively low over the five-year period; only four of the 183 students failed and repeated a year. Tables 2 and 3 summarise the numbers of students entering and graduating from the two programmes from August 1981 to August 1986.

In the design of the PEIP project, the staffing of the PTTCs with university-educated Batswana was deemed to be the most critical point for influencing and upgrading the national primary education network. As shown in Table 4, of the 42 BEd graduates, 31, or 74 percent, have been assigned as tutors to the teacher training colleges. The distribution of the new degree holders among the PTTCs has taken into consideration the unique staffing needs of the colleges; however, all institutions have been recipients of the graduates.

The diploma graduates, for the most part, have returned to the primary schools as teachers, senior teachers, deputy head teachers and head teachers; however, some were appointed directly to posts as education officers in the MOE Department of Primary Education and Teacher Training. Periodically concern has been expressed with regard to whether the postings of the Diploma graduates utilise the skills of this group as full as they might.

TABLE 2
INTAKE INTO THE DIPLOMA AND B.ED PROGRAMMES

Year	Number		
	<u>Male</u>	<u>Female</u>	<u>Total</u>
1981	14	16	30
1982	15	16	31
1983	13	18	31
1984	9	18	27
1985	11	17	28
1986	8	28	36
	—	—	—
TOTAL	70	113	183

TABLE 3
GRADUATES OF THE DIPLOMA AND B.ED PROGRAMMES

Year	Number	
	<u>Diploma</u>	<u>BEd</u>
1983	8	-
1984	7	-
1985	8	20
1986	10	22
	—	—
TOTAL	33	42

TABLE 4
POSTINGS OF DIPLOMA AND B.ED STUDENTS

Year	Diploma Graduates			BEd Graduates			
	P.T.*	E.O.**	Total	P.T.*	E.O.**	PTTC Tutor	Total
1983	7	1	8	-	-	-	-
1984	7		7	-	-	-	-
1985	6	2	8	-	5	15	20
1986	10		10	1	5	16	22
TOTAL	30	3	33	1	10	31	42

*P.T. - Primary
**E.O. - Education Officer

B. The Participant Training Program in the United States

The original staffing design for the DPE at UB called for the establishment of eight posts, each with separate areas of specialisation. The minimum level of professional preparation required by the University for regular appointment is the Masters degree. In view of the fact that there were no Batswana holding this qualification in the area of primary (teacher) education, it was necessary to recruit BEd holders with the appropriate experience for training to the Masters degree level. In addition, the plan for improving primary education in the country called for Masters degree training for two MOE officials associated with primary education.

With only minor variations, the training plan for long term study was implemented as it had been earlier envisioned. All participants selected for study in the U.S. successfully completed their Masters

degrees, several attaining high academic records in the process.

The criteria for the selection of participants who would staff the DPE included the following: a citizen of Botswana, experience as a primary school teacher or tutor in the primary teacher training colleges and a bachelor or education degree. Positions were advertised and selection committees composed of UB and MOE officials as well as representatives of the contract team reviewed application materials and conducted interviews. Similar procedures were followed for selecting the MOE participants.

Problems were encountered in finding suitably qualified mathematics and science candidates. After repeated advertising with no success for a mathematics candidate with a BEd degree, a mathematics tutor in a teacher training college holding a diploma was accepted and sent to Ohio University to complete a Bachelors degree and then to continue for the Masters degree.

The science position was filled by a teacher training college tutor who had earlier completed a Masters degree in the United Kingdom. Since this person's professional training had emphasised mathematics rather than science, he was sent to the U.S. for six months to study primary school science methods. It is interesting to note that of the eight Botswana lecturers in the DPE, seven have had experience as tutors in the teacher training colleges of Botswana.

Of the two participants from the MOE, one transferred shortly after completing her masters degree to the Foundations Department of the Faculty of Education at UB where she teaches curriculum and supervision courses to both primary and secondary students.

In designing the Masters degree programme for the participants who were to return to the DPE, attention was given to the development

of a broad knowledge base which would prepare the person for his/her professional responsibilities in a university setting. In most instances, the participants' Masters programmes went well beyond the minimum number of hours required and included a thesis or a substantial research project. A summary of both the long and short term participant training programmes carried out under the PEIP appears in Table 5.

C. In-service Education

This section of the report will present a chronological narrative of the in-service activities of PEIP (1981-1986). Following these activities a section dealing with lessons learned and recommendations will be offered. During the narrative, modifications in focus or procedures resulting from suggestions from MOE and outside evaluators will be highlighted.

1. Project Purposes and Outputs

The purposes of the project were twofold, one dealing with preservice education at the University of Botswana and the other dealing with in-service education. The purpose of in-service education was: "to strengthen the capacity with the UCB to organise and implement effective in-service programmes for supervisory staff and teachers involved in primary education".¹

One of the four specific project outputs related to the following in-service goal: "Institutional base established for the systematic and effective in-service training of head teachers, deputy heads, and senior teachers in the 480 primary schools and

¹Botswana Primary Education Improvement Project (633-0222)
Project Paper, Page 7.

TABLE 5
PRIMARY EDUCATION IMPROVEMENT PROJECT
PARTICIPANTS

Name	Sex	Specialisation	University	Degree	Departed	Return	Months Study
Mautle, G.	M	Social Studies	Ohio University	MEd	Dec. 1981	Dec. 1983	24
Mogobjwa, G.	F	Reading	Ohio University	MEd	Dec. 1982	Aug. 1984	20
Dikole, W.	M	Administration	Ohio University	MEd	Dec. 1982	Aug. 1984	20
Monau, R.	F	Early Childhood	Ohio University	MEd	Dec. 1982	Aug. 1984	20
Kandjii, I.	F	Guidance	Ohio University	MEd	Dec. 1982	Aug. 1984*	20
Mapolelo, D.	M	Math. Ed.	Ohio University	BS/MEd	Sept. 1983	Aug. 1986	36
Nleya, P.	M	Media	Indiana Univ.	MEd	Dec. 1983	Aug. 1985	20
Nyati, L.	F	English	University of PA	MEd	Dec. 1983	Aug. 1985	20
Marope, P.	F	Curr/Super.	Penn State Univ.	MEd	Dec. 1983	Aug. 1985	20
Mosothwane, M.	M	Science Ed.	Ohio University	na	June 1984	Nov. 1984	6
Sechele, G.	M	Administration	Ohio University	MEd	Dec. 1984	March 1986	15
Mogasha, M.	M	Administration	Ohio University	na	Sept. 1985	March 1986	6
Mautle, G.	M	Social Studies	Ohio University	PhD	Jan. 1986	June 1988	na

*Note: Miss Kandjii was funded under the PEIP Project at the request of USAID, however she holds her rank in the Department of Educational Foundations.

for the development of staff of the TTCs and the Inspectorate".²

Throughout the report it will be observed, by internal and external evaluators, that these outputs were not only achieved but in many cases were expanded to include areas that complemented the project purpose.

2. Underlying Themes

During the development of the in-service programme 5 major "themes" dealing with process occurred. These process "themes" or objectives were:

- a. Consultation. In-service education affects many units in the MOE. Not only are teachers and education officers (EOs) involved but also personnel from curriculum development units, TTCs, Unified Teaching Service, UB, and MOE headquarters. Therefore, it was imperative to solicit input and feedback from representatives of all of the above groups if in-service programmes were to be accepted. Throughout the project the importance of active consultation was promoted.
- b. Flexibility and Change. As a result of the consultation process and suggestions from evaluators, original guidelines and procedures were periodically assessed and, when appropriate, modified. As teacher needs become more evident, the focus of specific in-service activities was able to adapt to meet these needs. (This will be illustrated later in the case of education officer workshops.)
- c. Localisation. The consultation and flexibility factors

²Ibid, Page 8.

helped establish a more effective plan for localisation of in-service education. A single tutor and a contract team member was modified to become a "team approach" which included Botswana teachers, TTC tutors, UB students and Curriculum Development personnel. As a result of this approach, the expertise of the PEIP staff could be utilised more productively in the role of consultant/advisor/trainer.

- d. Development Cooperation. In-service education in Botswana did not begin with PEIP. The MOE had an in-service team leader whose job was to promote in-service activities in the country. Education centres had already been established and an in-service "team" was effective in mounting workshops in many primary schools. The team was especially noted for its "intensive workshops" in remote areas. The in-service advisor was assigned to work with the MOE in-service leader in order to expand the scope of in-service activities by integrating the PEIP staff in in-service endeavours. The PEIP involvement was to compliment the MOE plan rather than be a substitute for it.
- e. Multiplier Effect. It was recognised that there were not enough trained personnel to provide in-service support for all, or even most of the primary school teachers in Botswana. A multiplier effect was built into the in-service delivery system to achieve the maximum amount of output with a limited amount of input. The multiplier effect proved to be effective and became an integral part

in all of the PEIP in-service programmes. As an extension of developmental cooperation, it should be emphasised that this approach was a refinement of previous MOE approaches which trained EOs who in turn trained selected teachers.

These five process objectives will be in evidence throughout the development of the PEIP in-service programme.

3. Phase I of PEIP In-Service Education

The first in-service specialist for PEIP arrived in Botswana on July 28th, 1981. After extensive visits and consultations with teachers, TTC tutors, EOs and MOE officials, he formulated a national in-service strategy in which all providers of in-service were represented. This strategy was presented to the MOE and to the PEIP staff for discussion and approval on November 24, 1981. (Semi-Annual Report - 1; Appendix B).

The first workshop for the PEIP was held for education officers in Serowe during the week of January 18-23, 1982. The purpose of the workshop was to develop supervisory techniques for improving classroom instruction in reading, math/science and teaching English as a second language.

At the end of the workshop each education officer was to take back one skill he had learned at the workshop and practice it with a selected classroom of pupils. This was the first trial of the multiplier effect which was to become so important in the subsequent delivery systems of in-service education. As a precursor to this approach, a paper entitled "Some thoughts on the multiplier effect in in-service education" was presented to the MOE in 1981. (Semi-Annual Report - 1; Appendix B).

The first PEIP workshops for head teachers senior teachers, and education officers was held in April 26-29, 1982 at the TTCs in Serowe, Francistown and Lobatse. Forty participants were at each location making a total of 120 participants. One of the objectives of the workshop was to teach participants how to repeat the same instruction to their colleagues when they returned to their respective schools. This would fulfill the first multiplier effect of the programme. The second and third multiplier effect were scheduled for sometime after August when the participants had completed all three subject matter areas.

In June and August of 1982, the series of workshops were repeated resulting in each participant receiving a workshop in reading, math/science and teaching English as a second language. This completed what is termed as Step I of Phase I of the in-service programme. A list of the education officers and the schools that participated in Step I can be found in the Semi-Annual Report - 2, Appendix B.

Step II of Phase I had two major objectives: a) the repetition of the three subject matter areas, although in greater depth, to each of the 120 participants and b) the implementation of the next stage of the multiplier effect through the involvement of additional schools in the in-service programme.

The Step II workshops were conducted in November 1-5, December 13-15 and February 7-11, 1983. Although the same format was used in presenting the series of workshops, the venues were extended to include Maun, Mochudi, Mahalapye and Molepolole. This provided greater accessibility for teachers located in remote areas.

Step III workshops in Phase I were conducted in May 1-3, June 25-28 and August 20-23, 1983. It was decided that the in-service teams (120 participants) should remain intact for another year so they could receive more in depth training in the three academic areas mentioned. At this point there was some concern expressed by project evaluators about the availability of accurate reports especially concerning the results of the multiplier effect and attendance at workshops.

Addressing these issues was one of the tasks given to the new in-service advisor who arrived in Botswana on August 2, 1983. Another task was to see to the completion of Phase I of the in-service workshops with the implementation of Step IV. This last series of workshops in Phase I took place on October 24-27, December 12-15, 1983 and February 6-9, 1984. During the February workshops all of the participants who had attended at least 9 of the 12 workshops offered during Phase I received a Certificate of Attendance.

Although the records for Phase I concerning the spin-off workshops (multiplier effect) were not always verifiable, since data was given by the teams presenting spin-off workshops, subjective assessments of teachers reached and value of workshops to participants was uniformly high. (See Appendix A).

At this time a number of complimentary in-service programmes were being explored by the MOE in cooperation with the PEIP staff. These endeavours focused on the following goals:

- (a) developing a series of workshops for education officers that would support the workshops that would be offered to teachers in Phase II of PEIP; (A broad-based

committee was established to conduct a needs assessment with education officers and then arrange 6-8 suitable workshops during a two-year period of time. The results of the first EO needs assessment and a schedule of EO workshops may be found in the Semi-Annual Report - 6, Appendix D;

- (b) planning to localise the delivery system of PEIP workshops by integrating Batswana staff into training teams;
- (c) developing a plan for obtaining more accurate information concerning the number and effect of the spin-off workshops; and
- (d) develop criteria for the selection of the participants who would attend the workshops during Phase II.

These issues were discussed thoroughly and resulted in the following activities.

(1) As a result of the needs assessment a series of workshops for EOs which focused on the area of administration and supervision in relation to MOE educational programmes were scheduled for January, June and December of 1984. Workshops for the following year would deal with specific concerns of the education officers and the MOE.

(2) A series of meetings were held with education officers to solicit their suggestions for selecting teaching teams that would be accepted by the participants. Head teachers or other teachers that participated in Phase I were recommended. After consultation with all of the head teachers in the Gaborone area nominees were obtained. They were subsequently observed in a classroom setting and then interviewed. Six local teachers were

chosen and two were assigned to each of the 3 PEIP tutors. Those teaching teams were responsible for the preparation and delivery of in-service workshops during the first year of In-Service Phase II.

(3) A great deal of discussion took place concerning the selection of participants for Phase II. It was finally agreed that education officers would select 3 of the best teachers in each school to initiate the workshop team. It was also agreed to submit three additional teachers for a workshop team in a school which was located very close to the original school. This would result in 30 pairs of schools (termed sister schools) which would participate in In-Service Phase II with each school attending alternate workshops. After each workshop the workshop team members would return to their own school to present the workshop to their colleagues. They would then present the same workshop to the teachers in the sister school. The same process would be repeated 2 months later (in a different subject) when the workshop would be attended by the sister school.

(4) An examination system was initiated which permitted the course instructors to have a fairly reliable index of the effectiveness of the workshops they presented to the workshop teams as well as an index of the effectiveness of the presentation of the workshop teams to their sister schools.

4. Phase II of PEIP In-Service Education

The above suggestions were implemented and Phase II of PEIP in-service education began May 1-4, 1984 with workshops in reading, math/science and teaching English as a second language. Year I of Phase II was completed with workshops in the same subject

matter areas being repeated June 25-28, August 20-23, October 22-25, December 10-14, 1984 and February 4-7, 1985. Demographic data comparing participants in Phase I and Phase II of the programme can be found in Appendix B.

The innovations adopted for Phase II of PEIP seemed to have favourable results. The multiplier effect worked reasonably well as evidenced by the questionnaire responses to both sister schools requesting data as to workshops given and received. Attendance figures were also high indicating that the teams were operating as a unit. Subjective evaluations were also consistently high while the objective assessment of actual subject matter learned, as evidenced by examinations, surprised everyone. It was found that the original workshop group comprehended the material very well and was also able to teach the material effectively to the sister school. (See Appendix C).

The new PEIP "team" approach of presenting the workshops also seemed to have a positive effect. Participants indicated verbally, as well as in the written evaluations, that they were pleased to have local teachers involved in the presentations of the in-service workshops. A second effect was that the most common criticisms concerning previous workshops, namely, their relationship to the syllabus and the relevancy of the workshops to local situations and schools, became significantly less frequent. The PEIP staff found itself in the position of working with and training counterparts while at the same time learning very important cultural implications of the workshops from these same counterparts.

A similar approach was adopted in the EO workshops. Where

six Batswana primary school teachers assisting the PEIP tutors were finding it difficult to leave their classes every two months for the week-long PEIP workshops and finally the introduction of the 9 year basic education programme resulted in significant curriculum modifications.

Because of these factors, it was felt that more effort should be extended to localising the in-service activities and providing a structure which would enhance the implementation of in-service education for the entire country.

These efforts led to two developments in the second year of Phase II In-Service. The teaching teams were restructured to make them more reflective of local expertise. Each of the three teams included: one PEIP tutor, one TTC tutor in the relevant subject area, one curriculum development officer, one PEIP counterpart at UB and one or two BEd fourth year students majoring in the relevant subject matter area. The rationale for this modification was to permit the UB tutors to take on more of a consultancy role (although still presenting workshops); to give a higher profile to the Curriculum Development Unit and the TTCs in their role of in-service education; and to encourage BEd students to engage in in-service activities prior to being placed in a TTC or an EO position. It was also an attempt to shift the focus of the in-service delivery system from the UB to the TTCs.

A second focus was on the development of a national delivery system or "network" that would enable in-service activities to reach every primary and junior secondary school in the country. This was proposed through the development of a network of

previously the major, if not total, responsibility for presenting material was given to the PEIP team, there was initiated an effort to involve MOE officials, REOs and EOs in the presentations. EO workshop evaluations were similar to the evaluation of the teacher workshops; with more local involvement, the evaluations indicated more relevance in terms of topical issues. Evaluation of all the EO workshops were, in fact, very positive. (See Appendix D).

Another significant occurrence took place in July of 1984 when the in-service advisor was appointed Acting In-Service Leader as a result of the transfer of the MOE In-Service Leader. This assignment continued until April, 1986. While this resulted in some difficulties in managing two positions, it did promote the integration of MOE and PEIP in-service activities. Out of necessity, the in-service activities became unidirectional.

The first year of Phase II of the workshops (March, 1984 - February, 1985) saw the further development of the multiplier effect through sister school workshops. At the same time the three person teaching teams (1 PEIP tutor and 2 Batswana teachers) continued to prepare and provide workshops every two months.

At this time a few additional concerns surfaced which led to even further modifications during the second year of Phase II. There were some questions as to whether or not the PEIP was to be extended. Returning Batswana staff found that the UB was not in a position to give credit or recognition for in-service activities for promotion tenure or salary consideration. The

educational centres strategically located throughout the country. A number of position papers dealing with the role of the education centres and the future of in-service education were discussed with the MOE and the PEIP team. (See Appendix E).

5. Second Year of Phase II In-Service Education

The second and final year of Phase II In-Service for Primary school workshop participants began in April, 1985 and ended in February, 1986 at the Lobatse TTC. Workshops were conducted in April, June, August, October and December 1985, and February, 1986. (See Appendix F). In February, 1986 there was a joint meeting of all 3 groups (North - Centre - South) with a total of 90 teachers and 15 EOs in attendance. The Minister of Education gave the closing speech for the certificate award ceremony, the previous workshops held at three venues for the sister schools in December, 1985 had similar ceremonies. These ceremonies were also attended by Ministry officials who participated in the closing ceremonies. As in previous evaluations, the participants regarded the PEIP workshops very favourably. These ceremonies concluded Phase II of the PEIP workshops for teachers.

6. Interim activities from PEIP I to PEIP II

From March through August, 1986 in-service activities focused on four major areas:

a) Supporting workshops for teachers and EOs dealing with MOE priorities. These workshops dealt with such topics as "Breakthrough to Literacy", "Continuous Assessment", "The Nine Year Curriculum" and "Education Centres". All of these workshops involved PEIP staff as well as TTC and MOE personnel.

b) Dealing with issues relating to education centre

development. Some of these issues were location, staffing, training, commodity purchasing, and programming. Plans were also made for a British Consultant to visit the MOE to plan a series of workshops in October, 1986 dealing with education centres.

c) Exploring the focus of in-service activities for PEIP II which was to begin in September, 1986. Consultation with MOE, PEIP, TTC, UB and JSEIP staff led to a plan to develop a curriculum for primary school leaders, such as head teachers, deputy head teachers and senior teachers.

d) Continuing the thrust of the programmes that originated with PEIP I. These programmes include such topics as The Botswana Teaching Competency Instruments, The TTC Self-Study, and The Guidance and Counseling Programme.

7. Reflections on the In-Service Education Programme

In summary, there is general consensus that the in-service education programme was successful. Upon reflection, it would seem that the success could be attributed to a number of factors some of which were:

a) The practice of the 5 process themes or objectives mentioned at the beginning of this section; namely, consultation flexibility, developmental cooperation, multiplier effect and localisation.

b) The competency and dedication of the in-service staff. Staff includes PEIP tutors and counterparts, the in-service delivery teams, and TTC, UB and MOE personnel who contributed to workshops. The staff was exceptional in that it not only was instrumental in providing challenging and relevant workshops,

but it was also willing to listen, learn and revise.

c) The interest and motivation of the teachers who participated in the programme. There are not many countries where teachers are willing to give up vacation time to participate in workshops where the only incentive is to become a better teacher. Much of the success of the programme must be attributed to the participants.

D. Uses of Short Term Technical Assistance

The role and function of long term technical assistance personnel has been discussed earlier in the following sections of the report: Section II (personnel qualifications), Section III (inputs) and Section IV (role of the contractor team). (The names of the long term technicians, their specialisations and dates of service in Botswana are shown in Table 6.) This portion of the report summarises the uses which were made of short term consultants during the PEIP contract period, July 1981 through August 1986.

Table 6 shows that a total of 13 consultancies were carried out during this period by nine different consultants utilising 31.4 of the 37 months authorised in the project design. An additional seven months was reserved by the USAID mission for use by the external evaluator for the PEIP project.

It is interesting to note that of the six possible uses for short term consultants listed in the project paper, only two were actually utilised. The remainder of the consultancies were requested as specific needs were identified. While it is too early to assess the full impact of all of the consultancies, at four areas related to the development of primary education appear

TABLE 6
PEIP SHORT TERM CONSULTANTS, 1981-1986

Name	Dates of Consultancy	Period of Time	Purpose
Dr. Milton Ploghoft	July 18-Sept. 1, 1981	6 weeks	Assist team with Project start up
Dr. Max Evans	Nov. - Dec. 1981	4 weeks	Campus Coordinator visit to Project
Dr. Albert Leep	Jan. 11-March 20, 1982	10 weeks	Assist in development of Diploma and BEd programme
Dr. Max Evans	Sept. 18-Dec. 11, 1982	12 weeks	Develop plans for teacher licensure and professional evaluation of PTTCs
Dr. Doris Brodeur	April 11-June, 1983	12 weeks	Develop plan for organisation of the Primary Education Media Centre
Dr. Sally Navin	Oct. 13-Dec. 7, 1982	8 weeks	Conducted Guidance and Counseling Workshops
Dr. Ray LeGrand	May 20-July 10, 1983	8 weeks	External Examiner for DPE; develop implementation plan for Evans report
Dr. Max Evans	Nov. - Dec. 1983	4 weeks	Campus Coordinator visit; follow-up previous consultancy
Dr. Albert Leep	May 20-May 31, 1984	2 weeks	External Examiner for DPE review of Diploma and BEd programmes
Dr. Sally Navin	Sept. 1-Dec. 18, 1985	15 weeks	Conduct Guidance and Counseling needs assessment and develop long-range plans for Guidance and Counseling
Dr. William Gordon	Jan. 2-June 6, 1986	22 weeks	Teach courses in the social studies area so G. Mautle could begin doctoral studies
Mr. Jack Purves	Feb. 3-May 31, 1986	16½ weeks	Prepare a career development programme
Dr. Fred Dressel	April 30-May 31, 1986	6 weeks	Assist with preparation and implementation of self-study workshop to PTTC tutors
	Total Weeks	125.5	
	Total Months	31.4	

to have been considerably influenced by these efforts. The MOE is in the process of establishing a guidance and counseling programme, having appointed a Motswana full time to head this new development. The consultative work related to the design of the Diploma and BEd programmes was immediately useful in getting that course organised and approved by the appropriate university bodies. The outgrowth of the consultancy related to the evaluation of the teacher training colleges is a tentative plan of evaluation with a strong focus on self-study by the PTTCs has been tentively approved and will likely be implemented in the relatively near future.

The media consultant was of great assistance in developing a plan for the media centre and in identifying and ordering the types of equipment which were needed. The consultancy work related to career development concepts continues to be of great interest to MOE officials and could form the basis for some rather significant changes in both teacher preparation programmes as well as the development of the career ladder.

E. Commodities Purchased

Commodity purchased for the PEIP project, totalling \$222,685.00 consisted of books, periodical subscriptions, equipment, instructional materials and aids and office supplies. As planned, the largest share of the commodity budget was allocated to items needed for the development of the DPE; however, approximately 15 percent of the total commodity budget was used to secure equipment, educational materials and periodical subscriptions for the PTTCs.

A total of P53,417.84 was spent locally or within the region

F. Uses of Facilities Constructed Under the Project

As indicated earlier, a primary education center (PEC) and an 84-bed student hostel were constructed under the project but outside the USAID contract with Ohio University. The hostel was needed to house the degree and diploma students, since the existing hostel occupancy rate was already 100 percent. The hostel was constructed early in the life of the project and fully occupied upon completion. (Note: Despite the construction of additional hostels by UB, since 1985 some students have had to find lodging in the Gaborone community because of a lack of hostel rooms.)

The PEC, occupied in March, 1983, consists of a classroom block, an instructional media block and an office block. The total constructed area is 405 square meters.

The classroom block contains two standard 30 seat classrooms, one of which houses a Standard 5 laboratory class. An observation room is located between the two classrooms to enable undisturbed monitoring of student-teacher sessions.

The instructional media block contains a room which serves a variety of purposes including as a library and demonstration centre for primary education materials. The block also contains restrooms and a production room for preparing primary education teaching materials.

The office block provides four faculty offices, a secretary's office and an office for the Department Head/Chief of Party. All offices and classrooms are sized according to guidelines set by the University. Air conditioning was provided in faculty offices and in the instructional media room in accordance with

university policy.

The PEC, despite certain design shortcomings, has been a great asset to the PEIP project. The materials production room and equipment facilitated the preparation of large quantities of materials for workshops. The PEC has also served as a place for many meetings by education officials in the university and the MOE during the first two years of its existence; the need of the university for classroom space has made it increasingly difficult to schedule such meetings.

The design of the PEC, essentially completed before the arrival in Botswana of the contract team, did not take sufficiently into consideration the problems of providing security for instructional materials placed on shelves. Minor remodeling of the instructional materials laboratory has not eased this problem appreciably.

The cooperation of the MOE and Tshiamo Primary School in providing a Standard 5 class has added a rich resource to the DPE preparation programme. With the exception of vacation periods, the class meets daily with its teacher in the PEC and is available for use by lecturers in the department under policies jointly approved by the MOE and the DPE.

G. Reports and Papers Prepared

Listed below are the titles of most formal reports and papers which were written during the contract period and are attributed to work directly related to PEIP. It is important to note, however, that many written materials which were very important to the achievement of the project goals are not included in the following list. Among the excluded items are

the following: course outlines for the Diploma and BEd programmes, workshop handouts for teachers and PTTC examinations developed in cooperation with committees of PTTC committees.

For the items listed below, the names of the leading author(s) or group primarily responsible for writing the reports and papers are also given. Many of the papers may be found in the Semi-Annual Reports (SAR); however, a few were too bulky to include in SAR documents. The source for the latter materials is shown as "files", which refers to the PEIP files with USAID, the Ohio University files (College of Education) and the project files at the University of Botswana.

<u>Author(s)</u>	<u>Title</u>	<u>Date</u>	<u>Source</u>
Knox, Donald	Strategies for In-Service Work in Primary Education	March 1982	SAR-1
Leep, Albert	Proposed Programmes for the Diploma and BEd in Primary Education	March 1982	SAR-1
Evans, Max	Selected Issues in Education in Botswana	December 1982	SAR-3
Evans, Max	A Model for the Professional Evaluation of the Teacher Training Colleges of Botswana	January 1983	Files
Navin, Sally	Guidance and Counseling in Botswana: A Report of a Consultancy	January 1983	SAR-4
Brodeur, Doris	Organisation of the Primary Education Media Centre	June 1983	SAR-4 and files
Ramsay, Janet	Assessing Instructional Needs with Language Stories: A Paper presented at the Fifth TESOL Summer Meeting Toronto, Canada	July 1983	SAR-4
LeGrand, Raymond	An Implementation Plan (A follow-up to the recommendations in the Evans reports)	July 1983	SAR-4
Zajicek, Iva	Pre-Reading and Pre-Writing in Early Childhood: A Paper presented at the Regional Pre-School Trainer's Workshop	December 1983	SAR-5

<u>Author(s)</u>	<u>Title</u>	<u>Date</u>	<u>Source</u>
Knox, Donald	Proposed Preliminary Plan for a Five-Year Extension of the Primary Education Improvement Project	1984	SAR-5
LeGrand, Raymond	The Botswana Teaching Competency Model	April 1984	SAR-6
Knox, Donald	Involvement of Botswana Lecturers at the University of Botswana in the In-Service Education Programme: A Position Paper	May 1984	SAR-5
Haseley, Luther et al	Needs Assessment for Education Officers	August 1984	SAR-6
Evans, Max	Some Alternative Approaches to Continuing In-Service Education as PEIP is Phased Out	August 1984	SAR-6
Evans, Max	Objectives and Rationale for a Proposed Phase II of the Botswana Primary Education Improvement Project (PEIP II)	August 1984	SAR-6
Haseley, Luther and Jack Purves	Future Directions for In-Service Education: A Discussion Paper	January 1985	SAR-7
Evans, Max	The Teacher Training College as an Education Centre: A presentation at the TTC Seminar at Serowe	February 1985	SAR-7
Haseley, Luther	Possible Future Delivery System for In-Service Education: A presentation at the TTC Seminar at Serowe	February 1985	SAR-7
Haseley, Luther	Training Deputy Head Teachers or Senior Teachers to be In-Service Coordinators: A Discussion Paper	February 1985	SAR-7
Haseley, Luther et al	Responses of Primary Teachers and TTC Tutors to the Questionnaire Concerning Help Needed by Primary Teachers	February 1985	SAR-7
LeGrand, Raymond	Botswana Teaching Competency Instruments Handbook	May 1985	Files

<u>Author(s)</u>	<u>Title</u>	<u>Date</u>	<u>Source</u>
Evans, Max W. et al	Teaching Loads and Other Duties of Staff in the Department of Primary Education	October 1985	SAR-8
Navin, Sally	Guidance and Counseling Programme Development in the Botswana Educational System	December 1985	SAR-9 and files
Knox, Donald et al	Research Needs in Botswana, Swaziland and Lesotho (A Needs Survey conducted in the three countries)	June 1986	Files
Dressel, Fred and PEIP Team, DPE Staff, PTTC Tutors, MOE Officials	A Self-Study Guide for Botswana Primary Teacher Training Colleges (Draft Document)	August 1986	Files
Chiefs of Party PEIP Team	Semi-Annual Reports of Progress: Nos. 1-10	April 1982 thru August 1986	Files

V. LESSONS LEARNED FROM INTERNAL/EXTERNAL EVALUATIONS

The following "lessons learned" are drawn from the evaluations of PEIP conducted by external evaluators and from the experience of those engaged in carrying out the project. The lessons learned are organised under the following headings: general, project design, project implementation and specific - in-service.

A. General

1. Cooperation among units is necessary for the success of a project. The MOE initiated PEIP and then began to include the UCB, the EOs, selected head teachers, senior teachers and some TTC tutors and principals in cooperative efforts to achieve the goals established. At no time did the responsible organisations lag in their enthusiasm or support for PEIP, despite the presence of overloaded staffs and the requirements of other policy initiatives. It was

in this cooperative environment that the contract team was able to function effectively in the implementation of the project.

2. The success of a major project is dependent upon many leaders, all working toward the same goal. In order to achieve steps in implementation, a project, however, must have sustained direction, strong leadership, monitoring and active problem-solving by key administrators who adopt the project as their own. Such was the case with PEIP. Effective, continuous leadership from the participating units in the MOE, UB, the institutional contractor and strong support from the Botswana USAID Mission characterised PEIP throughout.

3. Special resources are necessary to achieve reform ideas. PEIP had the advantage of a good resource base provided by the GOB and USAID for accomplishing its objectives.

4. The capacity of the MOE to address problems related to teacher development will be greatly enhanced when the proposed Department of Teacher Education becomes operational. Such an organizational arrangement will establish within one division the responsibility for primary, junior secondary and senior secondary (pre-service and in-service) teacher preparation. The current organisational arrangement disperses responsibility among several different units which creates certain barriers to collaborative planning and the most efficient use of scarce resources.

B. Project Design

1. The design for PEIP I provided for interventions at two points in the primary education system: a) the upgrading of serving primary teachers and b) the development of a Department of Primary Education at the UB, the graduates of whom would go to

the PTTCs as tutors, the MOE as education officers or the primary schools themselves. Absent from the design were provisions for the project to address directly problem areas in primary school curriculum development or in the four PTTCs. No doubt the total impact upon primary education would have been greater in these two subsystems had they received direct attention.

2. A project must have the flexibility to change procedures as well as goals if necessary. Changing directions from Phase I to Phase II in-service workshop procedures improved the performance of the programme as indicated by interviews with teachers and education officers. The capacity to add a sixth person to the contract team during the third year to develop the Botswana Teaching Competency Model added a highly significant component to PEIP which had not been envisioned when it was being designed.

3. The involvement of the Ohio University contract staff in selected non-PEIP activities in both the MOE and UB contributed markedly to the achievement of the stated PEIP objectives. In a sense, the interactive effects of work on PEIP and non-PEIP activities could be described as synergistic. Among the additional activities engaged in by the OU team which went beyond contract responsibilities were the following: teaching MEd students and directing their research; assisting in the development of the programme "Breakthrough to Literacy in Setswana"; assisting in the development of a plan for the continuous assessment of students in the primary schools; assisting in the development of a national plan for guidance and counseling in the schools; serving on the primary schools curriculum panels; and serving on the panels for the moderation of examinations and teaching practice in the PTTCs.

4. A distinct asset in addressing the PEIP objectives was that the contractor team members for the most part occupied "line" positions in the university and in the Ministry of Education, as opposed to solely "advisory" roles. All Ohio University specialists directly involved with the development of the Department of Primary Education were formally appointed by the University Council to lectureship positions where they fulfilled most of the usual responsibilities associated with service in higher education institution. Throughout the life of PEIP, the Chief of Party also served as Head of the Department of Primary Education. Because GOB funds for PEIP workshops were channeled through the budget of the Department of Primary Education, resource management was simplified. A negative aspect to this arrangement was the unusually heavy administrative load which, combined with graduate level teaching and service on Senate and myriad university committees, was placed upon the chief of party.

The In-Service Advisor in the MOE served as Acting In-Service Leader, a line position, for approximately two years. This arrangement, while adding considerably to his work load, did assist the MOE at a critical time and it also provided the opportunity for the In-Service Advisor to be an active participant in a number of new MOE initiatives in the field of primary education.

5. Regular, ongoing formative evaluation is necessary to provide feedback information which will show whether the project is achieving the inputs, then outputs, necessary to project purpose and goals. This requires that a realistic plan of evaluation be developed in the early months of the project and that appropriate information be collected and assessed to determine what effects

the project is having on primary education. A vitally important aspect of the evaluation process is the review of the external evaluator's reports by a local committee which can initiate, if needed, changes in the project. The regular meetings (three times yearly) of the 14 member PEIP Advisory Committee also provided opportunities for assessment as well as planning. The semi-annual reports of the contractor, distributed to approximately 100 educators in Botswana required that both progress and problems be identified and that work plans for the succeeding six month period be based upon a thoughtful analysis of earlier developments.

6. The PEIP project was focused upon institution building, with a view to establishing structures which would be staffed by personnel who would be qualified both to maintain the institutions and to continue developing them after donor assistance was withdrawn. It was recognised by the MOE/UB/USAID/OU designers of PEIP that the objectives sought for primary education in Botswana would in all probability require a period considerably greater than five years. The mid-term evaluator recommended that consideration be given to a follow-on project in order that the desired goals be more fully achieved prior to the withdrawal of donor support.

C. Project Implementation

1. A sustained, deliberate effort must be made at the outset of a new project to inform target populations of its purposes and objectives; however, informational efforts also need to continue throughout the life of the project, as new local personnel become involved in activities associated with the project.

2. While project purposes and objectives are typically fixed

in the project design, there are likely to be a number of alternative paths which may be followed in achieving them. The PEIP project managers have placed great emphasis upon and faith in the consultative/needs assessment process as a planning aid in choosing from among alternative strategies. Such a process seemed to result in decisions which generally had a high technical quality and at the same time increased their acceptability to personnel who were involved in the implementation. Although the time spent in planning seems to be materially increased as more people become involved, the outcomes of broad-based acceptability of such plans was more than compensating.

3. The introduction of an innovation or a reform must be followed by a plan of implementation which includes close monitoring, provisions for feedback, formative evaluation and the on-going training of personnel involved in the innovation. When the intent is to impact upon a large, complex system of education, as was the case with PEIP, a time period of three to five years of continuous, vigorous effort must be anticipated in order to get the innovation accepted and practiced by a critical mass of teachers as a normal, ongoing part of the educational programme.

4. In projects which involve a limited number of contract specialists, as was the case with PEIP, particular attention must be given to developing "multiplier-effect" strategies for the dissemination and installation of educational changes. Such strategies must, of necessity, focus upon the development and use of leadership teams or groups. In Botswana, the chief avenue used for the introduction of new educational approaches was the education officer cadre and school workshop teams of three

teachers. The second PEIP project targets the leadership in the 528 primary schools (head teacher, deputy heads and senior teachers), in addition to the 35 education officers, as critical to the process of reform of primary education in Botswana. It is well documented in the literature of school change that the role of administrators as stimulators, monitors and helpers of teachers is a powerful element. Conversely, the role of supervisors in countries with centralised systems has been seen as a hindrance to desired reforms if the supervisors are not in favour of the change. In Botswana, the Education Officers and the In-Service Leader in the MOE played a very important part in working with PEIP to secure teacher participation and to encourage teacher use of the concepts and materials presented in the workshops.

5. Concerted efforts must be made in the design and implementation of such projects as PEIP to understand the education system holistically, and to integrate reform efforts at the various levels within the system. Primary education in Botswana may be conceptualised as comprising three different levels: the primary schools themselves; the primary teacher training colleges; and the DPE in the university.

Reforms would appear to have their greatest opportunity for impact if they are institutionalised at all three levels. Thus, teacher trainers who are being prepared at UB should be well grounded in educational reform practices; the same reasoning applies to the students who are being prepared in the teacher training colleges to staff the nation's primary school classrooms; and the innovations should be disseminated to serving teachers through well designed programmes of in-service education.

6. Care must be taken to avoid overloading the education system at any one period with too many reform initiatives. With limited staff in the MOE, UB, the PTTCs and education centres, project planners and managers must be sensitive to the additional demands which change places upon personnel, including the teachers themselves. Broad based planning and consultation and provisions for feedback should assist greatly in identifying early symptoms of "burnout" and in taking appropriate steps to deal with the associated problems.

7. Careful planning is required if the optimum benefit is to be derived from the use of short term consultants. Perhaps it goes without saying that requests for consultants should be based upon documented needs related to the project goals. In the PEIP project, the use of broadly based committees to assist in developing the terms of reference for consultants assisted greatly in defining specifically the tasks to be undertaken and in laying the groundwork for conducting the actual consultancy. The committees worked directly with the consultant throughout his or her stay in the country and, in several instances, provided follow-up leadership once the consultancy report was received.

D. Specific - In-Service

The in-service education dimension of PEIP was intense and continued as a major component throughout the life of the project. All contractor team members were crucially involved in in-service activities and all of them would likely agree with the In-Service Advisor of the team who said, "Suffice it to say that the experience was valuable, challenging, difficult and at times frustrating, but ultimately rewarding for all concerned." The

following lessons were reinforced by the in-service experiences of PEIP for both the external and the internal evaluators.

1. In-service education must be accepted by both the presenters and the receivers. Initial time in planning and consultation is not wasted time. Programmes are much more successful if the "ownership" of the programme is shared with as many as possible.

2. In-service education must be flexible. Many of the programmes that were the most viable during the last year of PEIP were not envisioned during the early stages of the programme. Needs assessment results and emerging priorities of teachers must be addressed by in-service topics.

3. In-service courses must be relevant and meaningful. The utilisation of local personnel in the delivery system helped address courses related to the syllabus, Setswana, and rural school issues that were difficult for the PEIP staff to deal with. Local teachers working with PEIP staff gave course content more credibility.

4. In-service education must not be fragmented. When the Nine-Year basic education curriculum was introduced in 1986, the in-service education programme was significantly affected. It was no longer possible to separate primary and junior secondary teachers and EOs in MOE workshops. Topics such as education centres and continuous assessment affected all levels of education. It was realised, however, that unless sincere efforts were made by all parties concerned to cooperate and coordinate activities fragmentation and isolation would occur.

5. In-service education must be integrated with pre-service education. An important realisation was that in-service education

cannot be viewed in isolation from pre-service education. If all primary teachers in Botswana are going to be evaluated through the Botswana Teaching Competency Instruments, TTCs must teach the competency instruments to their students. The same requirement should be given to the Primary Education Department and the Molepolole College of Education. If all levels of education do not support newly accepted innovative programmes, in-service education will find itself falling further and further behind in its efforts to promote these programmes in the primary schools.

VI. RECOMMENDATIONS

The recommendations growing out of PEIP I are grouped into three categories: (1) recommendations relating to the objectives/desired outputs for PEIP II, (2) recommendations relating to implementation processes for PEIP II and (3) recommendations related specifically to in-service education. The bases for the recommendations are the several evaluation reports for PEIP I and the professional judgments of the institutional contractor emerging from the experience of implementing this project.

The major recommendation coming from PEIP I, of course, was to continue the Primary Education Improvement Project for another five-year period. Since that recommendation overshadows all others, a brief history of the evolution of that decision seems to be warranted in this report.

One could argue that the basis for PEIP II was laid down in the publication of the National Commission on Education Study (1977) and the subsequent decision by the GOB to designate primary education as the top educational priority for the nation. As the project paper for

PEIP I was being developed (November/December, 1980), there was a general consensus among the parties to the project that the reforms being undertaken could not be achieved within a five-year period. There seemed also to be a clear expectation on the part of MOE officials at that time that there would be a second primary education project.

Written recommendations relating to a continuation of PEIP beyond 1986 appeared first in the mid-point evaluation conducted by Dr. Jane Meadowcroft (October, 1983) when she recommended that a follow-on project should be considered. Professor Donald Knox, then Chief of Party, prepared a paper titled "Proposed (Preliminary) Plans for the Five-Year Extension of the Primary Education Improvement Project (see Semi-Annual Report - 5, Appendix E). In April, 1984 the MOE Permanent Secretary wrote to the Permanent Secretary, Ministry of Finance and Development Planning, requesting a Phase II of PEIP. This was followed by a trip to USAID/Washington and to Ohio University by the Permanent Secretary and the Chief Education Officers, Primary and Teacher Training, to Press for the continuation of the PEIP project. In August, 1984 the Permanent Secretary in the Ministry of Finance and Development Planning formally submitted a request to the Director of USAID/Botswana for a Phase II of PEIP. During the same month, Professor Max Evans, the new Chief of Party for the contractor team, submitted a paper to the MOE, UB and USAID/Botswana officials concerning the "Objectives and Rationale for a Proposed Phase II (PEIP II) of the Botswana Primary Education Improvement Project".

During late 1984 and the early months of 1985 a committee composed of representatives from the MOE, UB, the OU team and USAID/Botswana prepared a draft of a concept paper which, when finalised by the AID mission, was submitted to USAID/Washington. This paper, which was

subsequently approved by USAID/Washington, formed the basis for what was to become the PEIP II project.

The final project evaluation in June, 1985, which was directed by the USAID/Botswana Human Resource Development Officer and included local input as well as the external evaluator's report, set forth as its first recommendation the following: "Begin the preparation of PEIP PP (Project Paper) to ensure the continued flow of primary in-service and pre-service support by the contractor for the next five to six years."

Ohio University was selected by USAID to assist with the PEIP II Project Paper Design, which began in November, 1985, and as the institutional contractor for the implementation of the project, which, as noted earlier, commenced August 1, 1986.

A. Recommendations Relating to the Objectives/Desired Outputs for PEIP II

1. Develop a Primary Education Specialisation in the Master of Education Programme at UB, beginning with PEIP II. The two graduate programs should contain a research component.
2. Plan a participant training schedule in PEIP II to allow training on the doctoral level for those capable lecturers in the Faculty of Education teaching in the Department of Primary Education.
3. Construct three education centres in PEIP II to complete the network of one in each of the fourteen districts of Botswana to ensure complete coverage of primary teacher in-service workshops.
4. Establish a network of in-service training, linking education centres and schools with PTTCs, the DPE/UB and the Primary Education and Training Unit at the MOE. Such a network is already in the planning stage; it needs to be modified

and/or revised to keep pace with the building programmes under several USAID projects.

5. Continue work with the TTCs in their self-evaluation and affiliation with UB to establish continuous linkages between UB's Faculty of Education and the TTC's, thereby moving them further into the stream of in-service training and encouraging them to become key links in the system of primary school reform.

6. Assist TTCs to revise and develop an operating core teacher training curriculum appropriate to the training needs of primary teachers.

7. Consider the possibility of the DPE/UB staff working more closely with the Tlokweng faculty in the further development of an experimental curriculum which is already underway.

8. Consider the advantages of providing a part time Diploma in Education Programme at either the PTTCs or at key education centres. With only ten graduates of the two-year programme each year from UB, the need for senior/head teacher upgrading is not being met quickly enough to keep pace with the growth of the primary schools.

9. Encourage more concentrated use of the Teaching Competency Instruments in PEIP schools. Utilize observations made in video tapes in in-service to assist and measure change in classroom behavior.

10. Establish procedures and forms for the follow-up of DPE and BEd graduates with data collection begun with the class of 1983 for the DPE and for the BEd with the class of 1985.

11. Continue work on improving selection procedures for

DPE and BEd candidates. The MOE and the PEIP team should be involved wherever possible.

12. Revise the Primary School Leaving Exam each year to reflect changes in curriculum/instruction that are being fostered by the various educational reform programmes. A variety of educators involved in primary instruction should continue to be involved in the test development process.

13. Consider the use of in-service training to allow teachers to obtain certification. This will involve setting up a career ladder for teachers and education officers.

14. Enlarge the facilities of the Primary Education Centre at UB to house the increased demand for BEd/DPE enrollment. Build at least one more hostel on the UB campus to provide accommodations for new entrants.

15. Train the head teachers to become change agents in each primary school and to liaise with education centres and PTTCs.

B. Recommendations Relating to Contextual Factors and Implementation Processes for PEIP II

1. View PEIP II in its larger systems context recognising that primary education is being affected by such environmental, developmental and organisational factors as the following: a movement toward decentralisation of control; an increasing concern for examining the relationships between proposed innovations and the Botswana culture/society which they are intended to benefit; an effort to upgrade and more fully localise teaching and training staffs; a very high birth-rate with the attendant demands upon resources to provide basic amenities; the role of the Ministry of Local Government

and Lands in addressing problems of primary education in Botswana; and the Government's priorities for addressing the problems of junior secondary education in the country.

2. Continue to encourage strongly the establishment of the MOE recommended Department of Teacher Education. The establishment of this department will address many organisational problems associated with the coordination and direction of both primary and secondary teacher pre-service and in-service education.

3. Continue the practice of consultation with representatives of all affected constituencies when initiating programme changes.

4. Make provisions in the design of the evaluation for PEIP II to secure data systematically from a variety of sources to assist in making formative decisions about project implementation and the achievement of objectives.

5. Evaluate the Diploma and BEd programmes in the Department of Primary Education. This should be given the highest priority early in the PEIP II project in order that appropriate programme modifications can be made to increase the efficiency and effectiveness of those programmes.

6. Analyse the procedures for admitting students to the Department of Primary Education and for the posting of graduates. There is some reason to believe that both of these processes can be improved which would result in better quality of intake into the DPE programmes and in more appropriate placement of graduates.

7. Integrate in so far as possible the several reforms

currently underway into holistic patterns. Several major, long-term reform efforts have been mounted by the MOE. It is important that planning and implementation efforts related to these innovations be coordinated in such a way that they not be seen as fragmented, unrelated initiatives, but rather as planned efforts all focused upon improving the quality of teaching and learning in the nation's primary schools.

8. Plan and monitor carefully the additional demands being placed upon individuals and groups of primary educators in order to lessen the likelihood of the "burnout" effect.

9. Continue the emphasis in the pre-service programme and, where appropriate, in the in-service programme upon moving away from memorisation as learning to the acquisition of higher level skills.

10. Develop structures to ensure that there is coordination of effort between PEIP II and the Junior Secondary Education Improvement Project. This is particularly critical in the development of the education centres where new construction responsibilities are shared by both JSEIP (6 centres) and PEIP (3 centres) but where PEIP II has been given the responsibility for "an established institutional network for the systematic in-service training of classroom teachers and head teachers in all 518 (now 528) existing primary schools and the in-service development of EOs and staff at the PTTCs".

C. Recommendations Related Specially to In-Service Education

1. There is a desperate need for more trained personnel to be assigned to leadership positions in the in-service education unit in the MOE where lack of sufficient personnel has

severely affected the development of in-service education in the country. The need will become even more acute with the opening of nine new education centres during PEIP II. This recommendation has already been voiced many times in previous evaluations of the in-service programme.

2. Although the multiplier effect has been successful there is a need for more in-service providers in the country. The mobilisation of sufficient personnel may be a difficult but necessary task. Approaches such as the Breakthrough Training Programme or counterpart training may be initiated. With EOs being overworked and with the phase out of in-service activities of the PEIP staff in 1991, some plan must be initiated to provide needed services to an ever increasing number of teachers.

3. Structures and systems for achieving educational goals must be established. The network of education centres provides a structure that facilitates the dissemination of in-service education for primary and junior secondary schools in rural as well as urban areas. A similar structure or process should be set up to facilitate the flow of ideas and the integration of programmes between pre-service and in-service education. Other structures or systems to facilitate communication and cooperation among units doing complimentary tasks should be established. Units such as schools broadcasting, TAPU, In-Service Education (primary and Junior secondary), Research & Testing and Publications should have an established forum for consultation and cooperative programming. A structure of in-service leadership/responsibility must also be established. With education centres servicing primary,

junior secondary, secondary and non-formal education, education centre directors must have the authority to mount workshops for all of these groups. The question then becomes: To whom are the education centre directors responsible?

4. Appreciation and support must be given to both the providers and consumers of in-service education. UB and TTC tutors must be given incentives for participating in in-service activities. Instead many are penalised by losing vacation time or being told that time given to in-service activities could be more profitably spent in writing and research. Likewise teachers who participate in long term in-service workshops (PEIP) should receive some recognition or reward for their efforts. It is recognised that this is a difficult problem to resolve but it is an important issue. Perhaps reviewing some of the recommendations concerning the adoption of a career ladder in Botswana would be a start.

5. A research capability should be developed that could deal with issues relating to in-service education. Many questions continually confront in-service education programmes - What difference does it make? How do teachers/children change? What approach is the most effective? What are the most important needs of teachers? What happens to children who drop out of school at Standard IV? We need answers to these questions if we are to maximise in-service efforts. At this point of development, action and applied research are greatly needed.

6. A systematic plan should be developed to identify the best candidates in the country for further training for educational leadership positions. With the manpower shortage as critical as

it is, the best potential leaders need to be quickly identified and trained. Concurrently, on-the-job staff development programmes should be mounted to increase the effectiveness of personnel already in leadership positions.

APPENDIX A

PERCEPTIONS OF THE VALUE OF WORKSHOPS

For workshops 10, 11 and 12, the last series of three workshops in the first phase of in-service workshops provided by the Primary Education Improvement Project (PEIP), three objectives were established by the PEIP workshop leaders for each of the content areas: reading, mathematics and English. At the beginning of each workshop the objectives were announced to participants to provide them with a framework for their forthcoming experience and to relate this experience to previous PEIP workshop experiences.

The objectives provided by the PEIP workshop leaders were:

- | | |
|--------------|---|
| reading: | <ol style="list-style-type: none"> 1. diagnosing comprehension difficulties 2. vocabulary development 3. developing comprehension skills |
| mathematics: | <ol style="list-style-type: none"> 1. design practical materials for teaching 2. involvement and practice in materials development 3. adaptation of materials to all standards |
| English: | <ol style="list-style-type: none"> 1. using newspapers and magazines in the classroom 2. teaching about transportation 3. effective use of questions in the classroom |

To obtain feedback from participants as to their perceptions of the value of the workshops, 10 statements were developed regarding their understanding of the objectives, ability to teach the objectives to others, previous PEIP experience as background to the current workshop, and judgement of the usefulness for several educational dimensions and situations. The 10 statements were the same for the three content areas, and for each objective participants indicated with a tick whether a statement was true for the objective. A copy of the participant evaluation form is attached.

The percentage of participants indicating "true" for each

statement and objective is presented in Tables 1 (reading), 2 (mathematics) and 3 (English).

When judgements for the 10 statements are summed for the objectives, 70% or more of the participants report a positive response (the last row in Tables 1, 2 and 3). A similar result is found when judgements are summed for each statement (the last column in the tables), with only statement 8, "My school has the materials to use the objective in class.", falling below 70% agreement. Thus the great majority of participant evaluate the workshops positively for all objectives and for all statements except the one dealing with materials availability.

Subjective evaluations such as these are composed of several factors, however: "true" evaluative response and tendencies to respond favourably (or negatively) for other reasons, such as the reaction to being in the programme or a general set to respond favourably. ON the assumption that a positive response bias is operating in the evaluation, investigation of relative, rather than absolute, endorsements of the objectives may provide more useful information to PEIP planners for improving in-service workshops.

TABLE I
 PEIP Reading Workshops 10, 11 and 12
 Percentage Agreement for Each Objective

	Objective						Total
	1		2		3		
	N	%	N	%	N	%	
1. I understand the objective.	55	79	66	94	57	81	85
2. I will be able to teach the objective to teachers.	49	70	61	87	59	84	80
3. The objective is useful to teaching from the revised syllabus.	48	69	67	96	53	76	80
4. Most PEIP workshops gave me a good foundation for understanding the objectives.	52	74	58	83	58	83	80
5. The objective is useful for teaching pupils of all ages.	57	81	62	89	58	83	84
6. The objective is useful for teaching all standards.	52	74	67	96	57	81	84
7. Untrained teachers will be able to use the objective.	53	76	60	86	49	70	77
8. My school has the materials to use the objective in class.	49	70	56	80	58	83	73
9. The objective is useful in teaching pupils of all ability levels.	54	77	64	91	60	86	85
10. The objective is useful for teaching any subject.	53	76	64	91	50	71	80
TOTAL	75		89		80		81

Objectives: 1. Diagnosing comprehension difficulties.
 2. Vocabulary development.
 3. Developing comprehension skills.

TABLE II
PEIP Mathematics Workshops 10, 11 and 12
Percentage Agreement for Each Objective

	Objective						Total
	1		2		3		
	N	%	N	%	N	%	
1. I understand the objective.	50	89	47	84	46	82	85
2. I will be able to teach the objective to teachers.	44	79	46	82	42	75	79
3. The objective is useful to teaching from the revised syllabus.	41	73	34	61	42	75	70
4. Most PEIP workshops gave me a good foundation for understanding the objectives.	47	84	38	68	40	71	74
5. The objective is useful for teaching pupils of all ages.	49	88	42	75	42	75	79
6. The objective is useful for teaching all standards.	44	79	42	75	41	73	76
7. Untrained teachers will be able to use the objective.	44	79	39	70	34	61	70
8. My school has the materials to use the objective in class.	39	70	29	52	31	55	59
9. The objective is useful in teaching pupils of all ability levels.	43	77	41	73	41	73	74
10. The objective is useful for teaching any subject.	48	86	42	75	39	70	77
TOTAL	<u>75</u>		<u>89</u>		<u>80</u>		<u>81</u>

Objectives: 1. To design practical materials for teaching.
2. Involvement and practice in materials development.
3. Adaptation of materials for all standards.

TABLE III

PEIP English Workshops 10, 11 and 12
Percentage Agreement for Each Objective

	Objective						Total
	1		2		3		
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	
1. I understand the objectives.	73	97	72	96	69	93	95
2. I will be able to teach the objective to teachers.	68	91	65	87	58	78	85
3. The objective is useful to teaching from the revised syllabus.	50	67	64	85	54	72	75
4. Most PEIP workshops gave me a good foundation for understanding the objectives.	53	71	54	72	52	69	71
5. The objective is useful for teaching pupils of all ages.	66	88	67	89	56	75	84
6. The objective is useful for teaching all standards.	65	87	64	85	62	83	85
7. Untrained teachers will be able to use the objective.	70	93	64	85	47	63	80
8. My school has the materials to use the objective in class.	35	47	47	63	47	63	57
9. The objective is useful in teaching pupils of all ability levels.	64	85	69	92	48	64	80
10. The objective is useful for teaching any subject.	64	85	57	76	81	81	81
TOTAL	81		83		74		79

- Objectives: 1. Using newspapers and magazines in the classroom.
2. Teaching about transportation.
3. Effective use of questions in the classroom.

APPENDIX B

BACKGROUNDS OF IN-SERVICE PARTICIPANTS

Participant Background

Participant background forms were completed by 169 teachers. In the description of participants which follows, comparable information for phase I is presented where available. A copy of the phase II background form is attached.

The age of participants by teaching position is presented in Table 1. The phase II participants are, on the average, 4 years younger than the participants in phase I. While all positions except head teacher are represented by younger teachers, much of the difference is due to the substantial increase of assistant teachers: 13% of phase I participants were assistant teachers as opposed to 42% in phase II.

TABLE 1

Age of Participants by Position for Phase I and Phase II

	HT		DHT		ST		AT		Total	
	Phase		Phase		Phase		Phase		Phase	
	I	II								
N	30	43	9	9	29	44	10	69	78	165
%	38	26	12	05	37	27	13	42	--	--
Mean Age	40.1	42.0	40.9	39.8	38.7	35.8	31.2	28.9	38.5	34.8
s.d.	7.6	9.4	7.6	9.3	8.4	7.3	5.5	6.1	n/a	9.4
Range	28-56	31-57	29-54	26-55	27-60	24-56	21-40	20-55	21-60	20-57

The sex of participants by teaching position is shown in Table 2. There was an increase in the participation of female teachers (59% in phase I and 64% in phase II), but this remains lower than the 75% of primary teachers nationally who are female. Senior and assistant teacher positions are in line with the national figures, but the administrative posts, especially head teacher, remain largely male. The percentage of male head teachers in phase II (69%) does represent the national figure, however.

TABLE 2
Sex of Participants

Phase		HT		DHT		ST		AT		Total	
		M	F	M	F	M	F	M	F	M	F
I	N	16	14	na		na		na		33	47
	%	53	47	na		na		na		41	59
II	N	31	14	3	6	11	32	15	56	60	108
	%	69	31	33	67	26	74	21	79	36	64

Comparing the ages of head teachers by sex for phases I and II reveals little change (see Table 3). Similarly, the years of experience in the head teacher position remained relatively consistent from phase I to phase II. Table 4 shows women have had about 5 years less experience as head teachers; the range of experience (1 - 16 years) and the standard deviation of 4.0 years suggest that women have been moving into the leadership posts only within the last decade.

TABLE 3
Age of Head Teachers by Sex

	I		II	
	M	F	M	F
N	16	14	29	14
%	53	47	67	33
Mean Age	41.4	38.6	43.2	39.4
s.d	7.3	7.6	8.0	11.7
Range	30-56	30-54	28-57	31-54

TABLE 4
Years as Head Teacher by Sex

	I		II	
	M	F	M	F
N	16	15	31	14
Mean Years	8.6	4.9	10.7	5.3
s.d.	4.9	2.0	6.8	4.0
Range	3-22	1-7	1-27	1-16

The phase I participants reported an average of 8 years of basic education while phase II participants report almost 10 years. The present group, then, has a better educational background with 70% having at least some secondary education experience and about 60% having 3 years or more.

About two-thirds reported 2 years of teacher training (50% in phase I) and about one-fourth 3 years (50% in phase I). This indicates the younger teachers participating, and that they are products of the present 2-year teacher training programme, as opposed to foreign or the earlier 3-year programmes.

The teaching position held and the source of teacher training is presented in Table 5.

TABLE 5
Position by Teacher Training College

School	%									
	HT		DHT		ST		AT		Total	
	I	II	I	II	I	II	I	II	I	II
Francistown	06	09	33	33	34	30	30	21	23	21
Serowe	31	29	11	--	32	33	40	44	30	34
Lobatse	28	40	--	33	24	28	30	31	24	33
PL + PTC	06	04	22	22	03	02	--	--	06	03
Foreign	28	18	33	11	27	07	--	04	17	09

Overall, nearly 90% are now products of the existing teacher training colleges as compared with about 75% for phase I participants. Looking at head teachers only, the low percentage stemming from Francistown remains. This is probably due, in part, to the date of the opening of the school.

The age of teachers and their preferences in teaching subjects is shown in Table 6. Only partial data is available from the phase I participants.

Mathematics and English still account for nearly 75% of teachers' indications of favourite teaching subject. For two-thirds of the teachers, science, social studies and religion are indicated as the subjects most difficult to teach. For science, the 7% who indicated it was their favourite subject had an average age of 29.3 years while the 37% who said it was most difficult had an average age of 37.2 years. This suggests a difference in teacher training experiences, and that science in-service work might profitably be aimed at older teachers.

TABLE 6

Subject Preferences by Age

	II				I	
	N	%	MEAN AGE	s.d.	N	%
<u>Favourite</u>						
Math	85	52	34.4	8.8	40	51
English	35	21	38.1	9.8	17	22
Social Studies	19	12	33.3	8.7	7	09
Science	14	09	29.1	5.7	2	03
Setswana	10	06	38.8	12.5	5	06
Other	1	--	27.0	na	8	10
<u>Difficult</u>						
Science	60	37	37.1	8.7	} na	
Social Studies	31	19	30.0	8.6		
Religion	18	11	32.8	9.3		
English	15	09	34.7	9.8		
Setswana	13	08	32.9	7.1		
Math	12	07	38.3	10.4		
"None"	7	04	42.6	12.3		
Other	6	04	32.6	3.5		

The standard taught by male and female teachers is found in Table 7, and is very similar to that reported in the Primary Education Survey 1982. Women tend to be assigned to the lower standards (1 - 3) and men to the higher standards (5 - 7).

TABLE 7

Percentage of Male/Female Teachers by Standard

		1	2	3	4	5	6	7
Phase II	Male	05	---	10	32	45	30	50
	Female	95	100	90	68	55	70	50
Primary Survey 1982	Male	--	03	14	25	34	35	52
	Female	100	97	86	75	66	65	48

APPENDIX C

TEST PERFORMANCE OF WORKSHOP PARTICIPANTS

Participant Learning

For each of the workshop content areas, the PEIP leaders developed objective tests of participant learning. Copies of these instruments are attached. Some indication of participant learning could be gained (albeit in a post test only situation) but more importantly a comparison of learning between teachers taught by the PEIP leaders and teachers taught by their sister school could be made, and thus an estimate of the loss of learning transmitted when teachers were workshop leaders.

Participants receiving workshops from PEIP personnel took the test at the conclusion of the workshop. These schools then provided the workshop to their sister schools. When the sister schools attended the next workshop conducted by PEIP personnel, the same test was administered to them at the beginning of the workshop.

The average test scores are shown in Table 8, which presents the test performance of participants for the three workshop content areas and the source of workshop leaders (PEIP personnel or teachers). In each instance, lower test scores are shown for teachers receiving the workshop from their sister school. However, none of these differences is statistically significant. It should also be kept in mind that those taught by PEIP personnel took the test immediately, while those receiving the workshop from their sister school had up to a month between workshop and test. Such results suggest that using workshop trained teachers to in turn teach other teachers is a viable in-service procedure, worthy of additional evaluation and refinement.

TABLE 8
 Test Performance of Participants
 Taught by PEIP Team or Sister School

<u>Workshop</u>	<u>Region</u>	<u>School</u>	<u>Taught By</u>	<u>N</u>	<u>Mean</u>	<u>sd</u>	<u>t</u>
Reading	North	AB	PEIP	29	9.70	4.95	1.016
		BA	AB	27	7.04	3.86	
	South	B	PEIP	30	7.50	1.57	.304
		A	B	33	6.88	1.14	
	Central	A	PEIP	28	13.39	3.35	
	Math	South	A	PEIP	29	12.60	.85
B			A	29	10.20	2.20	
Central		B	PEIP	20	12.80	.90	.471
		A	B	21	11.81	1.00	
North		A	PEIP	24	11.42	1.00	
English		Central	A	PEIP	26	12.00	2.90
	B		A	27	9.70	3.00	
	North	B	PEIP	26	12.60	3.40	.420
		A	B	19	8.42	1.04	
	South	A	PEIP	30	11.20	1.05	

APPENDIX D

PARTICIPANT EVALUATION OF PEIP WORKSHOP
27-30 JUNE 1983

PEIP WORKSHOP 27-30 JUNE 1983 PARTICIPANT EVALUATION EDUCATION OFFICER

The following aspects of management and administration impressed me:

1. How to determine the competency of a classroom teacher. This was very helpful to the EO as it involves his daily work in the classroom with teachers.
2. Analysis of administrative skills and attitudes expected from an administrator. This will have an effect on the attitudes of the EOs towards the administered.
3. Planning--it stands us (EOs) a good chance of planning ahead with definite objectives given to the point of view of the pupil and NOT the teacher as it used to be. This has helped many of us. Thanks for that.

This workshop has been very useful to us because it gave us the basic skills which are very useful, suitable and relevant to our situation here in Botswana. Among the skills we gained are the supervisory and administrative skills. I wish this type of informative workshop could be continued along the same principles, objectives and goals. I have really appreciated the type of approach used at this workshop.

For a change I found the workshops giving me some guidelines on my duty or job. As this was the beginning of such a course organized for EOs that should be the first but not the last. In fact, it would be better still to conduct a two weeks' seminar/workshop for us once or twice a year. We would be happy if on the other hand some strategy could be formulated to take course step by step--evuating officers to the University personnel from both Diploma and BED courses or something like that. Once more, we have some insight into our working situation.

The workshop was a success as it dealt with issues that relate to the EO's work. Sometimes books that deal with the courses we do should be given to EOs so that they will continue to add their knowledge on what they have learnt. EO s workshops should be conducted at least three times a year.

The idea/practice of inspectors being together is a very good one because:

1. You are able to discuss and exchange ideas about problems and achievements in different areas-districts.
2. Group discussions bring about more and better understanding on what has been presented.
3. This kind of programme is helpful in equipping the EO with more administrative skills.
4. Such an arrangement should be continued.
5. The practice of giving workshop participants an afternoon break/off is appreciated highly (as it has been the case on Wednesday.)

- I. I was impressed about the workshop which involved part of my career/job now. To me it made me feel more confident about my work. More over, we did share ideas about how we could improve our skills and to identify competence among our subordinates. I was impressed to know whether I was effective or not in my job, which styles to use in different situations.
- II.
 - a) I wish we could meet more often and discuss our problems.
 - b) This kind of workshop should be planned for a longer period next time.
 - c) I wish we could meet and discuss our problems which perhaps even hinder our progress and frustrate us in our cadre.

The course/programme---I felt it was more relevant to what I am doing as EO. The programme so far has made me aware of many/some parts of my work I had not been aware of. We hope for more such programme. The EO need such programme to make them more confident of their work as leaders. We are grateful. I hope the resource people will talk more of it and begin or carry on.

Education Officers had separate morning sessions from their teams 27th to 30th June 1983. It was not only interesting but very useful to have exercises on leadership styles. Indicators on lesson planning was something WE EOs feel we should have long started when PEIP was born.

Course Regularity:--It is necessary that such course be held once in every six months for sessions of four or five days not once in twelve months as at present.

Course Content:--The content of this workshop was appropriate to most of our needs. The level of presentation of material was just right for our educational capacities/abilities.

Course Leaders:--There is greater need for participation of a senior official of the Ministry of Education Headquarters. Our present course leaders are alright but for more practical indepth application of our situation in Botswana this officer is necessary.

General Comments:--Course appropriate and should be regular and fully intensified

I was impressed by all the presentations. They were all educative and informative. The resource persons were all interesting and knowledgeable people who worked hard in order to get the best out of the participants. Materials presented were good and useful. The whole week was tinged with joy and happiness because of the feeling that there was a lot to learn. One would like to see workshops of this nature being continued and maintained in order to provide EQs with the skills they require in administration and management in order to function effectively as supervisors. It would not be a bad idea if the organized considered lengthening the course duration. We want to more ideas, skills and techniques in order to become leaders worthy of their names.

The course that was organised for the EQs was very good. We need more of that if we are to talk about the improvement of Primary Education in the country. What kind of a teacher am I? How do I find the competency of teachers? and how to plan are the basic skills that any leader needs if he/she has to overcome certain complaints. The forms you used for competency are most relevant in the process of our assessment of competency. It will be very unfair not to give you pat at the back for all that you did for us, all the resource people did excellent work.

The workshop for EQs. This was very useful and informative. It was a high level course for administrators which in my opinion should be continued.

The EO workshop was needed. I think the need to involve EOs is important and this was a good beginning. The interest among the EOs was high. I would like to caution about giving too much too fast. It takes actual working with ideas presented and using them effectively before more should be given. Maybe I'm trying to say that even EOs need to be spoonfed. There was a lot of information given and new ideas presented. We must now be given time to digest it. It was a good workshop.

What we received this week was the right type the techniques would be quite appropriate for our field. I'm saying this because this stuff is the right type of ideas we need as administrators. When one works with schools must first of all be able to organize, plan, take decisions and be able to manage. A manager who fails to take a decision is a failure in life. This was the right material we should have started with from the beginning of the PEIP workshops. I really enjoyed and I'm pretty certain that from now onwards I will be able to plan my work well. The way that all our four groups as Education Officers presented the matter after every lesson was quite good.

My impressions of what happened this week are these:

1. A lot of information was given yet I'm not sure it was all absorbed. (I'm sure you realized this!)
2. Is it fair to a learner to give a 4 week course in 2/4 hours?
3. When lessons are planned is special attention given to the culture you are working with?
4. Please, Please, Please, don't stop here. Continue on--SLOWLY but continue. I heard this week that a little knowledge can be a dangerous thing. I think you've started a bomb ticking. Don't let it explode--explosions harm people. (I'm a pacifist.)
5. How aware was the Ministry of the things that were presented to us this week. I know the people were here this week, but did the Ministry know your plans before this week?
6. What are we, or how are we to apply the information given to us this week to our work?

The workshop on competency was of great benefit to us because of its matter presented to us. This really gave us confidence within ourselves. I was so delighted when we were given the four styles.

It is of very great value that we should know where we are at present concerning the evaluation on competency. If more of these lessons could be given to us frequently our EOs and Head Teachers would work efficiently and more cooperative. I really could see the value of this when we are dealing with the behavioral objectives. It is of great help and value that this should be trained on how to construct objectives. In so much as it is true that we the education officers should be given more in-service on the leadership course and administration. In connection with competency, a more detailed data and programme should be set-off, so that we all benefit. We are to give advices and instructions to each other. We should help one another properly.

Since PEIP started, this is the first time something specific to my work was touched. I was made to assess my performance in my work and also assess my relationship with those I work with on the scale of 1. High and Low Task and 2. High and Low Relationship. It also helped me revise some of my administrative techniques which were rusty. I am now having a good picture of myself in work and with others. One might only end up by requesting PEIP to continue such workshops for EOs on an intensive scale and ultimately develop such to up-grade the field EOs so that they professionally climb up the ladder. LONG LIVE PEIP!

In-Service Workshop on the

Nine Year Curriculum

for

Education Officers and Teacher Educators

February 24 - 27, 1986 - Oasis Motel, Gaborone

SUMMARY OF EVENTS

This Workshop, an historic first, brought together in a workshop the Primary Education Officers and the Secondary Education Officers to discuss jointly the nine year basis education programme. Others invited and in attendance, were Chief Education Officers in charge of the Ministry's Departments of Primary, Secondary and Curriculum Development and Research.

The Principals and several lecturers from Molepolole College of Education, the four Teacher Training Colleges; representatives from the Department of Non-Formal Education, the University of Botswana, and the Education Centres as well as all of the Education Officers from Primary and Secondary; and all the members of the PEIP and the JSEIP teams were in attendance. There were over 150 participants. A high level team of officials from Lesotho were also present.

The Workshop was jointly organised by the in-service advisors of JSEIP and PEIP.

The chair revolved each day to Dr. L. Halsey; PEIP In Service advisor, Mr. S. Kesupile, Primary Education - Special Education Unit; Mr. P. Ramatsui, Curriculum Development Unit; and Dr. D. DeBey, JSEIP, In-Service advisor.

Evaluation

An open session evaluation discussion followed the distribution of evaluation questionnaires. (See Appendix IV). Evaluation forms were completed by 80 participants. Eighty four percent indicated that they found the workshop very useful, and the other 16% found it somewhat useful. No-one indicated that it was not useful or unnecessary.

Participants found the following aspects of the workshop particularly useful. These were the cooperation between the primary and secondary departments of education; the openness and quality of the exchange of information; and the usefulness of the discussion on the Nine years curriculum.

An area of the workshop which could have been improved was an extension of time. It was suggested that more input from non-formal education should be included next time. A workshop for Headteachers on the Nine year curriculum should be held.

One hundred per cent of the participants wanted this workshop format to become an annual event, and 25% felt it should occur more often than that.

Suggested items on the agenda for next year are some of the following:

- The policy and implementation of decentralisation
- Review and update on the Nine Years Curriculum
- Update on improved communications in the MOE and entire educational system.
- Role of the E.O.'s with respect to in-service and educational innovations.
- Relevant Educational Research reports should be available.
- Integration of the Primary and Secondary EO's into the Nine year programme.
- Updates on Continuous Assessment, individualised instruction, special education, and guidance and counselling.
- Update on improvements in TTC's and TAPU.
- Reports should be available as handouts.
- More small group discussions should be programmed.

Compiled by
Dr. Darrell DuBey
InService JSEIP

FEB 24th CHAIRPERSON - DR. HASELEY

- 8:30-9:00 - Opening - P.S. M.O.E
- 9:00-9:30 - Overview of Nine Year Program
Mr. Eric Odotei
Mr. Neihls Lindhardt
- 9:30-10:00 - Questions - Discussion
- 10:00-10:30 - Tea
- 10:30-12:30 - 9 Year Curriculum

POLICY & IMPLICATIONS PANEL DISCUSSION
CEO (SEC) CEO (CD & E) CEO (P & TT)
Questions & Responses

- 12:30- 2:00 - Lunch
- 2:00- 3:00 - Questions and Responses to 9
Year Curriculum Continues
- 3:00- 4:00 - Role of PEIP II Dr. Evans
Role of JSEIP Dr. Hartwell

Feb 25th CHAIRPERSON - MR. KESUPILE

- 8:00-10:00 - Overview of the 9 Year Curriculum -
Mr. Ramatsui
- 10:00-10:30 - Tea
- 10:30-12:30 - Discussion and Questions on 9 Year
Curriculum
- Dividing of Participants into Groups
- Areas of Emphasis - SEOs
- 12:30- 2:00 - Lunch
- 2:00 -4:00 Small Group Activity and Reports

FEB 25th CHAIRPERSON - Mr. Ramatsui

- 8:00-10:00 - Update MOE
- Continuous Assessment - Dr. Hasley
- Competency Instruments - Mr. Mahube/
Dr. Behm
- 10:00-10:30 - Tea
- 10:00-12:30 - Transition: Standard 7 - Form I
Mr. Ramaswani/Dr. Artell
- 12:30- 2:00 -
Lunch
- 2:00- 4:00 - Update MOE
- Breakthrough - Sister Gregory
- Career Ladder - Mr. Purves

FEB 27 CHAIRPERSON DR. DUBEY

- 8:00-10:00 - Update MOE
- Special Education - Mr. Kesupile
- Guidance and Counselling - Mrs. Bakwena
DISCUSSION AND QUESTIONS
- 10:00-10:30 - Tea
- 10:30-12:00 - Evaluation - Announcements
- Next E.O. Workshop
- 12:00-12:30 - Closing - CEO (P&TT)
- Vote of Thanks PRO:JSS
- 12.30 - Lunch

APPENDIX E

POSITION PAPER ON EDUCATION CENTRES

POSITION PAPER ON EDUCATION CENTRES

The attached materials are articles, recommendations, and "Administrative Structure" suggestions concerning Education Centres that were developed during the past two years.

This seems to be a critical time for the development of a philosophy and programme for Education Centres for the following reasons:

- A. With the conclusion of Phase I of PEIP inservice in early 1986, inservice education will have to be centred or institutionalised at T.T.C.'s and/or Education Centres in order to continue the focus and momentum of inservice activities for primary schools throughout Botswana.
- B. With the opening of Tlokweng College in 1985 with a "Model" Education Centre and with equipment provided by the PEIP, relationships between MOE, UB, Tlokweng, TAPU, and the other Education Centres should be carefully and clearly assessed.
- C. Five of the six Education Centres are currently staffed by expatriate officers. There is a need for Centre officers to have experience in administration, curriculum development, needs assessment, and materials development skills. Participant and counterpart training is desirable if not necessary in order to adequately staff the Centres.
- D. With Ministry recommendations that Centre staff be increased to two or three officers Item C is especially important.
- E. As a result of the Sector Analyses Report, it was suggested that from 10 - 15 additional Centres be constructed in Botswana. The integration of programme, staff and facilities is crucial. Especially as it pertains to inservice as described in the attached materials.

This also seems to be an opportune time to discuss inservice as it relates to Centres as a priority with AID and the Ministry of Education in terms of Phase II extension of PEIP for the following reasons:

- A. The CEO, Mr. Sephuma, has indicated that this year the focus for the Ministry (P&TT) is going to be on Education Centres. Ministry "teams" have visited all the education centres in Botswana and have made recommendations concerning their utilisation (see last page of this document.)
- B. The British Council workshops this school year - (tentatively scheduled for Jan 1985) will be centred

on the role and activities of Education Centres and will be of four weeks duration.

- C. The transfer of equipment to Tlokweng TTC will require the MOE to develop policy concerning its relationship to other Education Centres which may have implications for staffing, budget, materials, transport and the relationship with University of Botswana, PEIP.
- D. Finally, but certainly not least to be considered is the continuity of inservice activities stimulated by PEIP. The use of Education Centres would seem to be logical, viable and a priority for the Ministry of Education and AIP. It might be appropriate to see Ohio University involved in Education Centre development staffing - training of Education Centre officers etc., in Phase II of PEIP as a vehicle to support the continuation of the inservice programme developed in Phase I of PEIP.

The Government of Botswana
Teacher Training

The Situation of Education Centres - 1984.

1. Where the Centres are situated.

Attached is an article on Education Centres. It is an extract from an Inservice magazine entitled Primary Education in Botswana. The article gives important facts and figures regarding the Centres and what the Ministry of Education sees as their function.

2. Education Centre Programmes.

For Education Centres to fulfil their role the Ministry of Education needs specially trained personnel. We need Officers who can:-

- (1) Assess the needs of the Primary Teachers.
- (2) Develop and carry out programmes.
- (3) and generally develop the Centres in order to have them fulfil the role of "Resource Centres."

3. Education Centres and the satisfaction of a Developing Country - needs.

Of necessity a Resource Centre in a developing Country such as Botswana should take on a " multi-purpose" function, and cater for the various rural extension teams. They should therefore in their programmes include programmes on health, agriculture and all social welfare activities. "Education" should be seen in terms of a package including all of the above. We need as a Ministry a programme that will give our officers in Education (Inspectors, Head-Teachers and Teacher Trainers) these programme designing skills.

4. The Education Centres' place in the National Development Plan.

The idea of the Education Centre movement in Botswana, originated with the former O.D.A. team of Inservice Teacher Educators. The team then known as " The Inservice Project" under the leadership of Mr B. Swallow operated in Botswana between the years 1972 and 1980

There was then an intensive curriculum development programme and the existing six Centres were focal points of much activity.

The Government of Botswana would like to maintain this tempo in activities. With the withdrawal of the expatriate members of the team, a need is felt for some kind of enrichment workshop, to help all officers at present using the Education Centres, to maintain the original quality of work.

The past Development Plan (V) recognised the importance of these Centres, as no doubt the current one will. But for lack of funding, there was the aim to build more Centres. While it may not be possible to build more structures, the Ministry of Education plans to develop programmes in existing ones so that they should give maximum service to the communities.

5. The request of the Ministry of Education to have the British Council organise a workshop to support our efforts to develop the Centres, recognises the fact that, the British Education Centres will have a different focus since the needs of their clients will be different from our own. We hope the documents attached will help to clarify some of our needs.

SUMMARY OF GENERAL AGREEMENT BY THE TEAM

- A. A director/coordinator of an Education Centre should be an experienced teacher of high credibility, preferably knowledgeable of both primary and secondary education.
- B. Centres should be self contained in terms of staff (e.g. at least 4 professionals in each centre), transport and physical facilities.
- C. In terms of materials a centre must be sure to serve all levels of education under the direct responsibility of the Ministry of Education i.e. adequately equipped for all subjects at both primary and secondary.
- D. Each Centre should have a local in-service committee which must include the class-room teacher.
- E. Coordinators or Directors of Centres should be directly responsible to the In-Service Leader to avoid any clash of demands from Regional Education Officers and the In-Service Leader.
- F. When expatriate officers are appointed, it should be policy to have a local as a counter-part.
- G. In each centre there should be enough offices and work-rooms while it should be possible for the officers to go out to the schools.
- H. It has become abundantly clear that each centre should have some hostel facilities to accommodate up to 30 participants.

Teacher Training In-Service

During NDPV inservice teacher-training was provided by a team of fourteen officers and a Team Leader. The organisation was one office at the Ministry from which the Team Leader administered the "team" and six centres and eight offices in the districts from which the four to five-thousand Primary Teachers could expect professional help. This was far from adequate.

At present the team is made up of six officers operating from six centres. This represents a reduction of the already inadequate service by more than half. The University Primary Department however supplements in-service programmes through the Primary Education Improvement Project. The present administration at Head Quarters has failed to support in-service adequately resulting in much training money not being properly used or not used at all.

It was hoped that during Plan Period V the team would be strengthened and more centres built - this has not happened.

Facilities at the existing six centres have not been extended. The provision of in-service training has suffered many set-backs.

NDP will need to strengthen in-service teacher training by supporting the following programmes:

- (a) Special training programmes for teachers of infants.
- (b) Preparation of serving teachers to help them cope with a nine-year Basic Education programme.
- (c) Professional support for Teachers teaching in non-Setswana speaking areas.
- (d) Training of serving teachers in the implementation of Setswana as a medium of instruction in the first four years.
- (e) Extensive training of Tirelo Setshaba participants for their work in Primary Schools.

To carry out the task above, NDP VI will support and staff proposed additional eight centres and additions to existing facilities.

Each centre will require the minimum of two professional staff, warden and assistant. A clerical officer, a typist, a teachers, a driver and a messenger.

The post of In-Service Leader at Headquarters be retained. The manpower projection above to be spread over the planning period. The hope is for the P 101,675 representing current financial provision for six centres and Headquarters will be maintained and that the additional centres will be provided for. One hopes also that the allowable increase in recurrent expenditure will be spread evenly over the plan period to permit a consistent development of programmes.

At present only Primary Teachers receive training at the centres. Secondary Schools will use the Centres more during Plan VI. Money during NDF V was estimated to provide in-service refresher courses lasting a week each for about 2520 teachers annually. This excludes 2 to 3 day courses for a further 1800. These figures will increase progressing with the expansion of existing centres, the building of new one, and personnel provision.

JOB DESCRIPTION OF EDUCATION CENTRE
DIRECTOR

4. DUTIES

4.01 ADMINISTRATIVE

1. Plan a schedule of events through the centre planning committee for a term or a year.
2. Organize work and book displays.
3. Initiate and organize courses for the centre on a regular basis in cooperation with education officers, head teachers and others.
4. Write reports and keep records of courses given at the centre, such reports to include objectives, content, materials needed, potential staff, beginning and ending dates, population(s) served, attendance, budget and the evaluation of the courses.
5. Coordinate the production of teaching aids.
6. Help education officers identify teachers who show potential for promotion by their exemplary teaching and other criteria agreed upon.
7. Design and distribute a questionnaire to EOs, Headteachers and others for suggestions as to how the centre can meet their needs (specifically)
8. Establish an education centre advisory committee comprised of officers and teachers in the area.
9. Establish a budget for operation with the appropriate MOE officials.

4.02

CURRICULUM AND INSTRUCTION

1. Provide copies of all revised syllabi and organize groups of teachers to study chosen objectives and suggest activities to help reach these objectives.
2. Study publications and stay on the alert for new educational teaching aids and ideas.
3. Emphasize a curricular activity or theme such as reading, maths, science, social studies, Setswana, English, sports, agriculture, etc., and show displays related to the one theme chosen.
4. Writes or helps direct the writing of children's Setswana textbooks for the different standards.
5. Experiment with the construction of tests in the different subject matter areas.
6. Choose two schools, one in close proximity to the centre, for the purpose of experimentation in curricular areas.
7. Establish a reference library with appropriate holdings for teachers and children.
8. Provide teaching aids raw materials for workshop consumption.

4.03 PUBLIC RELATIONS

1. Keep all relevant publics informed of activities, i.e., MOE officials, TTCs, UCB Primary Education Department, CDU and E, Non-Formal Education.
2. Cooperate with the editor of MOSO and Thuto regarding articles for wide distribution to children.
3. Take care of all correspondence pertaining to the centre.
4. Keep a strong tie to the Department of Primary Education at the UNB with a view in mind to involve the personnel there in appropriate settings.
5. Involve the TTC administration and tutors in the region in mounting workshops appropriate to the expertise available.
6. Keep avenues of communication open with CDU and E.

4.04 RESEARCH AND EVALUATION

1. Develops appropriate assessment instruments to evaluate workshops.
2. Conducts a follow-up of workshops and courses to assess their effectiveness.
3. Arranges for an annual review of the centres activities and programme.

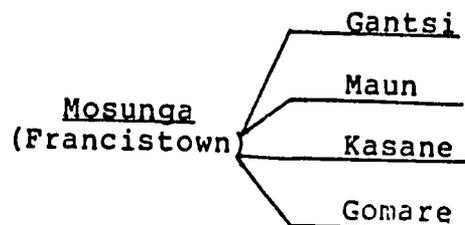
- 4.05 Undertakes any other related duties as required to meet the needs of the schools and the centre.

INTRODUCTION

CONCEPT OF NETWORKING

- I A structure that allows an operation (In-service, research, feedback) to function efficiently.
- II There are simple and complex networks. Complex have small networks within a large network.
 - A. Small networks have autonomy within them as well as being part of the larger network.
- III Example with Ed. Centre organisation
 - A. 4 major centres and sub centres make up the complete network.
 - B. Each of the major centres with its respective sub centres make up a small network accountable and responsible to the school serviced by the small network.
- IV Organisational Structure
 - A. Centre Directors (major centres) should be able to mobilise their own small network.
 - B. The entire network should be mobilised by a designated MOE official.

EDUCATION CENTRES



STAFFING: 2 officers for the 4 main centres
 1 officer for eaach of the 10 sub centres

APPENDIX F

WORKSHOP SELECTION CRITERIA

AND

WORKSHOP SCHEDULE 1984-86

SUGGESTED PARTICIPANT FOR THE NEXT PHASE OF THE FEIP PROGRAMME

1. NAME _____
2. SCHOOL _____
3. POSITION _____
4. TRAINING _____
5. YEARS TEACHING EXPERIENCE _____
6. STANDARD NOW TEACHING _____

TICK THE APPROPRIATE BOX AS IT RELATTES TO THE ABOVE PERSON	BELOW AVE	AVE	HIGH	VERY HIGH
<u>TEACHING EFFECTIVENESS</u>				
<u>KNOWLEDGE OF SUBJECT MATTER</u>				
<u>ABILITY TO USE NEW IDEAS</u>				
<u>PARTICIPATION IN IN-SERVICE ACTIVITIES</u>				
<u>ENTHUSIASM IN TEACHING</u>				
<u>RELATIONSHIP WITH CHILDREN</u>				
<u>INTEREST IN BEING A FEIP PARTICIPANT</u>				

GIVE A BRIEF REASON FOR YOUR CHOICE OF THIS TEACHER AS FEIP PARTICIPANT.

RECOMMENDING E.O. _____

PHASE II - P.E.I.P. WORKSHOP SCHEDULE

<u>TARGET SCHOOLS</u> (I OR II)	<u>DATE</u> 1984.	<u>SOUTH</u>	<u>CENTRAL</u>	<u>NORTH</u>
I	April 30 - May 1-2-3	Lobatse Math/Science T.T.C	Serowe T.T.C. English	Francistown T.T.C Reading
II	June 25 - 28	University of Botswana Reading	University of Botswana Math/Science	University of Botswana English
I	August 20-23	Lobatse T.T.C. English	Serowe T.T.C. Reading	Francistown T.T.C. Math/Science
II	October 22-25	Molepolole(Hotel)	Karame. Centre	
II	October 29-31 Nov. 1	Math/Science	English	Francistown(Hotel) Reading
I	December 10-13	Lobatse (TTC) Reading	Serowe (TTC) Math/Science	Francistown (TTC) English
	<u>1985</u>			
II	February 4-7	Molepolole(Hotel) English	Kanamo Centre Reading	Francistown(Hotel) Math/Science

WORKSHOP SCHEDULE FOR APRIL 1985 THROUGH FEB. 1986

PHASE II PEIP WORKSHOP (YEAR II)

<u>TARGET SCHOOLS</u> (I OR II)	<u>DATE (1985)</u>	<u>SOUTH</u>	<u>CENTRAL</u>	<u>NORTH</u>
II	April 22-25	Lobatse TTC Math	Serowe TTC English	Francistown TTC Science
I	June 17-20	Gaborone Social Studies	Gaborone Math.	Gaborone English
II	August 12-15	Lobatse TTC English	Serowe TTC Science	Francistown TTC Math
I	Oct. 14-17	Gaborone Math	Kanamo Centre English	Francistown Hotel Social Studies
II	Dec. 9-13	Lobatse TTC Science	Serowe TTC Math	Francistown TTC English
I	Feb. 11-14 (1986)	Gaborone English	Kanamo Centre Social Studies	Francistown Hotel Math