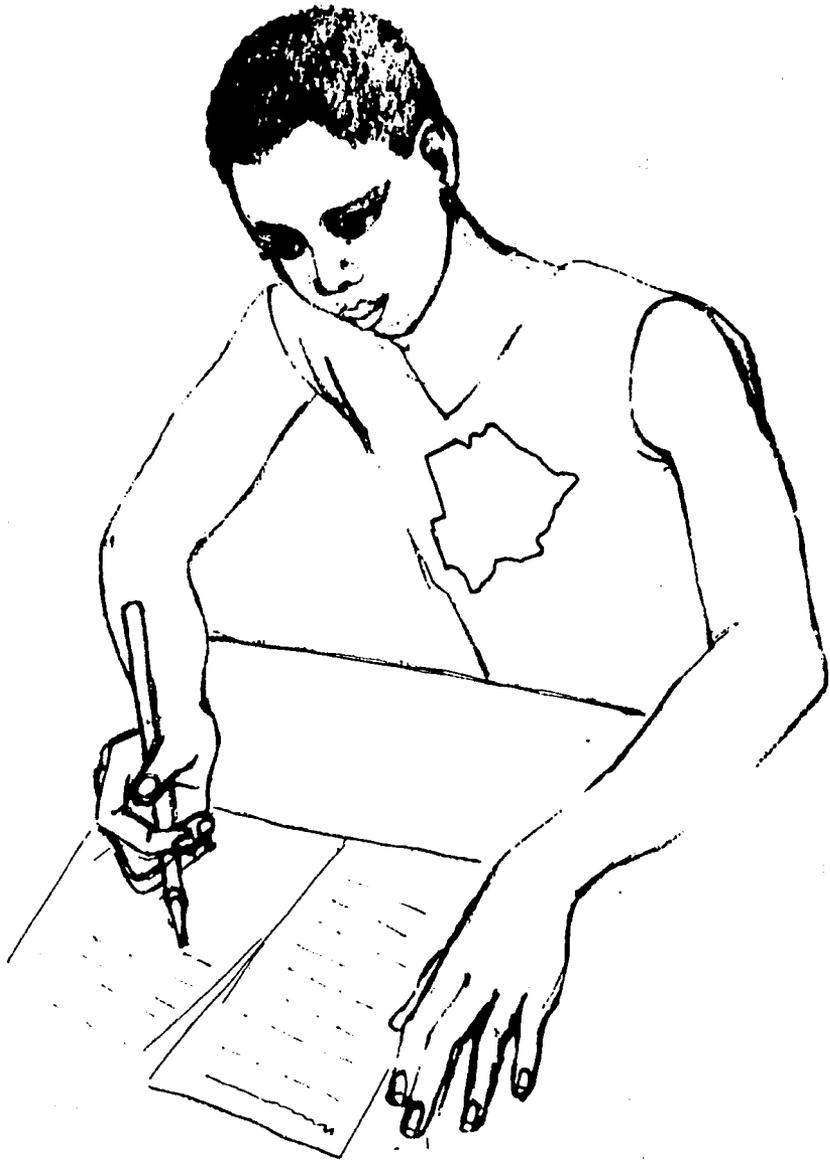


OHIO UNIVERSITY USAID CONTRACT

6330222

PO-PHW-041

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**MINISTRY OF EDUCATION
UNIVERSITY OF BOTSWANA
PRIMARY EDUCATION
IMPROVEMENT PROJECT
REPORT No.4**



University of Botswana

Private Bag 0022 Gaborone Botswana
Telephone 51151 • Telex 2429 BD

31 October 1983

To Dr. Ann Domidion
 Human Resource Development Officer
 USIAD/Botswana

SUBJECT: Fourth Semi-annual Report of the Ohio University
Contract Team covering the period 1 May 1983 through 31
October 1983

Article 1 Section F (b) of the contract states: "The Contractor will prepare reports which discuss progress towards achieving project objectives and adherence to the annual Work Plan during each six months period of the Contract. These reports should be objective analyses of progress made on all major activities. They shall include assessments of accomplishments and discussed in detail in the annual work plan." Section F (d) states further: "The Contractor shall submit two copies of each Report required by paragraphs (a), (b), or (c) to the Office of Development Information and Utilization, Bureau for Development Support, Agency for International Development, Washington, D.C. 20523. The title page of all reports forwarded to the AID Reference Centre pursuant to this paragraph (d) shall include the contract number and project title as set forth in the schedule of this contract."

Attached is the report.

Donald M. Knox

Donald M. Knox
Chief of Party

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CONTRACT

Between the

UNITED STATES OF AMERICA

and

The Ohio University, Athens, Ohio

AFR-0222-C-000-1066--00

Project No. 633-0222

PIO/T No. 633-0-222-20061

Appropriation No. 72-1121037

Allotment No. GESA-82-21633-KG13

SEMI ANNUAL REPORT, PERIOD 1 MAY 1983 THROUGH 31 OCTOBER
1983

CHAPTER I

INTRODUCTION

Article I, Section F (b) of the contract states that "the Contractor will prepare reports which discuss progress towards achieving project objectives and adherence to the annual work plan during each six month period of the contract. These reports should be objective analyses of progress made on all major activities. They shall include assessments and accomplishments and shortfalls as well as recommendations for any changes in the project implementation procedures as outlined in the Project Paper and discussed in detail in the annual Work Plans."

Article I, Section A, Objective, states that the Statement of Work shall be "to assist the Government of Botswana (GOB) (1) to establish in the University of Botswana (UB) a permanent capacity to provide pre-service training through (a) the creation of a four-year professional Bachelor of Education degree program and (b) a

two year diploma program 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 UB to organize and implement effective in-service programs for supervisory staff and teachers involved in primary education.

"By the end of the project, as a result of GOB and USAID project inputs, it is anticipated that there will be: (1) a functioning Department of Primary Education as a new entity in the UB. (2) Botswana graduates of the UB with B.Ed. 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 replace U.S. project staff at the UB. (4) An institutional base established for the systematic and effective in-service training of head teachers, deputy heads, and senior teachers in the 480 (now 500) primary schools, and for the development of staff of the TTCs and the inspectorate.

"Over a five-year period the project will train approximately 80 Botswana in primary education to diploma and degree levels, depending on the exact mix of students in the two programs. The majority of the Botswana who completed the B.Ed. degree will be slated for positions as tutors in the Teacher Training Colleges for the first 5 - 10 years following establishment of the program at UB. 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. Since an on-going institution is being created, 23 - 30 Botswana will continue to complete the UB program annually, long after this AID project terminates."

In this contract Ohio University is required to provide 25 person years of long-term technical assistance over the life of the project. By 12 September 1981, all long-term technicians were on post and assigned to their respective duties. At the end of the first two years of the project, two technicians departed Botswana and two replacements were assigned to duty.

An Organization Chart depicting the organization and structure of the contract responsibilities appears in Figure 1.

Figure 1

Organization Chart

Ohio University
College of Education
Botswana Project

Ohio University
Contract
Chief of Party

Curriculum &
Supervision
Specialist

Reading/
Language Arts
Specialist

Teaching
English as a
Second Lang-
uage Special-

Math/
Science
Special-
ist

In-service
Education
Specialist

Professional Teaching responsibilities within the Department of Primary Education for the two year Diploma in Primary Education and the four year Bachelor of Education degree program in Primary Education

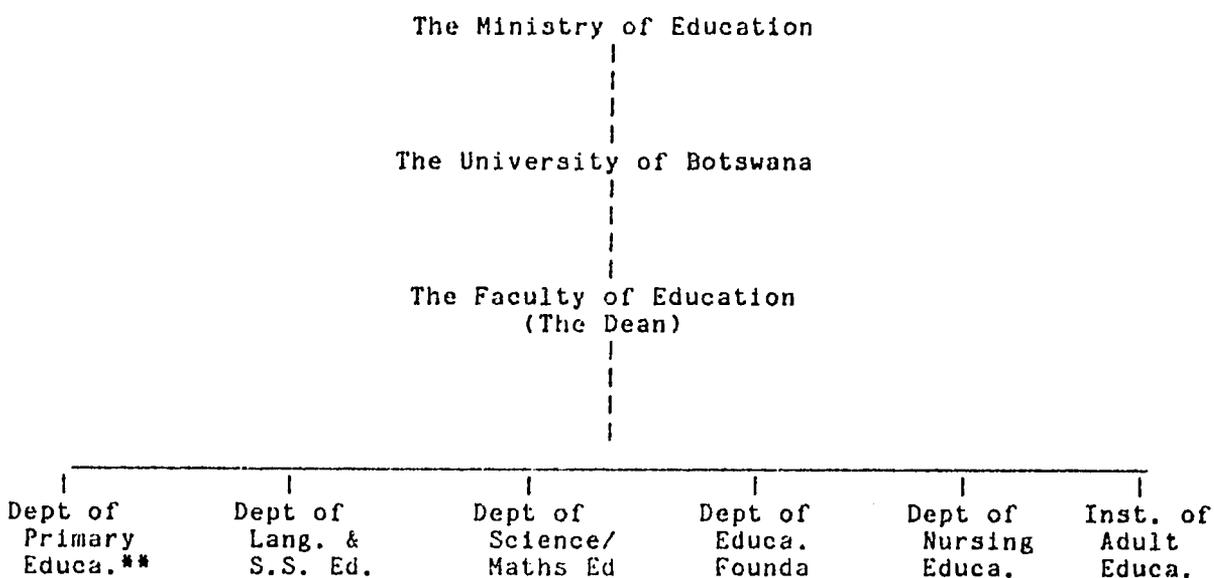
also

Professional responsibilities in In-service Education; conducting work-shops for head teachers, senior teachers, TTC tutors, and education officers from the Ministry of Education.

Note: The Ohio University Contract is the vehicle used for actual implementation of the Primary Education Improvement Project, the agreement between the Government of Botswana and the United States Agency for International Development. In the PEIP Project itself, Ohio University functions as a "support group" to both the pre-service program in primary education and to the in-service program in the primary sector. Figures 2 and 3 on the following page may help to explain this.

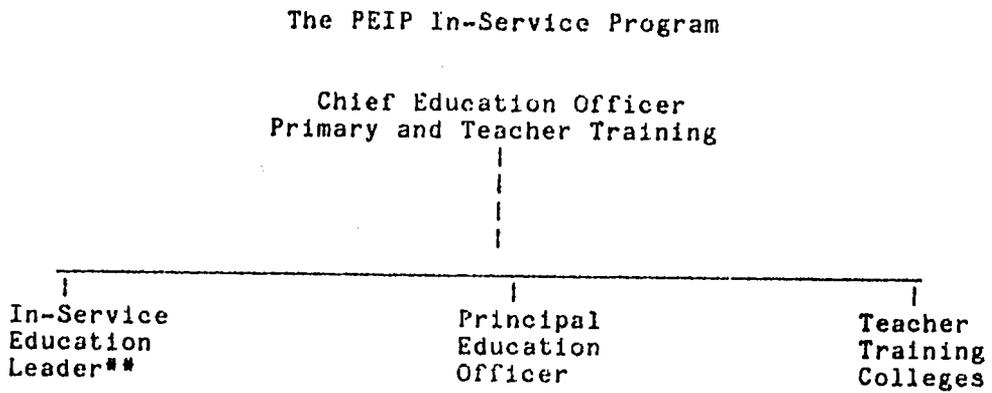
Figure 2

THE PEIP PRE-SERVICE PROGRAM



**Note: Presently the Department of Primary Education is 100 % staffed by the Ohio University Contract personnel. As participants return from graduate study in the United States, the department will gradually become localized.

Figure 3



** The Ohio University Contract serves as a support group for the In-Service Program. The PEIP Workshops conducted in accordance with the project agreement are offered under the coordination of the In-Service Office of the Ministry of Education. One Ohio University team member serves full-time as an adviser in the In-Service Office.

CHAPTER II

PERSONNEL

The Contract calls for an overseas staff of five (5) technicians of education advisors, including a Chief of Party who serves as Team Leader and Specialist in Curriculum and Supervision; an In-Service Education Specialist; a Reading/Language Arts Specialist; a Mathematics/Science Education Specialist; and a Teaching English as a Second Language Specialist. There are additionally, forty-four person months of short term consultants, some specified and some unspecified to be utilized, as the need arises during the life of the contract.

As of 31 October 1983, the Ohio University staffing pattern for the contract was as follows:

- | | |
|--|--------------------|
| 1. Chief of Party/Curriculum & Supervision Specialist/
Head Department of Primary Education | Dr. Donald M. Knox |
| 2. In-Service Education Specialist | Dr. Luther Haseley |
| 3. Reading/Language Arts Specialist | Dr. Iva Zajicek |
| 4. Mathematics/Science Education Specialist | Dr. Marion Blue |
| 5. Teaching English as a Second Language Specialist | Ms. Janet Ramsay |

Ohio University advisors live in USAID provided housing and follow the same personnel regulations as USAID direct-hire technicians. Complete personnel records are maintained in the Ohio University Office, currently located in the Primary Education Centre on the campus of the University of Botswana. Each advisor earns a total of 26 days of annual leave each year, and sick leave at the rate of 15 days per year as provided for under the contract. Reimbursement for sick leave, however, taken under this contract is limited to the amount earned by the employee while serving under this contract.

Complete and cumulative records of both annual leave and sick leave taken by Ohio University employees in

Botswana from the date of their arrival on post can be found on the following pages.

ANNUAL LEAVE RECORD, OHIO UNIVERSITY CONTRACT

Knox, Dr. Donald M.

Date of Contract: 22 June 1981

Date of Arrival: 22 July 1981

House No 10284 Maru-a-Pula

Month	Accumulated	Taken	Balance
Jun 81	1.0	0.0	1.0
Jul 81	2.0	0.0	3.0
Aug 81	2.0	0.0	5.0
Sep 81	2.0	0.0	7.0
Oct 81	2.5	1.0	8.5
Nov 81	2.0	0.0	10.5
Dec 81	2.5	8.0	5.0
Jan 82	2.0	0.0	7.0
Feb 82	2.0	0.0	9.0
Mar 82	2.5	0.0	11.5
Apr 82	2.0	0.0	13.5
May 82	2.0	0.0	15.5
Jun 82	2.0	0.0	17.5
Jul 82	2.5	0.0	20.0
Aug 82	2.0	12.0	10.0
Sep 82	2.5	0.0	12.5
Oct 82	2.0	0.0	14.5
Nov 82	2.0	0.0	16.5
Dec 82	2.5	1.0	18.0
Jan 83	2.0	0.0	20.0
Feb 83	2.0	0.0	22.0
Mar 83	2.5	0.0	24.5
Apr 83	2.0	0.0	26.5
May 83	2.0	0.0	28.5
Jun 83	2.5	4.0	27.0
Jul 83	2.0	2.0	27.0
Aug 83	2.5	0.0	29.5
Sep 83	2.0	0.0	31.5
Oct 83	2.0	0.5	33.0

ANNUAL LEAVE OHIO UNIVERSITY CONTRACT

Zajicek, Dr. Iva F.

Date of Contract; 26 July 1981
Date of Arrival; 17 August 1981

House no; 9995 Jinja

Month	Accumulated	Taken	Balance
Jul 81	0.5	0.0	0.5
Aug 81	2.0	0.0	2.5
Sep 81	2.0	0.0	4.5
Oct 81	2.5	4.0	3.0
Nov 81	2.0	0.0	5.0
Dec 81	2.5	5.0	2.5
Jan 82	2.0	0.0	4.5
Feb 82	2.0	0.0	6.5
Mar 82	2.5	0.0	9.0
Apr 82	2.0	0.0	11.0
May 82	2.0	15.00	-2.0
Jun 82	2.0	1.0	-1.0
Jul 82	2.5	4.0	-2.5
Aug 82	2.0	3.0	-3.5
Sep 82	2.5	0.0	-1.0
Oct 82	2.0	0.0	1.0
Nov 82	2.0	0.0	3.0
Dec 82	2.5	4.0	1.5
Jan 83	2.0	0.0	3.5
Feb 83	2.0	0.0	5.5
Mar 83	2.5	1.0	7.0
Apr 83	2.0	5.0	4.0
May 83	2.0	0.0	6.0
Jun 83	2.5	0.0	8.5
Jul 83	2.0	0.0	10.5
Aug 83	2.5	1.0	12.0
Sep 83	2.0	0.0	14.0
Oct 83	2.0	0.0	16.0

ANNUAL LEAVE OHIO UNIVERSITY CONTRACT

Ramsay, Mrs Janet

Date of Contract; 24 August 1981

Date of Arrival; 12 September 1981

House no; 10274 Maru-a-Pula

Month	Accumulated	Taken	Balance
Aug 81	0.5	0.0	0.5
Sep 81	2.0	0.0	2.5
Oct 81	2.5	0.0	5.0
Nov 81	2.0	0.0	7.0
Dec 81	2.5	6.0	3.5
Jan 82	2.0	0.0	5.5
Feb 82	2.0	0.0	7.5
Mar 82	2.5	0.0	10.0
Apr 82	2.0	0.0	12.0
May 82	2.0	0.0	14.0
Jun 82	2.0	3.0	13.0
Jul 82	2.5	15.0	0.5
Aug 82	2.5	0.0	2.5
Sep 82	2.5	0.0	5.0
Oct 82	2.0	0.0	7.0
Nov 82	2.0	0.0	9.0
Dec 82	2.5	4.0	7.5
Jan 83	2.0	0.0	9.5
Feb 83	2.0	0.0	11.5
Mar 83	2.5	1.0	13.0
Apr 83	2.0	1.0	14.0
May 83	2.0	0.0	16.0
Jun 83	2.5	0.0	18.5
Jul 83	2.0	0.0	20.5
Aug 83	2.5	1.0	22.0
Sep 83	2.0	0.0	24.0
Oct 83	2.0	0.0	26.0

ANNUAL LEAVE RECORD, OHIO UNIVERSITY CONTRACT

Steele, Dr. James D.

Date of Contract: 26 July 1981

Date of Arrival: 13 August 1981

House: 6202 Petleke

Month	Accumulated	Taken	Balance
Jul 81	0.5	0.0	0.5
Aug 81	2.0	0.0	2.5
Sep 81	2.0	0.0	4.5
Oct 81	2.5	1.0	6.0
Nov 81	2.0	0.0	8.0
Dec 81	2.5	5.0	5.5
Jan 82	2.0	0.0	7.5
Feb 82	2.0	0.0	9.5
Mar 82	2.5	12.0	0.0
Apr 82	2.0	0.0	2.0
May 82	2.0	15.0	-11.0
Jun 82	2.0	0.0	-9.0
Jul 82	2.5	0.0	-6.5
Aug 82	2.0	0.0	-4.5
Sep 82	2.5	0.0	-2.0
Oct 82	2.0	0.0	0.0
Nov 82	2.0	0.0	2.0
Dec 82	2.5	4.0	0.5
Jan 83	2.0	0.0	2.5
Feb 83	2.0	0.0	4.5
Mar 83	2.5	0.0	7.0
Apr 83	2.0	0.0	9.0
May 83	2.0	0.0	11.0
Jun 83	2.5	0.0	13.5
Jul 83	2.0	0.0	15.5
Aug 83	1.0	0.0	16.5

Dr. Steele departed Post on 13 August 1983. Leave Record Closed.

ANNUAL LEAVE RECORD, OHIO UNIVERSITY CONTRACT

Helms, Dr. Thomas

Date of Contract: 1 August 1983

Date of Arrival; 28 July 1983

House No 5511 Broadhurst

Month	Accumulated	Taken	Balance
Aug 81	2.0	0.0	2.0
Sep 81	2.0	0.0	4.0
Oct 81	2.5	1.0	5.5
Nov 81	2.0	0.0	7.5
Dec 81	2.5	0.0	10.0
Jan 82	2.0	0.0	12.0
Feb 82	2.0	0.0	14.0
Mar 82	2.5	0.0	16.5
Apr 82	2.0	1.5	17.0
May 82	2.0	0.0	19.0
Jun 82	2.0	1.0	20.0
Jul 82	2.5	16.0	6.5
Aug 82	2.0	0.0	8.5
Sep 82	2.5	0.0	11.0
Oct 82	2.0	0.0	13.0
Nov 82	2.0	0.0	15.0
Dec 82	2.5	2.0	15.5
Jan 83	2.0	0.0	17.5
Feb 83	2.0	0.0	19.5
Mar 83	2.5	5.0	17.0
Apr 83	2.0	12.0	7.0
May 83	2.0	0.0	9.0
Jun 83	2.5	0.0	11.5
Jul 83	2.0	0.0	13.5

Dr. Helms departed Post on 31 July 1983. Leave Record Closed.

ANNUAL LEAVE, OHIO UNIVERSITY CONTRACT

Haseley, Dr. Luther

Date of Contract; July 1983
Date of Arrival; 2 August 1983

House no; 5511 Broadhurst

Month	Accumulated	Taken	Balance
Jul 83	1.0	0.0	1.0
Aug 83	2.0	0.0	3.0
Sep 83	2.0	0.0	5.0
Oct 83	2.0	0.0	7.0

ANNUAL LEAVE, OHIO UNIVERSITY CONTRACT

Blue, Dr. Marion

Date of Contract; 15 August, 1983
Date of Arrival; 25 August, 1983

House; 6202 Petleke

Month	Accumulated	Taken	Balance
Aug 83	1.0	0.0	1.0
Sep 83	2.0	0.0	3.0
Oct 83	2.0	0.0	5.0

SICK LEAVE, OHIO UNIVERSITY CONTRACT (15 days per year)

Knox, Dr. Donald M.

Date of Contract 22 June 1981

Date of Arrival 22 July 1981

Date	Accrued	Taken	Balance
Jul 81	1.25	0.0	1.25
Aug 81	1.25	0.0	2.50
Sep 81	1.25	0.0	3.75
Oct 81	1.25	0.0	5.00
Nov 81	1.25	0.0	6.25
Dec 81	1.25	0.0	7.50
Jan 82	1.25	0.0	8.75
Feb 82	1.25	0.0	10.00
Mar 82	1.25	0.0	11.25
Apr 82	1.25	0.0	12.50
May 82	1.25	0.0	13.75
Jun 82	1.25	0.0	15.00
Jul 82	1.25	0.0	16.25
Aug 82	1.25	0.0	17.50
Sep 82	1.25	1.5	17.25
Oct 82	1.25	0.5	18.00
Nov 82	1.25	0.0	19.25
Dec 82	1.25	0.0	20.50
Jan 83	1.25	0.0	21.75
Feb 83	1.25	0.0	23.00
Mar 83	1.25	0.0	24.25
Apr 83	1.25	0.0	25.50
May 83	1.25	0.0	26.75
Jun 83	1.25	0.0	28.00
Jul 83	1.25	0.0	29.25
Aug 83	1.25	0.0	30.50
Sep 83	1.25	0.0	31.75
Oct 83	1.25	0.0	33.00

15

SICK LEAVE, OHIO UNIVERSITY CONTRACT (15 days per year)

Zajicek, Dr. Iva F.

Date of Contract: 26 July 1981

Date of Arrival: 17 August 1981

Date	Accrued	Taken	Balance
Aug 81	1.25	0.0	1.25
Sep 81	1.25	0.0	2.50
Oct 81	1.25	0.0	3.75
Nov 81	1.25	0.0	5.00
Dec 81	1.25	0.0	6.25
Jan 82	1.25	1.0	6.50
Feb 82	1.25	0.0	7.75
Mar 82	1.25	0.0	9.00
Apr 82	1.25	0.0	10.25
May 82	1.25	0.0	11.50
Jun 82	1.25	0.0	12.75
Jul 82	1.25	0.0	14.00
Aug 82	1.25	0.0	15.25
Sep 82	1.25	0.0	16.50
Oct 82	1.25	0.0	17.75
Nov 82	1.25	0.0	19.00
Dec 82	1.25	0.0	20.25
Jan 83	1.25	0.0	21.50
Feb 83	1.25	0.0	22.75
Mar 83	1.25	0.0	24.00
Apr 83	1.25	0.0	25.25
May 83	1.25	0.0	26.50
Jun 83	1.25	0.0	27.75
Jul 83	1.25	0.0	29.00
Aug 83	1.25	0.0	30.25
Sep 83	1.25	0.0	31.50
Oct 83	1.25	0.0	32.75

SICK LEAVE, OHIO UNIVERSITY CONTRACT (15 days per year)

Ramsay, Mrs. Janet

Date of Contract: 24 August 1981

Date of Arrival: 12 September 1981

Date	Accrued	Taken	Balance
Sep 81	1.25	0.0	1.25
Oct 81	1.25	0.0	2.50
Nov 81	1.25	0.0	3.75
Dec 81	1.25	0.0	5.00
Jan 82	1.25	1.0	5.25
Feb 82	1.25	0.0	6.50
Mar 82	1.25	0.0	7.75
Apr 82	1.25	0.0	9.00
May 82	1.25	0.0	10.25
Jun 82	1.25	0.0	11.50
Jul 82	1.25	0.0	12.75
Aug 82	1.25	3.0	11.00
Sep 82	1.25	1.5	10.75
Oct 82	1.25	0.0	12.00
Nov 82	1.25	0.0	13.25
Dec 82	1.25	0.0	14.50
Jan 83	1.25	0.0	15.75
Feb 83	1.25	0.0	17.00
Mar 83	1.25	0.0	18.25
Apr 83	1.25	0.0	19.50
May 83	1.25	0.0	20.75
Jun 83	1.25	0.0	22.00
Jul 83	1.25	0.0	23.25
Aug 83	1.25	0.0	24.50
Sep 83	1.25	1.0	24.75
Oct 83	1.25	0.0	26.00

SICK LEAVE, OHIO UNIVERSITY CONTRACT (15 days per year)

Steele, Dr. James D.

Date of Contract: 26 July 1981

Date of Arrival: 13 August 1983

Date	Accrued	Taken	Balance
Aug 81	1.25	0.0	1.25
Sep 81	1.25	0.0	2.50
Oct 81	1.25	0.0	3.75
Nov 81	1.25	0.0	5.00
Dec 81	1.25	0.0	6.25
Jan 82	1.25	0.0	7.50
Feb 82	1.25	1.0	7.75
Mar 82	1.25	0.0	9.00
Apr 82	1.25	0.0	10.25
May 82	1.25	0.0	11.50
Jun 82	1.25	0.0	12.75
Jul 82	1.25	0.0	14.00
Aug 82	1.25	0.0	15.25
Sep 82	1.25	0.0	16.50
Oct 82	1.25	0.0	17.75
Nov 82	1.25	0.5	18.50
Dec 82	1.25	0.0	19.75
Jan 83	1.25	0.0	21.00
Feb 83	1.25	0.0	22.25
Mar 83	1.25	0.0	23.50
Apr 83	1.25	0.0	24.75
May 83	1.25	0.0	26.00
Jun 83	1.25	0.0	27.25
Jul 83	1.25	0.0	28.50
Aug 83	.50	0.0	29.00

Dr. Steele departed post on 13 August 1983. Sick leave record closed.

SICK LEAVE, OHIO UNIVERSITY CONTRACT (15 days per year)

Helms, Dr. Thomas

Date of Contract: 1 August 1981
Date of Arrival: 18 July 1981

Date	Accrued	Taken	Balance
Aug 81	1.25	0.0	1.25
Sep 81	1.25	0.0	2.50
Oct 81	1.25	0.0	3.75
Nov 81	1.25	1.0	4.00
Dec 81	1.25	1.0	4.25
Jan 82	1.25	0.0	5.50
Feb 82	1.25	0.0	6.75
Mar 82	1.25	0.0	8.00
Apr 82	1.25	0.0	9.25
May 82	1.25	0.0	10.50
Jun 82	1.25	0.0	11.75
Jul 82	1.25	0.0	13.00
Aug 82	1.25	3.0	11.25
Sep 82	1.25	2.5	10.00
Oct 82	1.25	0.5	10.75
Nov 82	1.25	0.0	12.00
Dec 82	1.25	1.5	11.75
Jan 83	1.25	1.5	11.50
Feb 83	1.25	0.0	12.75
Mar 83	1.25	0.0	14.00
Apr 83	1.25	1.0	14.25
May 83	1.25	0.0	15.50
Jun 83	1.25	0.0	16.75
Jul 83	1.25	0.0	18.00

Dr. Helms departed post on 31 July 1983. Sick leave record closed.

SICK LEAVE, OHIO UNIVERSITY CONTRACT (15 days per year)

Haseley, Dr. Luther

Date of Contract:

Date of Arrival: 2 August 1983

Date	Accrued	Taken	Balance
Aug 83	1.25	0.0	1.25
Sep 83	1.25	0.0	2.50
Oct 83	1.25	0.0	3.75

SICK LEAVE, OHIO UNIVERSITY CONTRACT (15 days per year)

Blue, Dr. Marion

Date of Contract: 15 August 1983

Date of Arrival: 25 August 1983

Date	Accrued	Taken	Balance
Sep 83	1.25	0.0	1.25
Oct 83	1.25	0.0	2.50

CHAPTER III

REPORT OF PROGRESS FOR THE SIX MONTH PERIOD

Since this report is written specifically for the United States Agency for International Development (USAID), as a requirement of the contract AFR 0222-C-00-1066-00, most of the report will be written with that specific audience in mind. The Chief of Party, however is greatly indebted to the Primary Education Improvement Project Advisory Committee, chaired by Mr. M. Mogasha, Acting Chief Education Officer for Primary and Teacher Training, for its graciousness in also accepting this report to that body as well, in lieu of an annual work plan. This was accepted by the Advisory Committee since Chapter IV of each Semi-Annual Report always contains the plans for the next six month period of time. Longer range planning is done consistently, and such reports are submitted, approved and find their way into the Appendix section of these reports.

The semi-annual report is a time consuming activity, and it is greatly appreciated that PEIP team members can use one vehicle for reporting purposes and spend the majority of their time on actual project activities.

The six month period from 1 May 1983 through 31 October 1983 was one of high activity and rather significant accomplishment for the Ohio University Contract team and the Primary Education Improvement Project. Highlighted during this particular reporting period is the fact that the mid-contract evaluation was conducted by AID/Washington through their representative, Dr. Jean Meadowcroft, who arrived in Botswana on Tuesday, September 20 and departed on Tuesday, October 4, 1983. Dr. Meadowcroft chaired an evaluation team consisting of Dr. Laurie Mailloux, Dr. Ann Domidion of USAID/Botswana; Mr. P.V. Sephuma of the Ministry of Education; and Professor B. Otaala of the University of Botswana. All aspects of the project were under scrutiny, and the final report will be forthcoming within the very near future. Dr. Meadowcroft did conduct an exit interview with members of the Ministry of Education, USAID, and the Ohio University Contract for purposes of discussing the results of the evaluation. The final copy of the evaluation will be published in the appendix of the next report.

Two short term consultants served the contract during this reporting period: Dr. Doris Brodeur and Dr. Raymond LeGrand. Dr. Brodeur served as a consultant in Educational Media, and Dr. LeGrand served as external examiner for the second year pre-service students at the University and as a consultant to the Ministry of Education to develop a plan of implementation for the report submitted by Dr. Max Evans (see Appendix A of Semi-Annual Report No.

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2).

Another highlight of this reporting period was the graduation of ten Diploma in Primary Education students. Of these ten students, two were admitted to the Bachelor of Education degree program, one to the third year and the other to the second year. This action was taken by the University Senate at its meeting in June, 1983. All diploma graduates have been assigned to posts of responsibility by the Ministry of Education. A listing of these graduates and their previous and new assignments appear in Appendix I of this report.

Specific accomplishments during this reporting period are listed on the following pages of this chapter.

General Report From The Chief of Party - Dr. Donald M. Knox

1. The following new courses were added to Year 3 of the pre-service program:
 - a. EPI 300 Teaching Mathematics in Primary Schools
 - b. EPI 340 Teaching Social Studies in the Primary Schools
 - c. EPI 360 Test Construction and Integration in Primary Education (This course is taught by the Department of Educational Foundations)

2. During this reporting period all hardware commodities in the form of audio-visual equipment was procured for the Educational Media Center and for various Teacher Training Colleges. A complete listing of this equipment can be found in Appendix II of this report.

3. Four Staff Development Fellows (Participants) were selected for overseas studies in the United States during May of 1983. These cover the areas of Mathematics Education; Media; Teaching English as a Second Language; and Curriculum/Supervision, the latter being a SDF for the Ministry of Education. As of the writing of this report one has departed for study at Ohio University. Mr. Dumma Mapolelo departed Botswana in September to study in the area of Mathematics Education. A special comment should be made with respect to this particular participant. Since Mr. Mapolelo did not possess a bachelor's degree, it was not possible for the University of Botswana to employ him as a University SDF (this is due to the fact that there is no salary schedule for non-degree personnel within the academic area). To salvage this situation, however, the Ministry of Education, through the kind offices of Mr. Swartland (Acting Permanent Secretary) and Mr. Sephuma (Acting Deputy Permanent Secretary), agreed to select Mr. Mapolelo as a MOE SDF for the period of time it takes for him to complete his

B.Ed. degree. Ohio University agreed to admit him to junior standing and plan a program for him to complete his B.Ed. degree in approximately six quarters of study. Upon receipt of his first degree, he will be admitted to the M.Ed. degree program at Ohio University and concurrently picked up as a University of Botswana SDF to fill the slot in Mathematics Education. It is anticipated that it will take Mr. Mapolelo another six quarters to complete the M.Ed. degree. It is projected that he will be in studies abroad for a three year period of time. Prior approval for this was obtained from the USAID Mission Director.

Other participants selected for study are as follows: Mr. Paul Nleya in Media Education. We have a letter stating that he will be admitted provisionally to Indiana University. This agreement was obtained through the kind efforts of Dr. Doris Brodeur who is a graduate of that institution. Ms. Lydia Nyati was selected in the area of Teaching English as a Second Language. She has yet to be admitted to an American University. Ms. Pricilla Marope was selected in the area of curriculum and supervision. She has been admitted to Pennsylvania State University. It is expected that she will depart in late December of 1983.

Delaying Action: Five SDFs were recommended by the selection committee, but one was not approved for release by the Ministry of Education. This was in the area of Educational Administration. A sixth individual was identified in the area of Science Education, but she did not appear for the interview. A further delay has resulted from the fact that we are attempting to secure admission for the remaining participants to universities other than Ohio University. It was proposed that all students be sent first to Ohio University for one quarter of study and orientation and following that transferred to other schools. This would eliminate the six week turn-around time it takes to get mail to and from Botswana. USAID felt, however, that this would be disrupting to the participants and that we should attempt, first, to secure admission directly to the desired institutions. This item may be re-opened as a result of one recommendation that is forthcoming from the mid-contract evaluation report.

4. Since the last semi-annual report a new Phase I of in-service workshops has been conducted. Phase II also was initiated during the week of October 24, 1983. This second phase is expected to be completed in February of 1984. Particulars for in-service will be covered later in this chapter.

5. Dr. Thomas Helms, In-Service Specialist, departed post, completing his tour of duty with the Ohio University Contract, on 31 July 1983. Dr. Helms has subsequently assumed his duties as Associate Professor of Education at Ohio University.

6. Dr. Luther Haseley, newly appointed In-Service Specialist, arrived on post to replace Dr. Helms on 2 August 1983.

7. Dr. James D. Steele, Mathematics/Science Specialist, departed post, completing his tour of duty with the Ohio University Contract, on 13 August 1983. Dr. Steele has resumed his duties as Associate Professor of Education at Youngstown State University.

8. Dr. Marion Blue, newly appointed Mathematics/Science Specialist, arrived on post to replace Dr. Steele on 25 August 1983.

9. Dr. Raymond LeGrand arrived in Botswana on 20 May 1983 to serve as external examiner for second year students. He subsequently remained in the country to consult with the Ministry of Education in the development of an implementation plan for the Evans Report. A copy of this report can be found in Appendix III. Dr. LeGrand departed Botswana on 10 July 1983.

10. Dr. Iva F. Zajicek, Mrs. Janet Ramsay, and Dr. Donald Knox took Home Leave in the United States during the months May through August. Since all home leaves were taken prior to the completion of tours of duty, written approval had been secured from the Mission Director. Early home leave was taken for the convenience of the project, since this was the only time that the University was not in session and classes would not be missed. Workshops were held as scheduled. Home leaves were scheduled around the in-service plan.

11. The first ten Diploma in Primary Education (DPE) students completed their studies in May, 1983. They were graduated formally at the Graduation Ceremony held at the University of Botswana on 8 October 1983. Of the ten who completed the diploma program, two were selected to enter the B.Ed. degree program. One entered at the third year, and one entered at the second year. The student who entered at the third year did not receive her diploma per se although she did complete the program. Since she was permitted by University Senate to enter year three she was treated as all other B.Ed. degree students in that category. The student who entered at year two, however, did receive his Diploma in Primary Education. A listing of the postings of Diploma graduates appears in Appendix I.

12. Three students were admitted to the Guidance component of the pre-service program. Dr. G. Kibria, through consultation with Dr. Sally Navin of Ohio University, has developed a third year course for these identified participants. A fourth year course will complete this component of their training next year. See Appendix IV for the Navin Report.

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13. The third class of students were admitted to full time studies in primary education beginning August of 1983. A total of 29 students were admitted: 10 Diploma and 19 B.Ed. students.

14. The Ohio University Contract was amended to add a sixth person to the team in Botswana. It is anticipated that this individual will soon be nominated to the Mission and the Government of Botswana for final approval in time for his/her arrival on post by 1 January 1984.

15. During this reporting period the entire project was photographed by TOPIC MAGAZINE the official journal of the United States Informations Service. It is anticipated that this issue will be forthcoming this year.

16. A film crew visited the pre-service project in September 1983 for purposes of developing a TV series on Education in Africa. This, also, was sponsored by the United States Information Service.

17. Through the efforts of the Ministry of Education a Standard 5 class of students from the Tshiamo Primary School, situated near the four-way stop to the south of the University campus, was installed in the Demonstration Classroom at the Primary Education Centre. This class is currently being used for observation purposes, for classroom demonstrations, for testing new curriculum materials, and for developing new teaching methodologies.

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READING LANGUAGE ARTS REPORT - Dr. Iva Zajicek

During the reporting period, May 1, 1983 through October 31, 1983, the reading/language arts specialist:

1. Prepared and conducted a third round of "multiplier effect" reading workshops, Lobatse, May 2nd - 5; Gaborone, June 27 - 30; Francistown, August 121-25.
 2. Returned to the United States from May 20 to June 22 for home leave.
 3. Served as acting Chief of Party of the project and acting Head of the Department of Primary Education during the absence of Dr. Donald Knox, July 10 - August 20.
 4. Participated in Primary English Curriculum Panel meetings and activities.
 5. Developed a new course in the Primary Education Bachelor of Education program, EPI 340--Teaching Primary School Social Studies.
 6. Taught courses EPI 210 Teaching Primary School Language Arts and Social Studies in the Diploma program and EPI 340--Teaching Primary School Social Studies in the Bachelor of Education program.
 7. Worked with the teacher of the Standard V demonstration class presently housed in the Primary Education Centre. Introduced and assisted with the use of equipment such as the tape recorder, listening station and language master in the classroom.
 8. Served on the Teaching Practice Moderation Team for the Faculty of Education. Visited students of Lobatse Teacher Training College, October 4-7, and students of Serowe Teacher Training College, October 11-14.
 9. Prepared a fourth round of "multiplier effect" reading workshops. Conducted the first in Molepolole, October 24-27.
 10. Participated in project activities such as attending planning meetings, cooperating with USAID film crew and selecting staff development fellows.
 11. Participated in activities of the University, Faculty of Education and Primary Education Department. These included preparing course materials for the external examiner, attending Faculty Board and other meetings and attending graduation exercises.
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TEACHING ENGLISH AS A SECOND LANGUAGE REPORT -

Ms. Janet Ramsay

The following is a listing of accomplishments and activities of the TESL specialist during this reporting period, May 1, 1983 through October 31, 1983.

1. Prepared and conducted the third series of TESL in-service workshops. May 2-5 in Francistown, June 27-30 in Gaborone and August 22-26 in Serowe. The first workshop of the fourth series of workshops was prepared and presented October 24-27 in Francistown.
2. Prepared course materials and began to teach EPI 220 Teaching English as a Second Language and EPI 215 Diagnostic Teaching.
3. Attended Primary English Curriculum Panel meetings called by the Curriculum Development Unit of the Ministry of Education.
4. Met with English tutors from the Teacher Training Colleges to coordinate the content of the course and obtain input for the final examination. Collected sample questions from the colleges and wrote the final English examination.
5. Met with Dr. Betty Taska, USIS English Language Teaching Specialist to discuss the coordination of language teaching in Botswana.
6. Completed the analysis and final draft of "Assessing Instructional Needs with Language Experience Stories". The paper was presented at The Fifth TESOL Summer Meeting, "Evaluation in ESL Programs", at the Ontario Institute for Studies in Education, Toronto, July 21-23, 1983.
7. Ms. Thantshi Masitara, lecturer in the Faculty of Education at the University of Botswana, attended the Teachers of English to Speakers of Other Languages (TESOL) Summer Institute at the University of Toronto, July 4-August 12, 1983. Ms. Masitara was enrolled in two courses: Methodological Issues in Teaching English as a Second Language - Young Learners taught by Dr. Carole Urzua, Lewis and Clark College and Talking and Learning in a First Language, University of Bristol. This was a very valuable experience for Ms. Masitara because it gave her an opportunity to become acquainted with the latest in first and second language research and with a number of the educators involved in this research. The highlight of Ms. Masitara's experience was applying the research findings to actual teaching in a primary classroom. This enhanced her knowledge of primary school pupils and benefit the B.Ed. Primary students at the University of Botswana.
8. A TESL staff development fellow, Ms. Lydia Nyati, was

interviewed, selected and released by the Ministry of Education to the University on August 11, 1983. She is assisting the TESL specialist with lectures, preparation of TTC English examinations, Primary English Curriculum Panel meetings, preparation and presentation of the October 24-27 "Multiplier Effect" workshop.

9. Attended the "Seminar on Teacher Training College Curriculum" organized by the Faculty of Education at the University of Botswana.

10. Presented an afternoon workshop on "Visual Memory" sponsored by Botswana Council of Women for pre-school teachers.

11. Participated in meetings relevant to PEIP, the Ministry of Education and the Faculty of Education at the University of Botswana.

IN-SERVICE EDUCATION REPORT - Dr. Luther Haseley

Following is a listing of the accomplishments and activities of the In-service specialist during the reporting period.

1. Attended workshops on symposiums on education; National Symposium on Education for Development, August 16-19; British Council workshop "In-service for Education officers, Lobatse August 15-16; British Council workshop, Serowe August 30-September 9.

2. Helped organise and convene P.E.I.P workshops, Francistown, August 21-25; Francistown and Mahalapye, October 24-27.

3. In-service follow up; PEIP workshop for participating schools, Serowe October 3-4; helped plan for follow-up to British Council workshop Serowe, October 10-14; visited 14 primary schools affiliated with the PEIP program.

4. Attended professional/staff meetings: Approximately 15 meetings with Ministry of Education personnel to discuss teacher education and Pre-service/In service education; five meetings with Primary Education Team to discuss PEIP workshops and In-service education.

5. Visitations: TTC in Serowe, Lobatse, Francistown; Education Centres in Serowe, Lobatse, Mochudi, Mahalapye; 30 primary schools in the above areas.

6. Developmental Activities (in progress): working on Ministry of Education committee to develop plan to reorganise Ministry of Education in regard to teacher education; working on committee to develop plan to implement the Evans and LeGrand reports; working with In-service leader to develop plans to: effectively deploy PEIP participants who will be available for in-service activities; select criteria for choosing new PEIP schools; develop plans for utilization of Education Centres under new organisation plan; developing modified follow up procedures for PEIP workshops with primary education staff and evaluation consultant.

7. Initiated video-taping of PEIP workshop presentations by the Primary Education staff and follow up workshops by PEIP participants.

MATHEMATICS AND SCIENCE REPORT - Dr. Marion Blue

Following is a partial listing of accomplishments and activities of the Mathematics/Science specialist since arrival on post August 25, 1983 and continuing through the period of November 1, 1983.

1. Planned, prepared and presented a Phase IV workshop for the Central District at Mahalpye.
2. Attended a session of the planning committee of the Botswana Science Teacher Association.
3. Prepared syllabi for teaching the courses of Mathematics EPM 130, Mathematics Education EPI 200, and Mathematics EPI 300.
4. Have learned students in the above 3 classes by name.
5. Prepared materials and the students of EPI 200 for teaching standard five pupils attending the PEIP demonstration class in this building. These materials were used by EPI 200 students to teach primary pupils while being filmed by a television team from USIS.
6. The mathematics /science specialist has met with the Exam Committee to plan for assisting with the November scoring team.
7. The mathematics/science specialist has met with Mr. Alan Grihault of the Botswana Ministry of Education Mathematics Panel to assist in preparation of materials, sharing of ideas and to assist in arrangements for meeting accommodations for the panel meeting in October.
8. The mathematics/science specialist has twice been invited to attend meetings of the secondary mathematics/science department to offer input into course content and the implementation of course offerings.
9. This specialist has met with the primary teacher of standard five of the demonstration class on four different occasions. He has also presented a lesson to the class.
10. Along with Dr. Haseley of In-service, he has visited several primary schools and classes in the area.
11. Attendance at 5 Primary Education Staff and 2 Faculty of Education meetings is noted.
12. He has met with the United States Ambassador to Botswana, the Vice-Chancellor of the University, the Dean of the Faculty of Education, the Mayor of Gaborone and many USAID officers.
13. Counselling with student advisees in arranging class and

course schedules has been done.

14. Affiliation has been made with the Rotary Club of Gaborone and the Gaborone Singers.

CHAPTER IV

PLANS FOR THE PERIOD 1 NOVEMBER 1983 THROUGH 30 APRIL 1984

Paramount in the next six months of this contract project will be a major addition to the scope of work and the addition of a sixth person to the contract team. This redefinition of our scope of work will include setting up the implementation plan for the Teacher Performance Assessment Instruments developed by the Teacher Assessment Project, College of Education, University of Georgia and the Georgia Department of Education. Targeted for training in the utilization of this instrument will be the following: members of the Ohio University Contract Team; lecturers in the Faculty of Education at U.B.; all Tutors in the Teacher Training Colleges; selected individuals from the Ministry of Education, the Education Officers, and the Head Teachers of primary schools in Botswana. The Ohio University Contract was subsequently amended to add a sixth person to the team in order to facilitate the implementation of this scope of work.

In addition to the above the following project plans for the next six month period are presented:

1. With reference to the report submitted by the Mid-Contract Evaluation team, the following actions will be taken:

a. Two SDFs (Participants) will be identified and submitted for approval for study in the United States. Areas of study will be Science Education and Administration/Planning (In-service)(MOE).

b. Shelving and cabinets will be recommended for purchase and installation within the Primary Education Centre.

c. A recommendation to the Faculty Senate will be made to enable the Department of Primary Education to section students into diploma and degree programs following their first year of studies at the University. This recommendation has already received approval, in principle, by the Senate Executive Committee at its meeting in May of 1983, but it failed to be placed on the agenda at either the June or September meetings of the Senate.

d. Arrangements will be made for the consultancy of Dr. Albert Leep, Professor of Education at Ohio University to visit the project in May of 1984.

e. Meetings will be held with the In-service

Specialist and Dr. Brian Axtell in order to develop a proposal for compiling more exact data with respect to in-service attendance at spinoff workshops.

f. Project data such as inventories, class lists and the like will be forwarded, as a matter of record, to the USAID Human Resource Development Officer so that a records file can be established at that level.

2. A continuing workshop for Education Officers, in the area of Educational Administration, will be initiated through cooperation with the Ministry of Education and the PEIP program will be established. It is anticipated that from three to four workshops per year will be conducted. A workshops curriculum spanning a two year period of time will be presented for consideration.

3. The three Staff Development Fellows (Participants) who are currently in this country awaiting admissions to American Universities will be processed for departure. It is projected that all three will depart Botswana prior to the end of December 1983.

4. Dr. Albert Leep will be recommended to the Faculty of Education Board and subsequently to the Faculty Senate for approval to serve as external examiner for the second and third year students in the pre-service program.

5. The sixth person to be added to the Ohio University team will be nominated, approved and on post by 1 January 1984.

PROJECTED PLANS, READING LANGUAGE ARTS SPECIALIST -
Dr. Iva Zajicek

During the next six month reporting period, the reading/language arts specialist plans to:

1. Conduct two remaining reading workshops in Phase I of the "multiplier effect" workshops, December 12-15, Serowe and February 6-9, Francistown.
2. Plan the first round of workshops in Phase II of the "multiplier effect" workshops presently projected to begin in April, 1984.
3. Work with returning participant, Texan Mautle. Mr. Mautle will complete a Master's degree in November and will return to assume teaching responsibilities in the Primary Education Department.
4. Continue work with the Primary English Curriculum Panel.
5. Work with a group of pre-school educators interested in pre-reading activities.
6. Continue participation in all activities relevant to the Primary Education Improvement Project.

PROJECTED PLANS - TEACHING ENGLISH AS A SECOND LANGUAGE -
Ms. Janet Ramsay

During the next six-month reporting period, the TESL specialist intends to:

1. Present two TESL workshops in the fourth series of "multiplier" in-service workshops. December in Lobatse and February in Mahalapye.
2. Plan, with the In-service leader, the second phase of "multiplier" in-service workshops.
3. Continue teaching EPI 220 Teaching English as a Second Language, EPI 215 Diagnostic Teaching. Prepare course materials and teach EPI 420 Methods of Second Language Teaching in Primary Schools.
4. Continued participation in the Primary English Curriculum Panel meetings and on the sub-committee for liaison with the National (Secondary) English Panel.
5. Continue as English Moderator for the Teacher Training Colleges. The moderator will supervise the marking of the final examination and call meetings to coordinate the content of the curriculum at the three colleges.
6. Supervise university students working with the primary school demonstration class located in the Primary Education Centre. All students will apply learning theories to an actual classroom situation.
7. Continue participating in meetings relevant to the Faculty of Education, the Ministry of Education, in-service aspects of PEIP, and teaching English in Botswana.

IN-SERVICE EDUCATION PROJECTED PLANS - Dr. Luther Haseley

1. To help coordinate and convene the PEIP workshops scheduled in December 12-15 and February 6-9.
2. To attend spin off workshops conducted by PEIP participants.
3. To assist in the development of a plan to choose appropriate teams for the next phase of the PEIP.
4. To continue working with Ministry of Education committees concerned with teacher education and In-service education.
5. To develop a two year continuing education plan for education officers and interested Ministry of Education Officers in accordance with the recommendation set forth by Dr. LeGrand in his report to the Ministry of Education.
6. To do a follow-up in selected primary schools affiliated with the PEIP program.
7. To video tape various workshops and classroom activities as they relate to PEIP.

PROJECTED PLANS FOR MATHEMATICS/SCIENCE EDUCATION -
Dr. Marion Blue

During the period November 1 1983 to April 30 1984, the Mathematics/Science specialist plans to:

1. Plan, prepare and present 3 PEIP workshops.
2. Continue to familiarize himself with schools and personnel in PEIP teams.
3. Provide input into selection of a SDF in the area of Science Education and assist in necessary processing for study in the United States.
4. Continue to assist the Standard Five teacher and class presently attending school in the Primary Education Building of this University.
5. Assist in the monitoring of marking of the Primary Teacher Certificate Examination during the week of November 14 through 18, 1983 and by meeting with the Mathematics Panel throughout this academic year for preparing the examination for 1984.
6. Arrange for a visit with Mr. Adrian Rosser, in Francistown, to view the Teaching Aide Production Unit and purchase such equipment as will be suitable for use in this project.
7. To continue to assist in making arrangements to meet with Mr. Alan Grihault and the Primary Mathematics Curriculum Panel of Botswana.
8. Continue to meet with the planning committee of the Science Teachers Association of Botswana.
9. Continue liaison with the Department of Secondary Mathematics/Science of the University of Botswana.
10. Continue to provide guidance and counselling to students as called upon.
11. Will order texts for 1984-85 academic year.

APPENDIX I

LIST OF GRADUATES DPE 1983

Name of Graduate	Class of School
Amos, Thomas, Othusitse, Matome	
Former Position: Senior Teacher..... Masedi School Box 140 Tonota	Group 2
Present Position: Deputy Head Teacher.... Masedi School Box 140 Tonota	Group 2
Kgengwenyane, Eva, Sehlime	
Former Position: Senior Teacher..... Camp Primary School P.O. Box 10011 Gaborone	Group 2
Present Position: Deputy Head Teacher.... Lesethane Primary School P.O. Box 114 Ramotswa	Group 3
Makgato, William	
Former Position: Assistant Teacher.... Machaneng School Box 6 Machaneng	Group 3
Present Position: Acting Deputy Head Teacher.... Two Rivers School c/o Central District Council	Group 4

Malefho, Ontefetse

Former Position: Assistant Teacher.... Group 1
 Motetshwane School
 P.O. Box 154
 Serowe

Present Position: Senior Teacher
 Riverside School
 Serowe

Marks, Enid

Former Position: Head Teacher.... Group 4
 Rases School
 P.O. Box 348
 Mochudi

Present Position: Acting Head Teacher.... Group 2
 Mmusi Primary School
 Mochudi

Matlhare, Bakwadi, Julia

Former Position: Deputy Head Teacher.... Group 3
 Molebatsi School
 P.O. Box 49,
 Moeng

Present Position: Acting Deputy Head Teacher.... Group 1
 Madikwe Primary School
 Bobonong

Modise Kgomotso

Former Position: Assistant Teacher.... Group 3
 Aerodrome School
 P.O. Box 718
 Francistown

Present Position: Acting Deputy Head Teacher.... Group 4
 Pelotelele Primary School
 North East District Council

Morebodi, Lynette

Former Position:

Assistant Teacher....
Neale Sechele Primary School
P.O. Box 35
Molepolole

Group 2

Present Position

Deputy Head Teacher....
Moshaweng Primary School

Group 4

Rarahobo, Seroro, Khoza*

Former Position:

Assistant Teacher....
Molebatsi
P.O. Box 48
Moeng

Group 3

Present Position:

Acting Deputy Head Teacher....
Lentswe le Moriti School
Lentswe le Moriti

Group 4

Sefiwa, Onteletse Cecilia**

Former Position:

Deputy Head Teacher....
Mosielele School
P.O. Box 72
Moshupa

Group 1

Present Position

Head Teacher....
Crescent School
Lobatse

Group 1

*Transferred to 2nd year B.Ed

**Transferred to 3rd year B.Ed

APPENDIX II

7	Collator Ideal 8116	244169	Allen Import		1311.00
8	Mimeograph Gestetner 1510	60A3815	B.M.S.		1665.00
9	Caramate Singer 44641	110456	Allen Import	26.8.83	957.00
10	2 lamps for above DDM, 80-W		Allen Import	26.8.83	55.00
11	10 Carousel Slide 8--slide tray		Allen Import	26.8.83	120.00
12	Filmstrip Proj- ector, Singer Instaload 35 Model 8134	A20518	Allen Import	26.8.83	1078.00
13	2 lamps for above,DDK 80W		Allen Import	26.8.83	66.00
14	4 Opaque Proj- ectors, Beseler Vu-Lyte IV	B180331 (Serowe) B180318 (F'town) B1080327 (Lobatse) B180101	Allen Import	26.8.83	4840.00

15	4 lamps for above. A1- 58, 1000W		Allen Import	28.6.83	176.00
16	Camera, Olympus XA2 + flash	4185363	Allen Import	28.6.83	246.00
17	2 batteries for above camera		Allen Import	28.6.83	n.c
18	3 film pro- jectors - Bell and Howell 16mm 1680G	0016069 (Lobatse) 0108016 (Serowe) 0254064	Allen Import	28.6.83	3384.00
19	6 lamps for above pro- jectors		Allen Import	28.6.83	118.80
20	3 Exciter lamps for above pro- jectors		Allen Import	28.6.83	45.00
21	Synchronised recorder, Audio- tronics audi- cassette, 152S	105130	Allen Import	28.6.83	429.00

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22	Cable		Allen Import	28.6.83	6.00
23	Audiocassette Tandberg TPR 101 portable	nil	Allen Import	28.6.83	132.00
24	9 Audio Tutors	10731359 10731360 (Serowe) 10730436 10730439 (Lobatse) 10731356 10731357 10731358 (F'town) 10730799 10730368	Allen Import	28.6.83	2574.00
25	4 listening centres, MPC PA 1900,+ junction box 8 headphones, carrying case	nil (F'town 1) (Serowe 1) (Lobatse 1)	Allen Import	28.6.83	860.00
26	Audiocard Reader, Tutorette Audiotronics 810A	815988	Allen Import	28.6.83	242.00
27	3 boxes blank cards/small 100 per box		Allen Import	28.6.83	66.00

28	2 boxes blank cards/large 100 per box		Allen Import	28.6.83	55.00
29	Cassette copier, mono Alpha 21, TCD 261	50011E	Allen Import	28.6.83	2200.00
30	Cassette tape eraser, Nortronics QM 212	nil	Allen Import	28.6.83	209.00
31	2 Flipchart Board & Easel	nil (F'town-1)	Rep Agencies	5.7.83	310.00
32.	10 flipchart pads (plain)	nil	Rep Agencies	5.7.83	90.00
33.	2 flipchart pads (graph)	nil	Rep Agencies	5.7.83	18.00
34.	2 Spring clamps (for above)	nil	Rep Agencies	5.7.83	3.00
35.	48 dry wipe markers for Ozalid board	nil	Rep Agencies	29.6.83	79.20

36.	Lettering system - Leteron Econ-o-sign IIC E.O.S.II	C52519	Rep Agencies	22.6.83	425.00
37.	4 sets DC-1000H capitals, lower, punctuation & numerals	nil	Rep Agencies	22.6.83	291.00
38.	25 rolls letertape	nil	Rep Agencies	22.6.83	220.00
39.	3 magnetic 2" letters Magi-board 136/set	nil	Rep Agencies	22.6.83	177.00
40.	Overhead projector, 3M, 213ADA	7660	Rep Agencies	22.6.83	325.00
41.	4 lamps for above projector	nil	Rep Agencies	22.6.83	72.00
42.	1 box acetate	nil	Rep Agencies	22.6.83	10.00

48

43.	Slide Projector Kodak Ekta- graphic, B-2AR	nil	Rep Agencies	28.6.83	545.00
44.	Zoom Lens for above projector	nil	Rep Agencies	28.6.83	103.00
45.	2 lamps for above projector	nil	Rep Agencies	28.6.83	28.00
46	Overhead Proj- ector, Kodak Ektagraphic B2AR	5669	Rep Agencies	28.6.83	325.00
47.	1 remote cont- rol device	nil	Rep Agencies	28.6.83	22.00
48	Computer, monitor stand,, video lead, disk drive Apple IIe Bundle		Apal Computers	23.6.83	3144.75
49.	Interface card Apple IIe		Apal Computers	23.6.83	273.00
50.	External Drive w/o control		Apal Computers	23.6.83	714.00
51.	Spinwriter letter quality		Apal Computers	13.9.83	2619.25

printer NEC

52	Printer cable	Apal Computers	21.6.83	55.00
53.	20 Dysan Disettes	Apal Computers	21.6.83	110.00
54.	Diskette Holder	Apal Computers	21.6.83	10.00
55.	Apple Writer IIe	Apal Computers	21.6.83	367.50
56.	Manual, prog- ramming, basic	Apal Computers	21.6.83	18.00
57.	Super serial card	Apal Computers	13.9.83	309.75
58.	Stapler, Maru- zen, electric	Office equip. and Services		115.05
			14.7.83	
59.	10 boxes stap- lers for above	Office equip . and Services		15.00
			14.7.83	
60.	40 Stencils Card lettering- Stenso	Office equip . and Services		92.40
			14.7.83	
61.	12 Stencils plastic ball pen	Office equip. and Services		7.80
			14.7.83	

62.	3 classroom maps - world, Africa, South- ern Africa	Office equip . and Services	56.85
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14.7.83

63.	2 Globes	Office equip. and Services	103.80
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14.7.83

APPENDIX III

AN IMPLEMENTATION PLAN
A Report Of A Consultancy

Prepared For The
BOTSWANA MINISTRY OF EDUCATION

By
Dr. R.A. LeGrand
Consultancy, John Carroll University
Cleveland, Ohio, U. S. A.

(USAID Contract AFR-0222-C-00-1066-00)

JULY, 1983

IMPLEMENTATION PLAN

WORD OF CAUTION

This implementation plan is designed to occur over a period of years. It will be read and digested over a period of hours or minutes. There will be a sense of becoming overwhelmed because of this condensing into a relatively few words what may take years to implement. Thus, I recommend that the margin notations be read first; then the plan in its entirety. This procedure should help to alleviate the problem.

ASSIGNMENT

In a meeting on June 1, 1983, it was decided that my purpose should be to design a series of definite steps which would implement the Evans' recommendations in the areas of: TTC self-study, Teacher Education, the in-service program, utilizing the TTCs and the Education Centers in co-operative in-service programs, the licensing of teachers for a career ladder and the development of the competency model in the in-service program.

Present at the Meeting were Mr. Mogasha, Mr. Purves, Dr. Knox, and myself.

ORIENTATION

Mr. Purves prepared an orientation which was designed to provide a view of the TTCs, Education Centers and the primary schools. The three TTCs were visited, as were two Education Centers and various primary schools.

In addition I took part in the TTC Seminar as well as the EO training session. Both of these opportunities provided insight into various aspects of my assignment, particularly the in-service issues.

PROCEDURE FOR THIS REPORT

During the intensive orientation I had the opportunity to carry on discussions with TTC principals, Education Center directors, Head Teachers and various other school personnel. As a plan of implementation developed, I had conferences with Mr. Swatland, Mr. Sephuma and Mr. Mogasha in order to insure that the plan reflected the facts of the Botswana situation. And of course, I was in regular communication with Mr. Purves who served as my contact with the Ministry of Education. A conference was also held with Mrs. Lesolie at which time I explained my task and requested her views on the area of in-service. I then orally reviewed the implementation plan as it was taking shape with Mr. Swatland, Mr. Sephuma, Mr. Mogasha and Mr. Purves and made any appropriate changes.

**DESIGN
OF THE
PLAN**

The plan is basically divided into six major sections:

- I. In-service
- II. First Five Year Plan
- III. Second Five Year Plan
- IV. Two Year License Plan
- V. TTC Self-Study
- VI. National Council on Teacher Education

Each major section is given in two parts:

1. Assumption In this part of the plan I have attempted to outline the basic assumptions which have arisen in my visits to schools and in my conversations with the various personnel.
2. Implementation Without specific action no movement will be made in putting the Evans' recommendations into place. Insofar as possible, a consensus seems to exist on the part of most of the people with whom I have spoken. I have made every effort to frame the implementation in some realistic form and to base it on structures and resources already in place.

I. IN-SERVICE

Assumptions

- Trained beginning teachers need further knowledge and skills in order to perform at the necessary level or competence.
- The pre-service and in-service education of teachers constitute the same process which is best planned and managed within the same organizational unit of the MOE.
- The TTCs have a special role to play in a two year in-service licensing scheme as well as in the ongoing in-service program.
- The Education Centers are a logical focus for in-service efforts and can effectively provide for the best use of available resources including those of TAPU and other departments.
- A well-planned five year in-service program with appropriate time lines will provide for good resource utilization of the TTCs, the Education Centers and the university. Future flexibility will also be facilitated.
- Given the present population growth and the number of trained teachers which can be matriculated by the TTCs, it is necessary to develop a scheme whereby untrained teachers can be upgraded via a ten year in-service program.
- Human resources are limited in the in-service area and are not likely to be greatly increased. EO's and Head Teachers must be given a greater role as instructional leaders in in-service as opposed to an inspectorial role.

Implementation

MOE:

FIVE YEAR PLAN

Plan, organize and facilitate a five year in-service plan including topics to be developed and their sequencing.

ONE UNIT

Develop and organize a structure for pre-service/in-service education under a single operational unit. A separate teacher education unit with pre-service and in-service responsibilities should be considered.

JOB DESCRIPTION FOR IN-SERVICE

Identify and appoint an In-Service Director with strong administrative ability responsible to the CEO. Supply a specific job description.

LINE-STAFF RELATIONSHIPS

Define clear line-staff relationships for all personnel and departments for the In-Service Program.

EO INPUT

Provide more directly for EO input into the planning and designing of the in-service program. Provide a planned program of in-service for EOs.

IN-SERVICE EVALUATION PLAN

Develop and carry out an in-service evaluation plan which can be shared with the NCTE.

TWO YEAR LICENSE DEVELOPMENT

Plan and develop continuing education requirements for a two year licensing scheme and initiate and plan for a ten year certification program for untrained teachers.

INDIVIDUAL INITIATIVE ENCOURAGEMENT

Develop policy to encourage individual initiative of the Education Centers.

TEACHER TRAINING COLLEGES :

TWO YEAR CURRICULUM FOR LICENSE

Develop a two year series of workshops which will lead to the two year license in both methodology and content areas.

WORKSHOPS FOR EDUCATION CENTERS

Develop and field test workshops and in-service packages for Education Centers in an upgrading plan.

PLAN FOR UNTRAINED BEGINNERS

Develop and conduct workshops, coordinated among the TTCs, for untrained beginning teachers. (This could be incorporated into the selection of the TTC entrants.)

ADVISORY TO EDUCATION CENTERS

Serve in an advisory role to the Education Centers in the development and scheduling of workshops.

TEN YEAR CERTIFICATION PLAN

Conduct special interest workshops in cooperation with PEIP and the Education Centers leading to a ten year upgrading of untrained teachers.

EDUCATION CENTERS:

IN-SERVICE FOCAL POINT

Provide in-service leadership and serve as in-service focal point with well-defined role descriptions, e.g. plan packages, schedule workshops, do needs assessment, serve as TTC liason, conduct follow-ups, etc.

WORKSHOP DESIGN AND COORDINATION, ETC.

Sponsor workshops for Head Teachers and EOs in planning and conducting workshops for their own teachers.

Introduce and sponsor Competency Model workshops for Head Teachers and EOs with assistance from PEIP.

Plan multiplier workshops and plan to facilitate effective follow-up

Integrate PEIP workshops and provide for follow-up.

Offer workshops for untrained teachers leading to the ten year certificate.

Develop community relation workshops

Design and field test workshops and instructional materials in conjunction with TAPU.

IN-SERVICE CURRICULUM AND SYLLABI

Plan, coordinate and conduct updating workshops on syllabi in cooperation with TTCs and the Curriculum Department. In-service new curricula and syllabi.

COMPETENCY MODEL WITH DIAGNOSIS

Monitor competency model and develop skills in developing individual prescriptions as well as group prescriptions for teachers.

DEMONSTRATION CLASS

Maintain a demonstration class utilizing recommended methods, teacher made materials and TAPU aids. New methodology and curricular ideas can be tested out here.

TAPU IDEAS

Generate and gather ideas from the field for TAPU development. Include a TAPU liason on staff.

MOBILE CENTER

Serve as base for mobile Education Centers for remote areas.

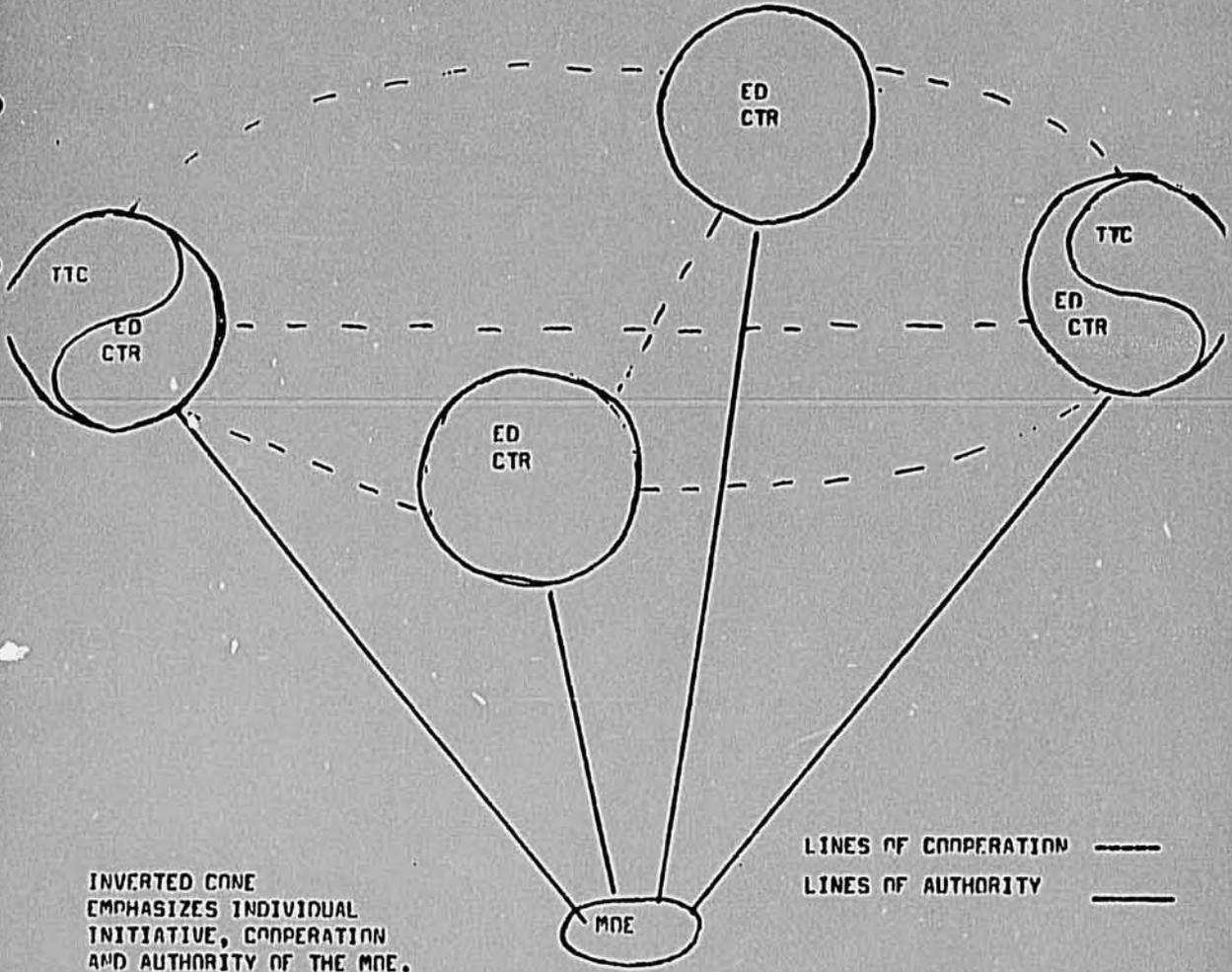
ORGANIZATIONAL STRUCTURE OF RELATIONSHIPS BETWEEN MOE AND EDUCATION CENTERS

One of the most powerful resources for upgrading and coordinating the in-service program is the Education Center.

Three important elements which must be clarified are 1. Direction and coordination from the MOE, 2. A strengthening of the relationships between the TTCs and the Education Centers and 3. Preserving and encouraging the individual autonomy and creativity of each Education Center.

The diagram indicates the line of authority from the MOE to the Education Centers by solid lines. The significance of the inverted come is in the importance it places on the Education Centers as the front line focal point of in-service and the supportive and facilitative role of the MOE as opposed to a more rigid, authoritative role. However, a clear line of authority is present and should be clearly stated.

ORGANIZATIONAL STRUCTURE
AND
RELATIONSHIPS OF EDUCATION CENTERS, TTCs
AND MOE



INVERTED CONE
EMPHASIZES INDIVIDUAL
INITIATIVE, COOPERATION
AND AUTHORITY OF THE MOE.

MOE AS DIRECTING ORGANIZATION
WITH SUPPORT AND LEADERSHIP
FUNCTION.

LINES OF COOPERATION -----
LINES OF AUTHORITY =====

TEACHER TRAINING COLLEGES-EDUCATION CENTERS

SPECIAL RELATIONSHIP

Build a special relationship as a TTC-EC organization. Develop specifics for cooperative efforts of TTCs and ECs e.g. workshops, experiences at both pre-service and in-service levels.

Establish guidelines for working relationships between the TTC and EC and establish local advisory coordinating committee for each TTC-EC.

FIELD TEST CURRICULUM

Field Test workshops which been developed for the two year license program.

DEMONSTRATION MODEL

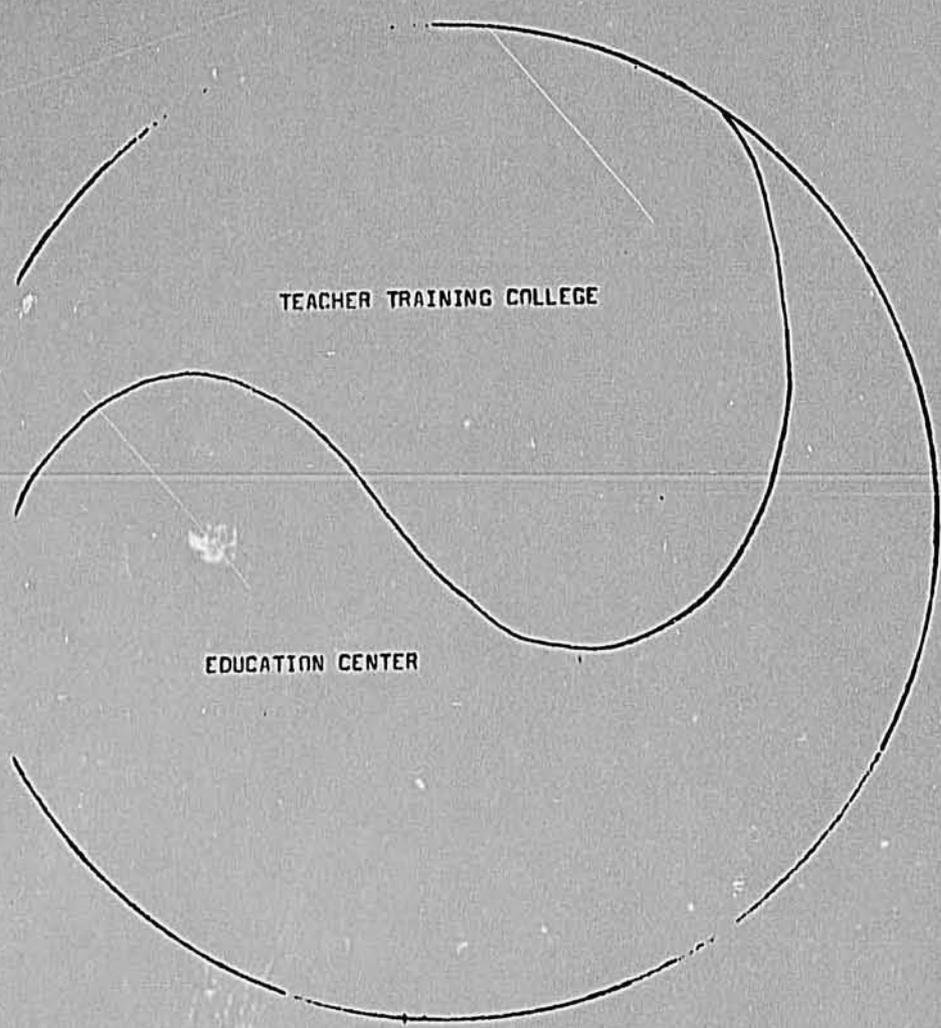
Serve as demonstration model for syllabi, materials, etc. for other ECs. Serve as prototype for TAPU-EC liason. Serve as demonstration center for teaching practice. Demonstrate AV usage for other ECs.

ASSIST WITH COMPETENCY MODEL

Assist in developing and adapting Competency Model as a needs assessment instrument for instructional improvement. Conduct EO workshops in Competency Model.

PLAN MOBILE IDEA

Develop plans for mobile units and field test.



TEACHER TRAINING COLLEGE

EDUCATION CENTER

SPECIAL TTC-EC RELATIONSHIP

A-V EQUIPMENT DEMOS
TEACHING PRACTICE DEMOS/MICRO TEACHING
MATERIAL USAGE DEMOS
COOPERATIVE WORKSHOPS
FIELD TESTING CENTER

II. FIRST FIVE YEAR PLAN

Assumptions

- . Without a definitive plan of some duration, little continuity or stability will be evident in the in-service program.
- . Neither formative nor summative evaluation of the in-service efforts are possible without a plan which fixes content, sequencing and responsibilities.
- . A five year plan provides for a period short enough to identify realistic objectives and long enough to insure longer term development of resources.
- . There are limited resources which must be used wisely in order to close an otherwise widening gap between trained, competent teaching and stop gap instruction.

Implementation

GOALS AND OBJECTIVES

Develop rationale, goals, and specific objectives for the in-service program and determine continuing education plan (credit, time, transferability, etc.)

ASSIGN RESPONSIBILITIES

Assign specific personnel to develop the plan. Establish yearly update and reporting procedures for the five year plan.

COORDINATE AND SCHEDULE

Inservice EOs to give workshops using developed workshops of a general nature.

Develop plans for inservicing syllabi and other instructional materials.

Coordinate the number and sequence of topics in light of available resources.

Schedule TTCs' development of a limited number of beginning packages.

DETERMINE COST

Project needed resources-personnel, material, financial-to carry out various aspects of the plan.

COMPETENCY MODEL

Develop and field test Botswana Competency Model.
In-service Head Teachers and EOs in Comptency Model.

REVISION

Provide mechanism for revision of projected goals
and activities as experience dictates.

TWO YEAR LICENSE

Design two year license program

FIVE YEAR PLAN

(SAMPLE)

84

DECISIONS/PLANNING FOR INSERVICE REORGANIZATION
FEED IN PEIP'S 10 YEAR DEVELOPMENT PLAN
PLAN BOTSWANA COMPETENCY MODEL
BEGIN COMPETENCE MODEL INSERVICE
ORGANIZE ED CENTERS FOR INSERVICE
BEGIN PLANS FOR LICENSING
DEVELOP TTC SELF STUDY

85

INTRODUCE COMPETENCY MODEL TO HEAD TEACHERS
CONTINUE EOs TRAINING IN COMPETENCY MODEL
DEVELOP THREE TTC WORKSHOPS FOR ED CENTERS
TRIAL TTC SELF STUDY
PLACE TTC-EC TAPU LIASON

86

INTRODUCE COMPETENCY MODEL INTO TTC CURRICULUM
TTCs DEVELOP ADDITIONAL WOKSHOPS
TRAIN TTC SELF STUDY TEAMS
PLAN GUIDELINES FOR LICENSING
DEVELOP INSERVICE EVALUATION PLAN

87

IMPLEMENT COMPETENCY MODEL
TRAIN HEAD TEACHERS
DEVELOP BOTSWANA RESEARCH MODEL WITH UB
IMPLEMENT TWO YEAR LICENSE PLAN

65

III. SECOND FIVE YEAR PLAN

Assumptions

- During the first Five Year Plan it is desirable to project needs beyond the planning period as a result of present experiences and new developments (national, educational, etc.).
- If continuous long term planning is to become an established, accepted procedure, a specific planning strategy must be highly visible to all involved and thus must be apparent as having a high priority in the MOE.
- Changing personnel has an adverse effect on program stability and continuity. Long term planning models will tend to alleviate the problem.

Implementation

- Plan for two year licensing procedure using workshops developed during the first Five Year Plan together with additions developed by the TTCs and the University.
- Plan for ten year updating of non-trained teachers via in-service.
- Research ways to differentiate in-service needs of experienced and untrained teachers, rural and urban schools.

IV. TWO YEAR LICENSE PLAN

Assumptions

- The creation of a professional ladder requires a plan which provides for incentive and rewards.
- Beginning trained teachers are only initially prepared and require further training while on the job.
- In-service provided while the teacher has a primary class is of much greater value because the skills can be immediately applied.
- TTC faculty and University faculty recognize the need for continuing in-service education for the beginning teacher.
- Any internship program must be introduced by incremental steps due to limited financial and personnel resources.

Implementation

INCENTIVES AND REQUIREMENTS

Determine incentives and requirements in the two year license. The two year license would be required of all beginning teachers after some specified time. Determining the number of clock hours required for credit, applicability for University credit, etc.

POLICY

Set policy on initial implementation, e.g. limited enrollment at first on a highly selective basis. Available via application with increases in the number of available places each year. Mandatory after the first five or ten years. Determine grandfather procedures.

STRUCTURE

Set curricula for the Two Year License Plan.

PERSONAL IMPROVEMENT PLANS

Require submission of personal improvement plans of non-qualified teachers to the respective Head Teacher. Develop a system for awarding Workshop Certificates.

TRAINED TEACHERS

UNTRAINED TEACHERS

1. ONE YEAR TRIAL
TEACHING

2. TWO YEARS IN TTC

TTC CERTIFICATE

3. TWO YEARS OF A STIPULATED
NUMBER OF WORKSHOPS AND
REQUIREMENTS

MOE LICENSE

SALARY INCREASE

TEN YEARS OF STIPULATED
WORKSHOPS AND COURSE
WORK

CAREFULLY DESIGNED
QUALITY
CONTENT
QUANTITY

DEVELOPED BY TTC AND UR

EVALUATION-EXAMINATION
VIA COMPETENCY MODEL

CERTIFICATE

SALARY INCREASE

TO BEGIN AFTER TWO
YEAR LICENSE IS
FULLY OPERATIONAL

TWO YEAR LICENSE PLAN

X NUMBER OF YEARS TEACHING
EXPERIENCE REQUIRED FOR
ELGIBILITY

TWO YEAR CURRICULUM CYCLE

X NUMBER ACCEPTED VIA APPLICATION C 1	SECOND YEAR C 2	I N C R E M E N T		
		NEW APPLICANTS C2	SECOND YEAR C 1	I N C R E M E N T
		NEW APPLICANTS C 1		SECOND YEAR C 2 I N C R E M E N T
		NEW APPLICANTS C 2		

RATIONALE:

BEGINNERS NEEDED
1-2 YEARS TO
ADJUST

BEGINNERS HAVE
SPECIAL NEEDS.
COULD PROFIT
FROM WORKSHOPS
DESIGNED FOR
BEGINNERS.

V. TEACHER TRAINING COLLEGE SELF-STUDY

Assumptions

- The professional responsibility of the TTCs for providing a quality teacher education program should be increased.
- The national goal of self-reliance can be furthered in the TTCs by engaging in a system of self-study which is monitored via a verification process in the NCTE.
- A self-study approach to quality increases the creative initiative of the organization by utilizing the power of the personnel in the organization; thus minimizing the rigid, mechanical application of rules and regulations.
- The TTCs possess staff with the ability to develop the skills necessary to the carrying out of the self-study.

Implementation

PLAN

Make specific assignment for staff development, instrument refinement and implementation procedures.

Specify team members' roles and verification procedures.

PRELIMINARY TRIAL

Conduct a preliminary review at a TTC with observers from other TTCs for training purposes.

TRAINING

Conduct training sessions for visiting team members.

FIRST ROUND

Engage in first round self-study with ongoing assessment of the self-study process.

REVISE

Redesign self-study process and procedures with University, TTC and consultant advisers as experience is gained.

NCTE ROLE

Develop role of NCTE as grantor of college accreditation in specific terms.

VI. NATIONAL COUNCIL ON TEACHER EDUCATION

Assumptions

- The overlapping of roles and responsibilities for teacher education of the MOE, the TTCs and the University requires a well-defined structure for determining lines of communication, decision-making and policy recommendation.
- The fast developing need for trained teachers at all levels, primary and secondary, demands an integrated plan for proceeding as well as a re-examination of the traditional invigilator function.
- Processes appropriate to a developing democracy which encourage and facilitate individual initiative as well as setting high standards of achievement should be developed at a national level.
- The training of teachers and the education of youth in general is the proper responsibility of the State and cannot be left to special interest groups or narrow conceptualization. The national body must be free of partisan viewpoints in order to utilize the opportunities available in a developing educational environment.
- Serious problems such as the differing plans for teacher training in the primary and secondary areas are developing which need immediate attention.

Implementation

IMPORTANCE OF OBJECTIVES

Without great care implementation of any proposal can become rigid and limiting. The careful development of the goals and objectives is therefore of prime importance and must be the first step in organizing a national body.

PROCEDURES FROM OBJECTIVES

Areas of organization, responsibility and procedure should flow from the goals and objectives and should be directly related to them.

HIGH TRUST LEVEL

A high trust level must be established between and among all parties to the process. Although the organizational structure can help provide for the facilitation of cooperative efforts, those charged with leadership of the process must develop an effective human relations strategy.

SUMMARY

Finally, I would like to inject my own opinion as it relates to the areas of the in-service portion of this plan.

1. Botswana has an opportunity to improve and build a very effective in-service program. The most serious pressing need is to define the role of an in-service director with strong administrative abilities. At present, while many excellent in-service experiences are offered, they are given in isolated, uncoordinated ways. Full utilization is not being made of your precious resources.

2. The Education Centers are a natural focal point for national in-service efforts. There is a large consensus in this matter.

3. The EOs are ready for further professionalization. This is a golden opportunity for the MOE to exert its leadership role.

It is my hope that the MOE will find this plan to be a practical response to my assignment. Whether or not any particular is accepted is not important. What is important is that the points raised are addressed in a long range plan which is supervised and evaluated on a regular, yearly basis. Particulars of implementation and their underlying assumptions can and will be changed. The requirement of a long term planning document for implementation will not change but become more essential as the complexity of Botswana's educational system increases.

APPENDIX IV

**GUIDANCE AND COUNSELING
IN PRIMARY EDUCATION
IN BOTSWANA**

A Report of a Consultancy

**Prepared for the
Botswana Primary Education
Improvement Project**

By

**Dr. Sally Navin
Consultant, Ohio University
Athens, Ohio, U.S.A.**

(USAID Contract AFR-0222-C-00-1066-00)

Introduction

At a conference held at the University of Botswana in May, 1982, on the Teacher Training College curriculae, Dr. Ghalam Kibria, Professor at the University, presented a paper entitled, "The Role of Guidance and Counseling in Primary Teacher Education." As a result of the interest expressed in this topic, Dr. Donald Knox, Chief of Party, Ohio University, USAID Team, asked that a guidance consultant from Ohio University, develop and present a series of workshops on guidance and counseling techniques and practices to the tutors at each of the three Teacher Training Colleges. During a two month period from October 13, 1982 to December 7, 1982, this task was accomplished.

This report reflects the activities in which this writer was involved during the consultation. The following areas will be addressed: Botswana consultations, workshop schedule and format, workshop evaluations, course development and the National Training Workshop on Aspects of Occupational/ Career Guidance.

Botswana Consultations

In an initial effort to become acquainted with the customs, practices and guidance concerns in the country prior to the workshop presentations, numerous individuals were consulted. These ranged from persons involved in educational pursuits to those in business, health, and town government. The following persons were invaluable in assisting the writer in becoming knowledgeable about the Botswana culture:

Dr. Ulla Kahn, Chief Education Officer, Curriculum Development and Evaluation Department, Ministry of Education

Ms. Seodi Khama, Curriculum Development and Evaluation Department, Ministry of Education

Mr. Kgomenyane, Secondary Education Department, Ministry of Education
Mr. K.R.S. Moilwa, Secondary Education Department, Ministry of Education
Ms. Catharine Kuate, Education Officer, South East District
Ms. Pauline Makepe, Career Master, Gaborne Secondary School
Ms. Molly Makipe, Head Mistriss, Mogabane School
Mr. P.V. Supuema, Primary Education Department, Ministry of Education
Mr. Woto, Nonformal Education Department, Ministry of Education
Mr. Jack Purvis, Primary Education Department, Ministry of Education
Ms. Festina Bakwena, Curriculum Development and Evaluation Department,
Ministry of Education
Mr. Tiro Bagwasi Gabasiano, Senior Community Development Officer,
South East District
Mr. Mosekiemeng Mosekiemeng, Education Secretary, South East District
Ms. Bralenna Badubi, Social Welfare Officer, South East District
Dr. Jack Finley, Health Education Officer, Ministry of Health
Mr. Raphael Sikwane, Director, Botswana Employers Federation
Dr. Pearl Masalaba, Director, Maternal and Child Care Division, Ministry
of Health
Ms. Ruth Palai, Nurse, Bontleng Clinic
Mr. Thomas Pule, Town Clerk, Town Council
Ms. Grace Busang, Nurse, Town Council

Workshop Schedule and Format

Following these series of consultations, a workshop schedule and format were developed. This workshop schedule was adopted:

Lobatse	10 November	1400 to 1700
	11 November	1400 to 1600
Francistown	17 November	1500 to 1700
	18 November	1600 to 1700
	19 November	1600 to 1700
Serowe	30 November	0730 to 1700

It was decided, given the time constraints imposed, that an overview of guidance and counseling would be offered and then emphasis would be placed on two major areas: self-concept development and awareness of the world of work. With the assistance of Dr. Gholam Kibria and Ms. Itah Kandjii, the writer introduced the tutors to specific techniques which they could use in the classes they were teaching. While the format changed somewhat with each workshop, a typical workshop agenda follows:

Self-Concept Development Activities

<u>Activity</u>	<u>Objective</u>
1. Guess Who I Am Standards 1-7	To assist students in getting to know one another
2. Success A Day Standards 1-7	To assist students in sharing with the class the successes they've had during the day
3. Collage of Self Standards 1-7	To provide students with an opportunity to collect pictures, words and symbols that represent themselves
4. Positive Feelings Standards 1-7	To assist students in describing things that make them feel good
5. Self-Worth Standards 1-7	To assist students in describing ways to make others feel worthy
6. Likes and Dislikes Standards 1-7	To assist students in identifying some of their likes and dislikes
7. Who Are We? Standards 1-7	To assist students in describing themselves
8. Strength Bombardment Standards 4-7	To assist students in providing positive reinforcement to one another
9. Positive Support Techniques Standards 4-7	To provide students with an opportunity to give positive feedback to one another
10. If I Could Be... Standards 4-7	To assist students in understanding who they are

- | | |
|---|---|
| 11. The Life Clock
Standards 4-7 | To help students see how people stay the same and also change |
| 12. Voting...And
Additional Questions
Standards 4-7 | To assist children in dealing with negative feelings |

World of Work Awareness Activities

<u>Activity</u>	<u>Objective</u>
1. This Is What I Like To Do Standards 1-4	To encourage students to explore their own interests
2. Show and Tell Standards 1-4	To encourage students to explore their own abilities
3. Things I Know How To Do Standards 1-7	To enable students to explore their own abilities
4. My Favorite Things Standards 1-7	To encourage students to explore the things they value
5. Career Day Standards 1-7	To enhance awareness of various jobs in the community
6. A to Z Standards 3-7	To enhance awareness of various jobs
7. Unscrambling Names of Workers Standards 5-7	To enhance awareness of various jobs
8. Career Bing: Work-O Standards 3-7	To engage in a "fun" activity to illustrate different jobs
9. Career English Standards 3-7	To develop students' awareness about various job descriptions
10. Professional Poetry Standards 3-7	To interest students in various jobs while instilling basic English skills
11. Who Works Here? Standards 3-7	To develop students' awareness about jobs
12. I Want To Be Standards 4-7	To encourage students to think about their future

Discussion regarding the objectives and theory supporting each activity was generated. When necessary, adaptations to the Botswana culture were considered. Additional techniques and guidance related activities were considered as well. Some textbooks and workbooks were presented to the workshop participants.

Workshop Evaluation

In general, the workshop evaluations were quite positive. The appropriateness of the workshop topics, the need for knowledge about the topics, the workshop time and approach, and interest in further information were considered. Seven of the eleven participants at Lobatse, seven of eleven at Serowe, and six of ten at Francistown indicated an interest in a full-time workshop on self-concept development and career awareness of primary children. A summary of all of the workshop evaluation forms appear as Appendix A.

Course Development

Three courses were developed to be included in Educational Foundations for Bachelor of Education students at the University of Botswana. These are Guidance and Counseling, Guidance in the Curriculum, and Career Guidance and Counseling. Guidance and Counseling familiarizes students with basic principles of guidance and counseling and the role of the guidance worker.

Theories of counseling, occupational choice and career development will be presented with special emphasis on the practical solutions of adjustment problems likely to be encountered by the counselor in Botswana schools.

Guidance in the Curriculum focuses on methods for implementing guidance techniques in on-going classroom activities. A major emphasis in this course is in assisting children in the development of healthy self-concepts. Specific tools and techniques to be used in this effort will be introduced.

Career Guidance and Counseling places an emphasis on assisting children in becoming aware of the world of work and developing a positive attitude toward work as well as a respect for all workers. The focus in this course is on awareness of the world of work rather than decision making regarding work. Again, specific activities and techniques for accomplishing this task will be introduced.

National Training Workshop on Aspects of Occupational/Career Guidance

A final involvement occurred on December 6, 1982 when a presentation was made at the National Training Workshop on Aspects of Occupational/Career Guidance. At this workshop, organized by the Ministry of Education, Department of Curriculum Development and Education, a model for career guidance at all school levels was presented. Methods for successful implementation of the model were discussed as well.

APPENDIX V

ORGANIZATION OF THE PRIMARY EDUCATION MEDIA CENTRE

University of Botswana

April 1983 -- June 1983

Primary Education Improvement Project

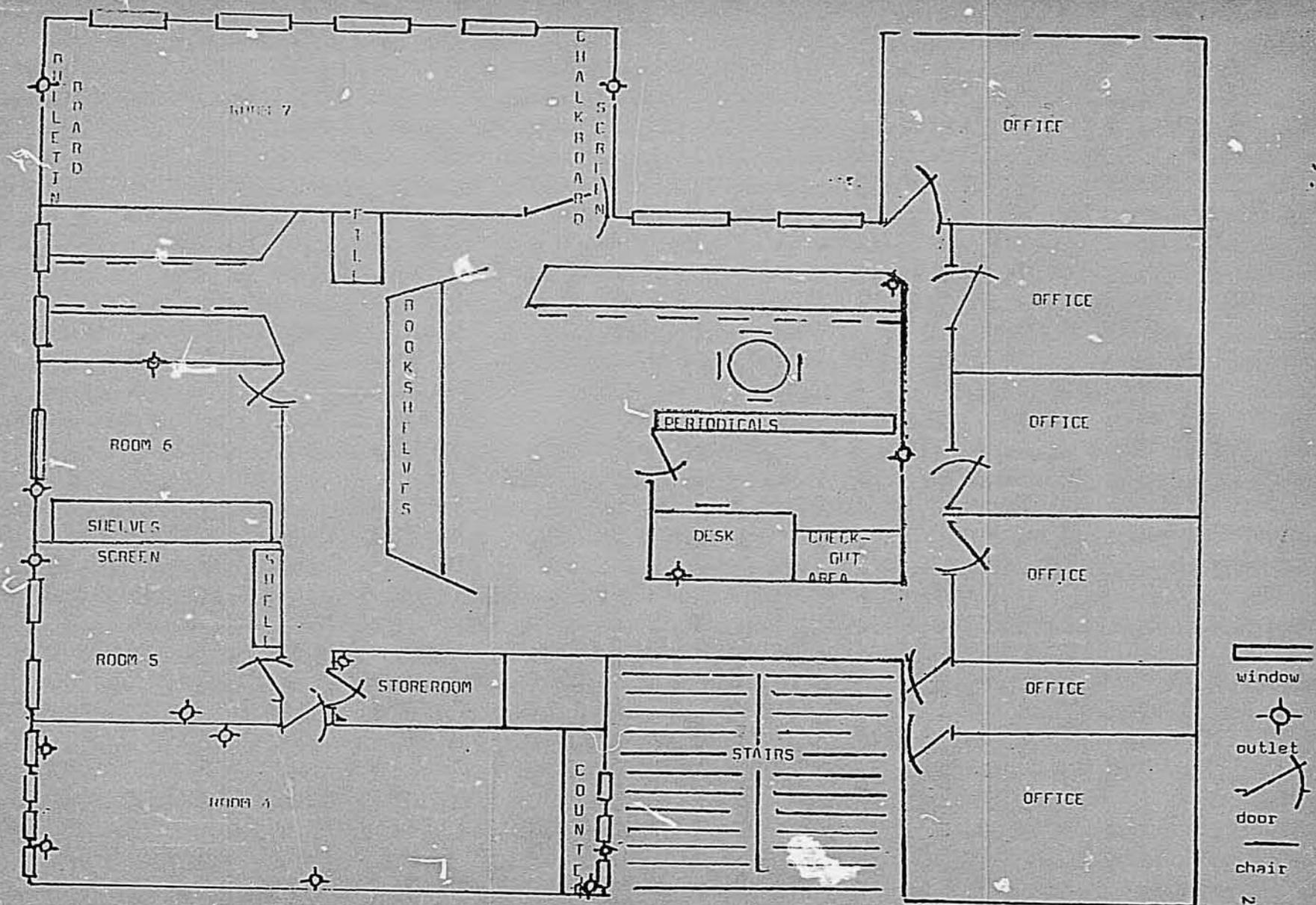
Consultant: Dr. Doris R. Brodeur
College of Education
Ohio University

The Primary Education Improvement Project (P.E.I.P.) addresses the problem of the shortage of trained teachers in Botswana's primary education sector. One of its main purposes is the provision of appropriate pre-service training for primary school teachers through 2-year and 4-year programs at the University of Botswana. A second related purpose is the organization and implementation of effective in-service programs for supervisory staff and teachers in primary education. Accordingly, P.E.I.P.'s objectives included the establishment of a Primary Education Centre that would provide books, teaching aids, and audiovisual equipment for the training of pre-service teachers and the preparation of materials for in-service workshops.

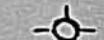
The Project contract provides for a short-term consultant to design and implement plans to procure audiovisual and production equipment and to organize a curriculum materials laboratory. From April 11, 1983 to July 1, 1983, an instructional media specialist from Ohio University, Athens served in this capacity. This report summarizes the work that has been completed, outlines the activities that are in progress, and makes recommendations for future action.

Description of the Primary Education Centre (PEC)

The Primary Education Centre is a separate two-story building on the campus of the University of Botswana in



PRIMARY EDUCATION CENTRE -- second floor
 (not drawn to scale)

-  window
-  outlet
-  door
-  chair
-  N

Gaborone. It consists of a classroom block, an instructional media block, and an office block. Two standard 30-seat classrooms, one of which is the primary school laboratory classroom, occupy the first floor. An observation room is located between the two classrooms. The office block and the instructional media block occupy the second floor. (See diagram.)

The instructional media block serves a variety of functions including a library and demonstration center for primary education materials, a production center for the preparation of teaching materials, a facility for videotaping microteaching lessons, and a study center for the training of pre-service teachers.

The open area of the second floor is the curriculum materials laboratory with bookshelves, vertical file, periodicals' racks, check-out desk, and study area. Surrounding this area are six faculty offices, one small-group classroom, two small work rooms, and a media production room. The media production room provides the equipment for print reproduction, thermal transparency production, lamination, and lettering.

A later section of this report will detail recommendations for the use and storage of the audiovisual and production equipment within the Primary Education Centre.

Policies of the Primary Education Centre

The following page outlines the policies of the Primary Education Centre. They include the principal objectives of the Centre, the clientele for whom the facilities are designed, the circulation policy, and a description of the facilities

Objectives

The Media Centre in the Department of Primary Education has as its main objectives:

1. To provide a curriculum materials laboratory for the examination and evaluation of textbooks and audiovisual materials.
2. To provide a facility for the production of print and nonprint instructional materials.
3. To serve as a training center for primary education students in the use of audiovisual equipment and materials.

Use of the Centre

In order of priority, the following people are eligible to use the equipment and materials of the PEC:

1. Primary Education faculty and staff;
2. Primary Education students;
3. Education faculty and staff.

Circulation of Materials

Books and audiovisual materials may be checked out of the Centre for a period of one week to Primary Education students, faculty, and staff. Exceptions to this policy:

1. Encyclopedia, reference books, and single-copy documents are used in the PEC only.
2. All audiovisual and production equipment are used in the PEC only.
3. Kits, slides, filmstrips, etc. of which there is only one copy are used in the PEC only.

Services and Facilities

The Media Centre provides the following facilities and services to Primary Education students, faculty, and staff:

1. Print reproduction through ink duplication (mimeograph), spirit duplication (ditto), and photocopy (Xerox).
2. Typing.
3. Production of audiovisual materials: overhead transparencies, slides, audiocassettes, lettering for posters and displays.
4. Video production and playback for use in microteaching.
5. Computer-based lessons for instruction and management.

and services of the Centre.

The policies were established by the Department of Primary Education after a series of discussions, meetings, and informal conversations.

CURRICULUM MATERIALS LABORATORY

The selection, evaluation, and appropriate utilization of instructional materials are essential skills in any program that prepares teachers. The Curriculum Materials Laboratory in the Primary Education Centre provides a collection of textbooks, professional books, reference materials, curriculum guides, government documents, standardized tests, and audiovisual materials related to primary education. These materials are shelved and filed on the second floor of the PEC and are available for circulation to Primary Education students, faculty, and staff.

Organization of Textbooks and Professional Books

While the Calendar of Activities (Appendix A.) details the chronology of the steps followed in organizing the curriculum materials, it may be noted that the organization was a continuous process. Activities that are described for a one or two day period usually were carried out a few hours at a time over several days and weeks.

Since there were already several books on the shelves in the PEC, the first task was an assessment of materials. Most of the books and kits were new and appropriate for the collection.

There was, however, an extensive collection of Social Studies textbooks that had been donated by the Educational Media Center at Ohio University, Athens. Not all of these texts were appropriate for Botswana primary education, nor was there room to retain all of them. About one hundred books were weeded from the collection and set aside to send to some of the local primary schools. (It was suggested that teachers might cut them up to use in producing their own instructional materials.)

The criteria used in weeding the collection were as follows:

1. international perspective
2. free of specific cultural bias
3. as current as possible
4. attractive layout
5. good physical condition.

The textbooks and professional books were classified according to the Dewey Decimal Classification (DDC) System. The University of Botswana Library and the Teacher Training College Libraries all use DDC. Since the intent was to organize and shelve materials as quickly as possible, materials were classified but not catalogued. A later section of this report details recommendations for cataloging. Dewey numbers were assigned, either from the Cataloging in Publication Data or from examination of the book's contents. A list of all Dewey numbers used in the PEC collection was kept to assist in later classification and retrieval of materials. (See Appendix B.) A Cutter number was assigned following the method used by the University of Botswana Library. In this way, about 879 books were classified and organized onto shelves.

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Organization of Special Materials

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Besides textbooks and professional books, the PEC also provides reference books, Government of Botswana publications, syllabi for primary education, standardized tests, catalogs of publishers, manufacturers, and vendors, periodicals, and audiovisual materials. With the exception of audiovisual materials, most special materials are filed in the vertical file. About 135 files were labeled and alphabetized. The wooden racks were labeled with the titles of about 20 periodicals.

Audiovisual materials were classified by Dewey Decimal Classification and were intershelved with books wherever possible. Very large kits were shelved above the books. At present, there is a limited collection of kits and audiovisual materials, but it is anticipated that this collection will expand.

Technical Processing of Materials

The books and other materials are currently being processed with pockets, borrowers' cards, and date due slips. A clerical employce of the PEC has been trained to do this processing. Library supplies needed to process the materials have been ordered. The following pages outline the steps to be followed in the classification and processing of books and special materials that will be acquired by the PEC in the future. While it would be desirable to employ a professional librarian or media specialist to classify the materials, it may be possible for a paraprofessional with a minimum of training to follow the recommended guidelines.

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Procedures for Classifying and Organizing Books and Audiovisual Materials

1. Check to see if the book has cataloging in publication data at the front. If yes, use the Dewey Decimal Classification number listed.

Library of Congress Cataloging in Publication Data

Finocchiaro, Mary Bonomo, 1913-
The function 1-notational approach.

PC1128.A2F515 1983 428.007 62-22307
ISBN 0-19-434106-2 (pbk.)

2. Consult the list of Dewey numbers that are being used in the PFC collection. If the number is not listed, check to see if another number can be used. (For the above example, use 420.7)
3. If a Dewey number is chosen that is not already on the list, add it to the list. The Dewey Decimal Classification Schedules (in the UB Library) will describe the numbers.
4. If there is no cataloging in publication data in the book, examine the table of contents and try to determine the subject area. Use the classifications in the PFC list, or consult the Dewey Decimal Classification Schedules.
5. Type a label. Adhere the label to the spine of the book, or to the lower left corner of the cover if the spine is too narrow. Cover the label with clear tape.

For a book:

Dewey number		420.7	371.39
First three letters of the main entry		FIN	LUN
Copyright date		1983	1982
Copy number (if more than one)			c.1

The main entry will usually be the first author listed.

For a textbook:

Dewey number		372.6	
Publisher code (see list)		LOM	
Date		1978	
Standard		Std 7 TE	c.1
Teacher edition (if applicable)			
Copy number			

For an audiovisual:

Format code (see list)		KIT	
Dewey number		372.6	
First three letters of main entry or publisher code		MPEP-2	
Copyright date		1980	
Copy number			c.1

For a reference book: REFERENCE

REFERENCE

2. They are filed in the third drawer of the vertical file.
3. No further processing is necessary.

Syllabuses

1. Syllabuses for primary education are filed alphabetically by subject area, then by standard level in the bottom drawer of the vertical file.
2. Syllabuses of more than one subject area are filed before all others by standard.
3. Multiple copies of the same document are labeled c. 1, c. 2. etc.
4. For syllabi that have more than five copies, c. 1 and c. 2 are filed in the vertical file. The rest are shelved in boxes labeled SYLLABUSES -- Std ____ .
5. Syllabuses are processed with labels, cards, pockets, and DATE DUE slips in the same manner as books. In place of a call number, the label and card say:

SYLLABUS
Subject area
Standard
Copy number

SYLLABUS
Science
Std 1-2
c.1

Procedures for processing books and other materials

1. Stamp the title page and the book pocket with

DEPARTMENT
OF
PRIMARY EDUCATION
UNIVERSITY OF BOTSWANA

2. On the pocket, type the call number (as typed on the book label),
the author or authors (surname first),
the title (in capital letters).
If there are more than two authors, type the first one, then type et al.
3. Glue the pocket to the inside back cover of the book. If there is information printed on this page, find another suitable spot. Be sure to glue the entire pocket.
4. Glue a DATE DUE slip on the page facing the pocket. If there is information on this page, glue the slip above the pocket. Glue only the top edge of the slip.
5. Type the same information on a borrower's card that was typed on the pocket.
6. Place the card in the pocket.
7. File the book on the shelf according to its call number.

DATE DUE

Return on or before the
last date stamped.

|

DATE DUE

Return on or before the
last date stamped.

|

DATE DUE

Return on or before
last date stamped.

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DATE DUE

Return on or before the
last date stamped.

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DATE DUE

Return on or before the
last date stamped.

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DATE DUE

Return on or before
last date stamped

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An inventory of the books, audiovisual materials, and special materials was taken on June 8, 1983. The inventory is separated by categories according to Dewey Decimal Classification and by format of materials. The number of titles is a count of each different title; the number of volumes is the total number counting all the multiple copies of the same title. The collection consists of 879 books (646 titles), 50 audiovisual materials (14 titles), and 154 files of special materials. The complete inventory is found in the pages that follow.

It is recommended in the Procedures for Classifying Materials that materials be counted and added to the inventory as they are processed. The inventory should be checked annually and missing titles and volumes noted.

Consultation with UB Library and Department of Library Science

The director and staff of the University of Botswana Library were consulted about library policies and procedures for organizing and circulating materials. While the PEC is not a departmental library but a curriculum materials laboratory, there are enough similarities to a school library to warrant standardizing the procedures.

The library director, Kay Raseroka, was quite helpful in describing library procedures and confirmed the recommendation to standardize PEC procedures. (See Appendix C. for details of the interview.)

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UNIVERSITY OF BOTSWANA

CURRICULUM MATERIALS INVENTORY

8 June 1983

	Number of Titles	Number of Volumes
Books	646	879
Audiocassette tapes	1	1
Kits	4	40
Filmstrips	1	1
Picture sets	8	8
Syllabi	29	180
Periodicals	21	--
Producer catalogs	56	--
Government publications	19	--
Standardized tests	29	--

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CURRICULUM MATERIALS INVENTORY

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Date 8 June 1983

Type of Material	Dewey Number or File Name	Number of Titles	Number of Volumes
Book	000 - 099	4	7
Book	100 - 199	7	7
Book	200 - 299	-	-
Book	300- 369	2	2
Book	370- 371.9	41	45
Book	372 --372.9	11	11
Book	372.3 - 372.39	15	15
Book	372.4 - 372.49	27	41
Book	372.5 - 372.59	3	3
Book	372.6 - 372.69	69	167

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CURRICULUM MATERIALS INVENTORY

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Date 8 June 1983

Type of Material	Dewey Number or File Name	Number of Titles	Number of Volumes
Book	372.7 - 372.79	48	53
Book	372.8 - 372.89	135	147
Book	400 - 499	72	79
Book	500 - 599	5	5
Book	600 - 699	19	40
Book	700 - 799	-	-
Book	800 - 899	11	11
Book	900 - 999	1	1
Book	Reference	-	69
Booklets	Phi Delta Kappa Fastbacks	176	176

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CURRICULUM MATERIALS INVENTORY

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Date 8 June 1983

Type of Material	Dewey Number or File Name	Number of Titles	Number of Volumes
Audiocassette tape	371.4	1	1
Kit	372.6	4	40
Filmstrip	581	1	1
Picture	372.6	5	5
Picture	372.8	1	1
Picture	810.08	1	1
Picture	917.3	1	1

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PRIMARY EDUCATION CENTRE
UNIVERSITY OF BOTSWANA

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CURRICULUM MATERIALS INVENTORY

page 4 of 4

Date 8 June 1983

Type of Material	Dewey Number or File Name	Number of Titles	Number of Volumes
Syllabus	Syllabuses for Primary Education	29	180
Display Rack	Periodicals	21	varies
Vertical File	Publisher/Producer Catalogs	56	--
Vertical File	Government Publications	19	--
Vertical File	Standardized Tests	29	--

1/3

The University of Botswana offers a Certificate in Library Studies through the Faculty of Humanities. The faculty who teach the Library Science courses were consulted for their recommendations and support in cataloging the PEC collection. Professors Kotei, Honono, Thapisa, and Neill were in agreement that the PEC curriculum materials collection could serve as a laboratory for their students in gaining experience in school libraries. Such an arrangement would at the same time benefit the PEC by providing pre-service librarians to catalog the materials. The Library Science faculty were eager to discuss such a cooperative venture in the near future.

Recommendations for Cataloging Materials

There is at present no listing or catalog of the books and other materials in the PEC collection. Full cataloging of materials requires the skills of a professional librarian. The University Library's staff are sympathetic to the need, but are unable to assume any additional cataloging responsibilities. The idea of working out a practical experience for Library Science students is a possibility. Professor Kotei and Mr. Neill would be the supervising faculty.

It is recommended that wherever possible complete descriptive cataloging be done following the new AACRII rules. A shelf list, using the main entry cards, should be completed as soon as possible. Once the complete list is available, author and subject cards can be prepared.

If professionals or paraprofessionals are not available to catalog the collection, the PEC staff can prepare a list of the materials in the collection using a standard bibliographic notation, such as:

Author. Title. Place of publication: Publisher, Copyright date. The call number assigned to the book should also be included, e.g., 371.33 HEI 1982. The catalog of the PEC collection may be listed either as a bibliography on sheets of paper, or on separate index cards for each title, or possibly on microcomputer diskettes.

Recommendations for Audiovisual Software

It is anticipated that the collection of audiovisual materials will continue to grow. Pre-service teachers need to examine and evaluate good examples of commercially-produced instructional materials. The following materials are available in South Africa and may be brought in on a preview basis prior to purchase.

In addition, instructional materials and teaching aids are produced for primary education by the Teaching Aids Production Unit (TAPU) in Francistown. (See Appendix D.) Since many primary schools will have these teaching aids, it is recommended that the PEC acquire a sample of all the materials produced by TAPU. In this way, pre-service teachers may be introduced to effective techniques for teaching with these materials.

AUDIOVISUAL SOFTWARE

The following materials may be worth previewing and evaluating for the Primary Education Centre collection.

- Available from: Encyclopedia Britannica (SA)
Educational Film Division
10th Floor, Standard Bank House
P.O. Box 10064
Johannesburg, South Africa 2000
836-9641/5
- A Story, A Story
African tale, Caldecott Medal Award
ST 82/1421 Media Guide 80/725
filmstrip/cassette
booklet R36.00
- Why Mosquitoes Buzz in People's Ears
West African tale ST 81/1734
filmstrip/cassette
R36.00
- Earth, Sun, and Moon
Includes longitude, orbits, solar system,
moon's phases TR 82/1402
33 overhead trans-
parencies with
overlays and notes
R76.00
- Sugar Production
Angola, Uganda, Swaziland, Zimbabwe
filmstrip
R12.50
- Gold and Diamond Mining
South and West Africa
filmstrip
R12.50
- Africa
Outline map, political overlay,
population, railways TR 82/722
7 transparencies
blank sheet
R43.00
- Africa: Wildlife
SK 81/547
43 slides/script
R30.00
- Life Cycle of a Plant
SK 81/580
37 slides/script
R30.00
- Chick Embryology
26 slides
R30.00

Circulation Procedures

Curriculum materials of the Primary Education Centre are available for loan to Primary Education students, faculty, and staff. The books and audiovisual materials are processed with borrowers' cards, pockets, and date due slips. When a book or other material is borrowed, the card should be signed by the borrower giving name, address, and telephone number where he/she can get a message. The circulation clerk writes the date due on the card and on the date due slip in the book. Most materials circulate for a period of one week. The borrowers' card is filed in a library card holder according to the call number.

For special materials that do not have borrowers' cards, a temporary paper card may be filled in and filed with the other cards. When the materials are returned, the circulation clerk returns the card to the book and replaces the book on the shelf. If after a specified length of time materials are not returned, the Primary Education staff will contact the borrower to ascertain the reason.

Since the curriculum materials collection is small at present and most of the materials will be needed for the Primary Education students at the University of Botswana, people from outside the university should be discouraged from borrowing the materials. The P.E.I.P. project has purchased curriculum materials and teaching methods books for each of the Teacher Training Colleges, and students in those Colleges should be encouraged to use those collections.

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AUDIOVISUAL AND PRODUCTION EQUIPMENT

The Primary Education Centre provides facilities and equipment for the production and utilization of instructional materials related to primary education. The equipment is used primarily in the PEC media production room, the small work rooms, and the classrooms by the PEC staff and the undergraduate pre-service teachers. In addition, the Primary Education faculty and staff use the facilities and equipment in the preparation and implementation of in-service workshops for primary school supervisors and teachers.

Needs Assessment

A needs assessment conducted in April 1983 determined that the following equipment had already been purchased and installed in the PEC:

- 1 Gestetner ink duplicator
- 1 Gestetner 1544 electronic stencil scanner
- 1 3M Transparency Maker (thermal copier)
- 1 Laminex 25" industrial laminator
- 1 Idealcollator
- 1 Ideal guillotine
- 1 3M Lettering System
- 3 portable projection screens

The P.E.I.P. Project Paper had listed several types of audiovisual and production equipment to be purchased both for the PEC and for the Teacher Training Colleges (T.T.C.). (The needs assessment and equipment acquisition for the T.T.C.'s are described in a separate section.) The amount budgeted for equipment

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procurement was \$57,000. The list was examined and revised in the light of current needs.

A preliminary list of desired equipment was drawn up on April 18, 1983. The list was separated into general categories: production and reproduction, display board materials, projectors, audio, video, microcomputers, furniture and accessories. Each member of the Primary Education staff was given a copy and asked for his/her reactions and recommendations. In addition, the University's media specialist, Dr. Sid Pandey, was asked to examine the requests for compatibility with the equipment belonging to the Educational Resources of the University. Based on these consultations, the list was revised on April 21, April 25, and again on April 29, 1983.

Examination of Equipment

During the first weeks of May, the P.E.I.P. Chief of Party, Professor Knox, and the media consultant visited audiovisual equipment vendors in Gaborone, Botswana and in Johannesburg, South Africa. It was necessary to examine first hand the models of equipment that are available to Botswana. The lists of equipment vendors are found in Appendix E. As a result of these visits, the equipment lists were once again revised. The following equipment was eliminated from the lists:

Equipment	Reason
dry mount press	not available in Africa
35mm single lens reflex camera	sophistication not needed, simpler camera would suffice
audiocassette playback only	the difference in price from models that record was minimal
3M originals	not available in Africa

Equipment Specifications

A Request for Bid form was developed and specifications were written. Each page specified only one piece of equipment. Vendors were asked to provide the details of the models they were bidding on, as well as the price quotation. A total of 38 items were described. Each vendor could bid on any or all of the 38 specified items. (See Appendix F.)

As much as possible, the specifications in these requests for bids were concise, used standardized measurements, avoided name-brands, requested service contracts and warranty information, and listed consumable items used with the equipment, e.g. lamps and batteries.

Selection of Vendors

The sets of equipment specifications were distributed to six local vendors and distributors: Allen Distribution Services, Apal Computers, Business Machine Services, Century Office Supplies, Office Equipment and Supplies, Rep Agencies. (See Appendix E.) Representatives of these agencies had previously procured equipment and office supplies for the PEC. Later, two other agencies, V & L Enterprises, and Tate Office Supplies were also given sets of specifications. Vendors were asked to return all bids by May 27, 1983. All the agencies, except Century Office Supplies, returned at least one bid.

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In selecting the vendors for audiovisual and production equipment, certain factors, in addition to low cost, were considered. Did the vendor:

1. have a local service department?
2. provide installation and on-site demonstration of new equipment?
3. offer up-to-date product information?
4. guarantee delivery on schedule?
5. provide a means to repair or replace damaged goods?
6. provide reliable service in the past?

Review of Bids

As the bids were returned, they were dated and organized by item for easier comparison. Each specification was checked to be sure that the vendor was quoting equipment that matched the request. Questions were noted and later clarified with the vendors. A summary sheet was prepared listing all the equipment and all the bids of each vendor. All bids, those accepted and those not accepted, as well as the summary sheet are filed in the main office of the PEC. A few items were eliminated at this point:

Equipment	Reason
folding easel	no bids that met specifications
slide dissolve unit	not essential for PEC programs
omnidirectional microphone	too expensive
3/4" U-matic video recorder	decision to purchase 1/2" VHS format
transport dolly	no bids
microcomputer table	no bids, not needed

A meeting of the Primary Education Department was called on May 31, 1983 to review all the bids. The staff approved the recommendations of the consultant, but asked for further clarifications from the vendors on the photocopier and the video equipment.

Further investigations of service contracts for photocopiers were conducted with the purchasing agent for the University and two local service representatives. Visits to V & L Enterprises, Gaborone, and T. L. Electronics, Johannesburg clarified questions concerning video equipment.

A final summary sheet of equipment bids was prepared and submitted to the U.S.A.I.D, contract supervisor. The summary, found on the following pages, lists each item, the number of bids received, the amount in pula of the low bid, and whether or not the bid was accepted. In the few cases where the low bid was not accepted, a justification was provided.

There were questions about the video equipment and the microcomputer. After consultation with video equipment vendors, it was suggested that for simplicity of operation, maintenance, and repair, it is better to purchase all the components of a video system manufactured by one company and sold through one vendor. Of the two vendors who offered quotations on video equipment, only one could supply a complete package of all the components desired.

The questions on the microcomputer concerned justifying the need for one in the PEC and justifying the cost of purchasing it locally rather than importing one from the United States. The justification of the need for a microcomputer is found following the bid summary. Although it is recognized that the cost is higher in Botswana, the local Gaborone vendor has a commitment to service the equipment that he sells. Moreover, the vendor is able to offer installation and on-site demonstrations of the equipment.

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Primary Education Improvement Project
Bids for Audiovisual Equipment

ITEM	NO. OF BIDS	LOW BID	AMOUNT (in pula)	JUSTIFICATION
<u>Office Equipment</u>				
photocopier	6	yes	P2083	
spirit duplicator	3	yes	380	
paper jogger	2	yes	425	
electric stapler	2	yes	115	
<u>Projectors</u>				
overhead projector	6	yes	325	
slide projector	4	yes	648	
slide viewer/projector	3	yes	957	
filmstrip viewer/projector	2	yes	1078	
16mm film projector	3	yes	1128	
opaque projector	4	yes	1210	
projection tables/carts	4	yes	165	
<u>Audio Equipment</u>				
cassette recorder w/ sync.	5	no	429	low bid recorder not sufficient quality for master recording
cassette recorder	4	yes	122 286	REC'D THE MODEL
floppy disc	1	yes	38 18	REC'D THE MODEL
listening center w/ cassette	1	yes	215	
record player	3	yes	125	
audio card reader	4	yes	242	
high-speed cassette duplicator	5	yes	2200	to reproduce tapes for the T.I.C.'s

Primary Education Improvement Project
Bids for Audiovisual Equipment

ITEM	NO. OF BIDS	LOW BID	AMOUNT (in pula)	JUSTIFICATION
<u>Production Equipment</u>				
Visualmaker kit (copystand)	2	yes	552	
camera	1	yes	246	
presentation board and easel	4	yes	155	
mechanical lettering system	3	yes	425	
<u>Video Equipment</u>				
videocassette recorder	3	yes	9,470	desirable to buy all video equipment from the same dealer, and to stay within the same manufacturer -- only one bidder could do this
video camera	5	no		
video monitor	5	yes		
tripod with dolly	3	yes		
blank videocassettes	5	no	16-18	prefer 3M Scotch brand reliable quality - low bid of 3M bids
<u>Microcomputer</u>				
microcomputer, disk drive, monitor	2	yes	3417.75	
printer	2	no	1555.00	needs to be compatible with microcomputer system.
software packages	2	yes	600	word processing, record keeping, computer-assisted instruction
<u>LETTERING SUPPLIES</u>				
lettering stencil	2	yes	3-6 ea.	
magnetic letters	3	yes	59	
maps	3	yes	18-21	
globes	3	yes	52	

Primary Education Improvement Project
6 June 1983

Proposed Purchase: 1 Apple IIe microcomputer
2 disk drives
1 green screen monitor
1 dot matrix printer
necessary interfaces and cables
blank diskettes
1 Apple BASIC manual
1 Apple Writer IIe (word processing program)

Total Estimated Cost: P5,500. This represents less than 10% of the proposed expenditures for equipment.

Justification:

The Primary Education Centre will be a model for primary educators of alternative, innovative approaches to teaching and learning. An important aspect of the program is to demonstrate to students what is possible and what is available for the improvement of primary education. It is essential to provide opportunities to the students and allow them to decide what innovations their local situations are ready for now, and which they can postpone for a few years.

The university B. Ed. and diploma programs in education are ready for the introduction of a microcomputer. Students will learn by experience the basic operation of the equipment as well as its many applications in computer-assisted and computer-managed instruction. While they will not be trained to be programmers, they will have the opportunity to examine the organization of computerized lessons and to write simple lessons of their own.

Several of the schools in Botswana are considering the purchase of microcomputers. Since the diploma students, in particular, will be in positions as head teachers and education officers, it is important that they have some experience in evaluating both hardware and software. The aim is to make them intelligent consumers of microcomputer and other technological information.

Moreover, the Botswana students who are currently enrolled in advance degree programs in the United States have expressed the desire to learn as much as they can about newer technologies of instruction, especially microcomputers. When they return to the University of Botswana, they want to be prepared to assume leadership roles in the improvement of primary education.

As a side benefit, the faculty and staff of Primary Education will be able to use the microcomputer in their own teaching to accommodate individual learning styles. They will also be able to keep academic and administrative records, plan financial operations, and develop a larger pool of valid, reliable test items for examinations. With a word processing program, they can write technical and other professional reports.

Based on the needs assessment of the PEC and the T.T.C.'s, a determination was made as to the numbers of each piece of equipment that would be ordered. Purchase orders were written on four-part forms. Although there was a delay in distributing the purchase orders, vendors were asked to supply the orders by June 27, 1983.

Procedures for the acquisition and organization of the equipment were formulated. These procedures are described on the following pages. Accurate records, invoices, and packing slips are kept in the main office of the PEC. All equipment was thoroughly tested as it was received. Most of the major pieces of equipment had been received and tested by July 1, 1983 when the consultant was scheduled to depart. The remaining invoices and orders were left with the P.E.I.P. Project's administrative assistant.

Equipment Inventory

An equipment inventory form was developed in order to keep accurate records of the equipment and materials purchased by the P.E.I.P. Project for the Primary Education Centre and the Teacher Training Colleges. The inventory lists the model and description, serial number, vendor, date purchased, and price of each item. In addition, equipment history cards are kept to keep track of the maintenance and repair record of each piece of equipment. The Equipment History form is included as a sheet

Procedures for Organizing Equipment

Acquisition

1. When equipment is delivered, check the invoice or packing slip to be sure all the parts are included.
2. Unpack, assemble, and test all equipment.
3. Check the purchase order to be sure the equipment and accessories match the order.
4. Write the date received on the purchase order and check the price. Attach the invoices to the purchase order.
5. When the equipment is checked thoroughly, label the equipment and accessories PEC in a visible spot with permanent ink or paint.
6. Forward the purchase order for payment.

Inventory

1. List each piece of equipment in the Equipment Inventory. Fill in the item, model and description, serial number, vendor, date purchased, and price.
2. Number the items consecutively as they are listed.
3. For each piece of equipment, fill in an Equipment History card. Include the purchase order number, dealer, price, model and description, and serial number. The inventory number is the number from 1 to ___ from the Equipment Inventory list. Fill in the date received, yes or no if the order is complete, and the date of the warranty expiration, if applicable.
4. If there is a service agreement, fill in the service dealer, the date of the duration of the agreement, and the cost.
5. Each time the equipment requires regular maintenance, cleaning, or repair, fill in the maintenance record.
6. Equipment History cards are filed alphabetically by manufacturer, model description and number in the bottom drawer of the vertical file in the main office. The Equipment Inventory is filed in the same drawer.

Manuals, Warranties, and Maintenance Instructions

1. Equipment instructions and warranties are filed alphabetically by manufacturer, model description and number in the vertical file in the main office.
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PRIMARY EDUCATION CENTRE
UNIVERSITY OF BOTSWANA

EQUIPMENT INVENTORY

Page _____ of _____

Date _____

Item	Model and Description	Serial Number	Vendor	Date Purchased	Price

1/5

Equipment History

P.O. no. _____ Dealer _____ Purchase Price _____

Model and Description	Serial Number	Inventory Number

Date Received _____ Order Complete _____ Warranty Expiration _____

Service Agreement: Dealer _____

Date _____ Cost _____

Maintenance Record

Date	Repairs	Parts	Labor	Total

(continued on other side)

Equipment History

P.O. no. _____ Dealer _____ Purchase Price _____

Model and Description	Serial Number	Inventory Number

Date Received _____ Order Complete _____ Warranty Expiration _____

Service Agreement: Dealer _____

Date _____ Cost _____

Maintenance Record

Date	Repairs	Parts	Labor	Total

showing two forms, but the actual histories are printed on card stock. These equipment histories will be maintained by the administrative assistant, and filed in the main office of the PEC. All the manuals, warranty information, maintenance instructions, and operating procedures for the equipment are filed alphabetically by model name and number in the main office.

The inventory taken on June 23, 1983 shows the equipment that had been purchased prior to the major expenditures of this project, as well as the equipment that was received as of that date. The list includes typewriters, ink duplicator, laminator, collator, stencil scanner, thermal copier, lettering systems, camera, overhead projector, and microcomputer. The value in pula of the equipment inventory as of June 23, 1983 was P27,782.00. It should be noted that most of this equipment is not a part of the budgeted amount of \$57,000 that was quoted earlier in this report. The equipment listed in the inventory that is a part of this budgeted amount will be included in the list in a later section.

Use and Storage of the Equipment

Most of the equipment will be stored and used in the Primary Education Centre. (The equipment purchased for the Teacher Training Colleges is not included in this discussion.) The production and reproduction equipment will be used in the large media production room (Room 4), except for the photocopier which is centrally located in the circulation desk area. The projectors, audio equipment, video recording equipment, and microcomputer are stored in the small soundproof room (Room 6). The microcomputer

will also be used at a work station in this same room. Some of the equipment will be stored on mobile carts for easier portability to the classrooms and conference rooms of the PEC. The floor plan with an overlay of the plan for storage of the equipment is found on the following pages.

Training of the Staff

The training of the PEC staff in the use of the newly purchased equipment was informal and was conducted as the equipment was being assembled and tested. The staff members are experienced teachers and office workers who have worked with most of this equipment before. Special problems or maintenance concerns were brought to their attention. For the introduction to the use of the microcomputer the local vendor arranged a training/workshop session for the staff members who would be using the microcomputer. The sessions were held at the PEC using the PEC equipment.

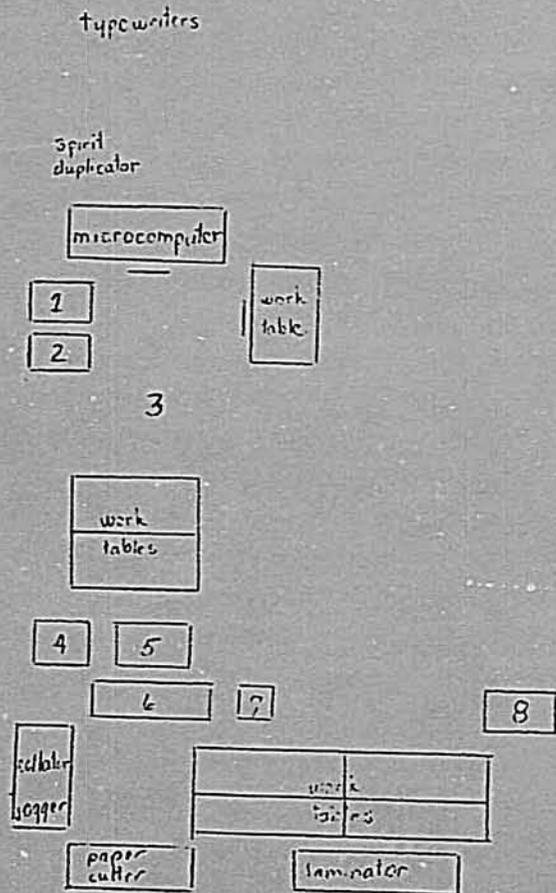
Expenditures

The equipment and materials ordered and purchased are listed following the floor plans. Since some of the equipment had not been received as of July 1, 1983, the prices listed are the purchase order prices. In some cases, alternate supplies were provided at a slightly different price. The total amount expended is about P48,401.85 which is about \$45,497.74 in U.S. dollars.

Flipchart

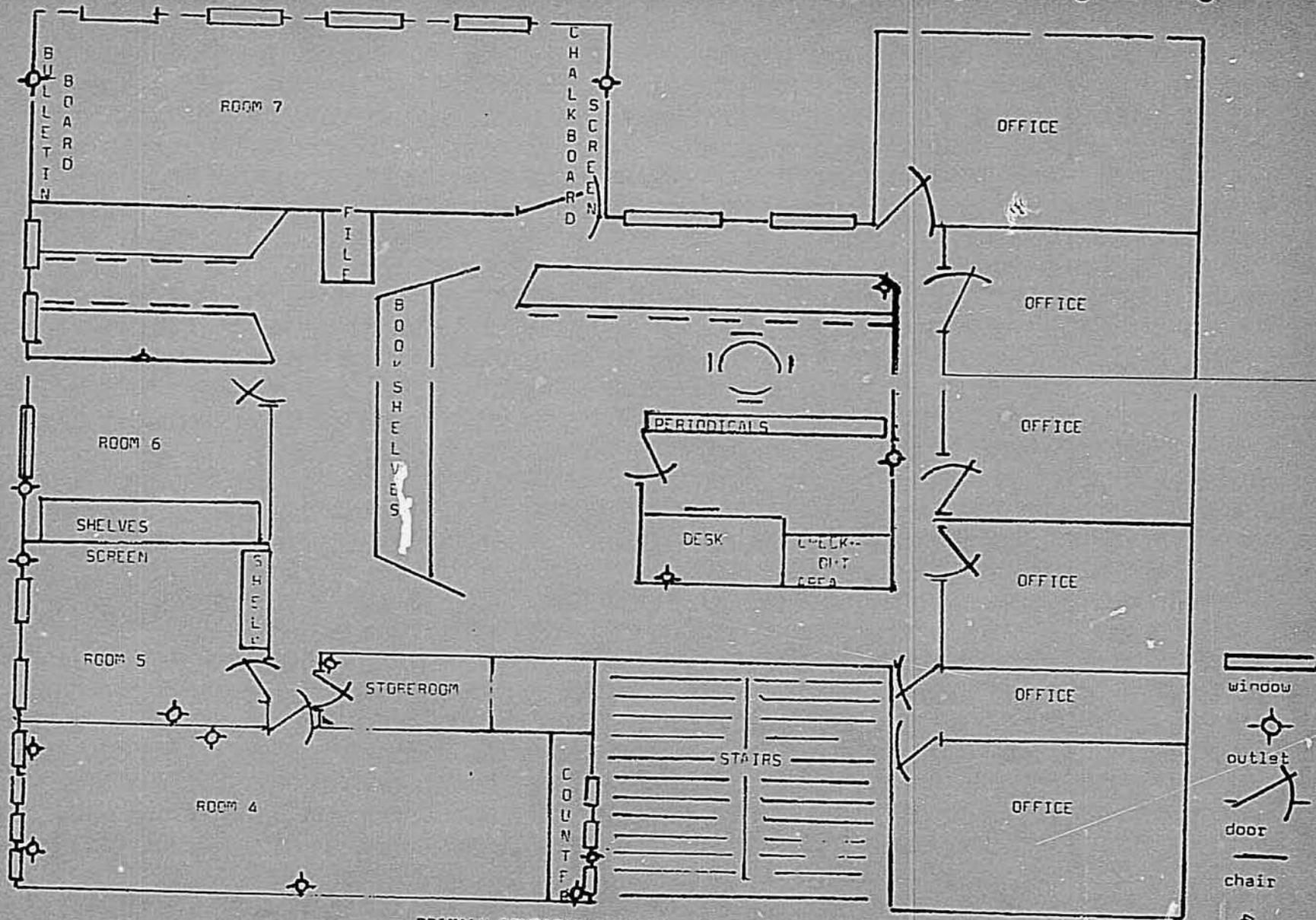
PLAN FOR THE STORAGE AND USE OF EQUIPMENT
IN THE PRIMARY EDUCATION MEDIA CENTRE

(use as an overlay to the floor plan)



photocopier

- 1 16mm film projector on cart
- 2 overhead projector on cart
- 3 record player
slide projectors
Visualmaker
filmstrip projector
audiocassette recorders
microphones
listening center
audiocard reader
portable videorecorder
- 4 video camera on tripod
- 5 videorecorder and monitor on cart
- 6 lettering devices
- 7 storage drawers
- 8 opaque projector on cart
- 9 ink duplicator
stencil scanner
thermal copier



PRIMARY EDUCATION CENTER -- second floor
(not drawn to scale)

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PRIMARY EDUCATION CENTRE
UNIVERSITY OF BOTSWANA

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Equipment Expenditures -- April-June 1983

Equipment and Supplies		Price(in pula)
1	Kodak Ektographic Visualmaker Kit	P 447.00
	1 Kodak x/35F camera	86.00
	1 Kodak Ektron II electronic flash	19.00
	2 PX camera batteries	8.00
1	Idealvibro 8103 paper jogger	425.00
1	Olympus camera -- Model XA2	246.00
	includes A 11 electronic flash	
	2 batteries for above camera	10.00
1	Singer Caramate - Model 4464	957.00
	2 lamps, DDM	55.00
	10 slide trays	120.00
1	Singer Insta-load 35 filmstrip viewer/projector	1078.00
	2 lamps, DDK	66.00
3	Bell and Howell 16mm projectors	3384.00
	6 lamps	118.80
	3 exciter lamps (for sound)	45.00
4	Beseler Vu-Lyte IV opaque projectors	4840.00
	4 lamps	176.00
1	Audiotronics Audiocassette sync recorder, Model 152-S	429.00
	synchronization cable	6.00
1	Tandberg TPR101 portable audiocassette recorder	132.00
	5 batteries	7.50
9	Tandberg Audio-Tutor TA771 audiocassette recorders	2574.00
4	microphones	
	2 lapel type	76.00
	2 table type, bi-directional	36.00
4	MPC listening centers Model PA8600	860.00
1	Audiotronics Tutorette audiocard reader Model 810 A	242.00
	3 boxes small blank cards	66.00
	2 boxes large blank cards	55.00
	4 batteries	6.00
1	Alpha 21 mono cassette copier	2200.00
1	bulk eraser for magnetic tapes	209.00
130	audiocassette tapes	
	100 C-45 tapes	450.00
	100 C-60 tapes	500.00
	30 C-90 tapes	180.00
40	videocassette tapes, 1/2"VHS	
	20 T30	320.00
	20 T60	360.00
3	classroom maps	56.85
2	globes	103.80

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Equipment Expenditures(continued)

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1	JVC ½" VHS videorecorder, Model HR2200	1680.00
	6 battery packs	300.00
	synchronization cable	10.00
1	JVC video camera, Model S100-E	4104.00
	1 carrying case	360.00
2	JVC monitor/receivers, Model 7808ME	3168.00
1	Husky tripod for video camera	317.00
	1 Husky dolly for tripod	165.00
1	JVC ½" VHS videorecorder, Model 7650EG	1620.00
	synchronization cable	10.00
1	3M photocopier, Model 545	2082.50
	1 box transparency film	64.80
	1 package toner and developer	136.50
1	Apple IIe microcomputer and accessories	3144.75
	80-column card	
	monitor	
	stand	
	disk drive	
	1 Apple Parallel Interface Card	273.00
	20 Dysan blank diskettes and holder	120.00
1	Apple dot matrix printer	1500.00
	cable	55.00
1	Apple BASIC programming manual	18.00
1	Apple Writer IIe word processing program	367.50
1	Apple disk drive (additional)	600.00
2	Ozalid flipchart board and easels	310.00
	10 flipchart pads	90.00
	2 graph pads	18.00
	2 spring clamps	20.00
	24 dry wipe markers	39.60
1	Leteron Econ-o-Sign IIC lettering system	425.00
	4 sets of cutting die	291.00
	20 rolls of Letertape	220.00
1	set Magiboard 2" magnetic letters	59.00
2	3M overhead projectors, Model 213ADA	650.00
	4 lamps	72.00
	1 box write-on acetate transparencies	10.00
1	Kodak Ektagraphic slide projector, Model B2AR	545.00
	1 zoom lens	103.00
	2 lamps	28.00
	1 remote control	15.00
5	Gestetner G20 spirit duplicators	1900.00
	50 reams ditto paper	281.00
	12 5-liter bottles of duplicator fluid	204.00
	24 boxes ditto masters	900.00
1	Audiotronics 300E classroom record player	120.00
1	Naruzen electric stapler	115.05
	10 boxes of staples	15.00
40	Stenso lettering stencils	92.40
12	ball-pen stencils	7.80
5	mobile tables with shelves (projection carts)	825.00

 TOTAL P 48401.85

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The three Teacher Training Colleges (T.T.C.) of Botswana, in Francistown, Lobatse, and Serowe, offer two-year programs for the training of primary school teachers. The lecturers for these colleges are 50% Batswana and 50% expatriates. In the future, these lecturers will be graduates of the undergraduate programs in Primary Education at the University of Botswana. Because of the close cooperation of the P.E.I.P. Project and the Teacher Training Colleges, it was determined that the Project support their instructional programs with the procurement of audiovisual and production equipment.

Needs Assessment

Each of the three Teacher Training Colleges was visited in May, 1983 and again in June, 1983 to assess the areas in which the P.E.I.P. could best assist in supporting the instructional program. Interviews were conducted with several instructors, with audiovisual coordinators, with principals, and with education officers. (See Appendix C.) During these interviews, questions were asked concerning the equipment that was already available to instructors and students, the extent to which it was being used, the reasons for non-use, and the direction that media utilization was likely to take in the next few years in the T.T.C.'s.

The kinds and numbers of pieces of audiovisual equipment were tabulated. In later visits to the T.T.C.'s, Jack Purves,

from the Curriculum Unit of the Ministry of Education, assisted the consultant in verifying the information that had been gathered and summarized.

There was not always agreement as to what the T.T.C.'s wanted or needed most in the area of audiovisual and production equipment. In some cases, instructors expressed interest in acquiring video equipment for use in microteaching. At the same time, many instructors felt that the video technology would be too difficult to operate and maintain without better training and organization of resources.

A seminar for instructors and principals of the Teacher Training Colleges was held in Gaborone in May, 1983. During the week-long program, discussions centered around the philosophy and programs of the T.T.C.'s, problems and issues in teacher training, and the improvement of the T.T.C. curriculum. One of the recommendations arising from these discussions was an increased awareness of the use of audiocassettes and radio programs in primary education. The college tutors were encouraged to be involved in the development of these audiocassettes.

Based on the recommendations of the T.T.C. seminar, the visits to the T.T.C.'s, and the interviews with interested resource persons, lists of equipment were drawn up. The main emphasis of support is in the area of print reproduction that would be available to tutors and students alike, and audiocassette production and utilization. (See Appendix G. for details.)

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Equipment Delivery

It was decided that all the equipment would be tested and stored at the Primary Education Centre until such time that the principals of the T.T.C.'s could come to Gaborone. The three principals of the T.T.C.'s will be invited to a training session in which the equipment will be demonstrated and proper utilization explained. The principals would then be responsible for the introduction and maintenance of the equipment in their respective colleges.

For the future, it is recommended that a media specialist plan and conduct workshops for the lecturers of the T.T.C.'s in the operation of audiovisual and production equipment, in simple maintenance and repair techniques, in the organization of resources, and in the effective utilization of media in instructional settings. It would be to the lecturers best advantage to hold these workshops at the T.T.C.'s with the equipment already there and in the setting in which it will be used. At the same time, newer and more sophisticated technologies could be introduced and specific problems and issues could be addressed.

COURSE DEVELOPMENT

The program for undergraduates in the Primary Education Department at the University of Botswana includes a course in audiovisual utilization and materials production. Students are scheduled to take this course in their fourth year. Since

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the first students enrolled in the program have just finished two years, the course has not yet been offered. A course outline has been developed and is included in Appendix H. The outline includes the unit topics, the concepts to be taught, the production skills associated with each unit, performance objectives, and lists of resources for teaching and for reference. The outline will be filed with the syllabi for the other undergraduate courses and will be further developed by the course instructor when the course is offered.

SUMMARY

This report describes the work that has been accomplished during April, 1983 through June, 1983 in the Primary Education Centre at the University of Botswana by the instructional media specialist under contract to the P.E.I.P. Project. The curriculum materials collection is organized and procedures and policies have been developed. Audiovisual and production equipment has been acquired and installed. The Teacher Training Colleges have been supported with some basic audiovisual equipment. A course in audiovisual utilization and materials production has been developed. The activities that were yet incomplete as of July 1, 1983 were left with instructions with the Primary Education faculty and staff. Any further questions can be clarified with the consultant by contacting Ohio University.

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APPENDICES

- Appendix A. Calendar of Activities
- Appendix B. Dewey Decimal Classification and Publisher Codes for the Primary Education Centre
- Appendix C. Site Visits and Interviews
- Appendix D. Report 1982 from Teaching Aids Production Unit
- Appendix E. List of Audiovisual Dealers and Local Vendors
- Appendix F. Requests for Bids
- Appendix G. Equipment Ordered for the Teacher Training Colleges
- Appendix H. Course in Audiovisual Utilization and Materials Production
- Appendix I. Directory of Resource Persons

APPENDIX VI

ASSESSING INSTRUCTIONAL NEEDS
WITH LANGUAGE EXPERIENCE STORIES

Janet K. Ramsay

Language experience stories were collected from pupils in Standards 3 - 6 of a primary school in Botswana. These stories were analysed to establish the level of mastery for selected features. The results of the the analysis indicated that although English is taught each year, pupils begin to acquire it only when English becomes the medium of instruction. Aided by the results of this study, goals and content for the English as a Second Language portion of the primary teacher in-service program were established.

The 1977 Report of the National Commission on Education, in Botswana, identified primary education as a national priority for improvement and reform. In 1981, the Primary Education Improvement Project (PEIP), a joint venture between USAID and the Government of Botswana, began to take shape with the arrival of Ohio University personnel. The aim of the project is: to establish at the University of Botswana a Department of Primary Education, which offers both B.Ed. program for future teacher trainers and a Diploma program for prospective educational leaders. The project also organizes and implements with the Ministry of Education an in-service program for teams of educators who will be conducting in-service workshops in their local schools.

Presently, English is taught as a subject during the first four years of primary education while pupils are learning to read and write their mother-tongue (Setswana). In the fifth year, English becomes the medium of instruction for the remaining three years of primary education in Botswana.

Upon arrival in Botswana, the Ohio University team visited a number of primary schools and teacher training colleges. Discussions were held with various educators concerning perceived needs in the area of instructional improvement. In these discussions it was suggested that most primary teachers need to improve their own English. Hamayan (1980) suggests that the teacher's language, the input, affects the pupil production in a bi-lingual classroom. Based on this hypothesis a portion of each in-service workshop should be devoted to language instruction for the teachers. The discussions also emphasized the need for more effective methods, techniques and teaching aids for oral English. (Specific content for future teacher workshops should be based on improving the pupils' oral English.) To determine the current proficiency level and to become acquainted with the pupils' ability in the different standards the focus of this study became centered on the pupil. It is designed to define the content of primary teacher in-service workshops based on pupil competencies.

Subjects

Eighty-four pupils in standards 3 - 6 (3rd - 6th year of formal education) provided language experience stories for this study. The distribution of pupils by standard was: 19 std. 3, 18 std. 4, 24 std. 5 and 23 std. 6 pupils. These pupils attend Mogoditshane Primary School located in a village which is a suburb of Gaborone, the capital of Botswana.

The ages of the pupils ranged from 9 to 16 years. All of the pupils in the study speak Setswana at school and all but 8% use it at home as well.

Method

The pupils' oral English was collected using an unstructured natural communication technique: language experience stories. Pupils were instructed to draw a picture of something that they could tell a story about in English. (Cooper & McNamara, 1978). Discussion of possible picture topics occurred before pupils were given paper and crayons. Upon completion of the drawings each pupil dictated his/her story to a researcher. This technique was selected for data collection because (1) it could be utilized by class teachers for individual and group needs assessment

(Cooper & McNamara, 1978), (2) the task itself is similar to tasks required of pupils learning English in school, and (3) the variety of English spoken by researcher (American English) was least likely to interfere with the pupil's understanding and production of oral English. The major limitation in the use of this technique is that the production of some structures might be avoided by pupils, but it does provide information about those structures the pupils use regularly and the extent to which those structures have been mastered.

Analysis

The oral language of the pupils was analyzed to establish the sequence that certain English features were learned. This sequence will serve as a basis for guiding instructional improvement by creating an awareness of the sequence and of when it becomes established in the pupils' speech. The group score method (Brown, 1973; Dulay, Burt and Krashen, 1982) was used to compute the sequence of learning for selected English features. The group score is obtained by assigning 2 points for each obligatory occasion. The actual score is obtained by allotting 2 points to features supplied correctly, 1 point to misformed features and 0 points for features not supplied in obligatory occasions. The actual score for all pupils is added together and divided by the sum of the scores for obligatory occasions. This is multiplied by 100 to yield the group's percentage of accuracy in using each feature.

Features Selected for Study

Pronoun Case	Nominative or accusative case. <u>He</u> is a man. The dog is walking with him.
Plural(s)	Short Plural/s/ and /z/. windows <u>cocks</u>
Articles	a, <u>an</u> and <u>the</u> .
Progressive	-ing in the past, present and future. The wolf was/is/will be <u>eating</u> the sheep. Past
Irregular	Main verbs such as: got, went, said. He <u>got</u> honey from the tree.
Past regular	-ed/t/ or /d/ or /id/ of the past regular tense. He <u>lived</u> in a house.
Present indicative	Third person singular noun followed by a main verb. My mother <u>lives</u> in this house.
Plural(es)	Long plural /iz/ houses <u>.</u>

Error frequencies of grammatical constructions were also tallied to determine the most common errors for each group of pupils. Descriptions of the errors to be counted were set according to actual errors occurring in the pupils' language experience stories. (Cooper & McNamara, 1978). Although there was no attempt made to determine the source of such errors in some instances, when errors were discussed with class teachers they indicated that perhaps they themselves do not have a clear understanding of the use of these features. The findings from the error frequency count were compared to the competencies established by the sequence of acquisition analysis. This procedure helped establish the pupils' strengths and weaknesses in the usage of oral English and led to the recommendations of content for the primary teacher in-service workshops.

RESULTS

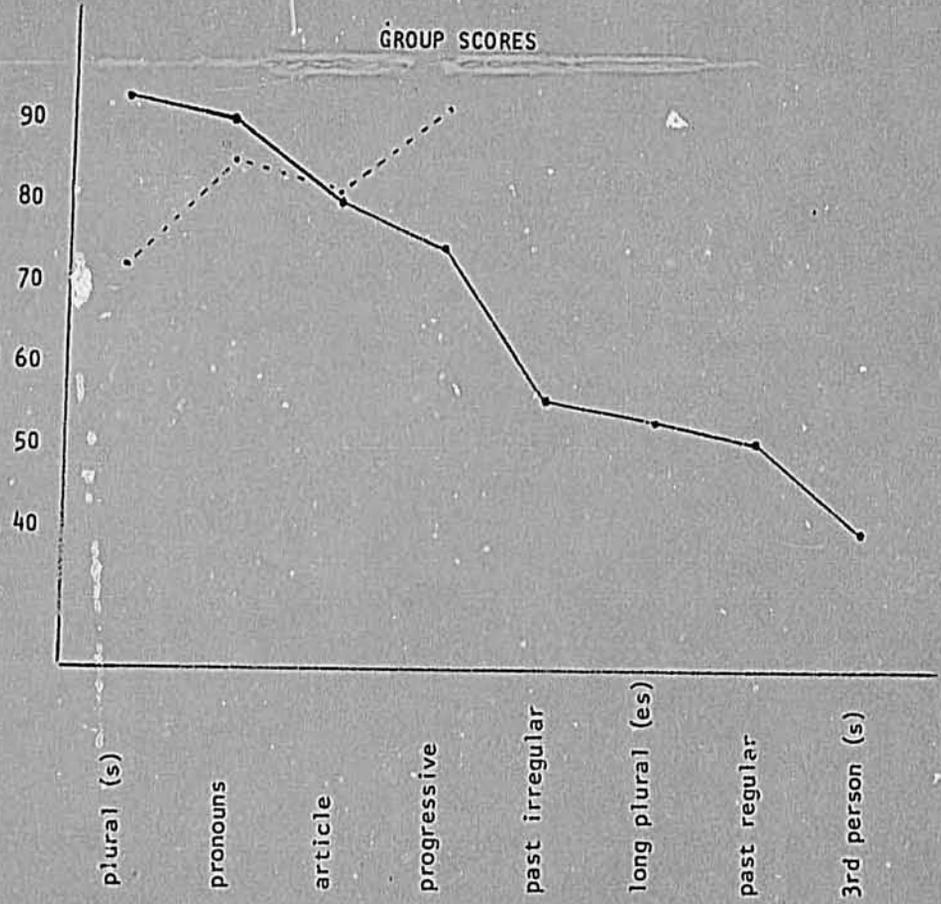
The content of the language experience stories centered primarily on village activities. Most stories produced by Standard 3 and 4 pupils consisted of naming objects in the picture using single words (17 pupils) or the phrases "It is a ..." or "This is a..." A few pupils were able to create a story line based on what they had heard or read recently. Standard 5 and 6 pupils also added content from social studies and science classwork. These four features were used with a high degree of accuracy. Pupils in Standards 5 and 6 regularly used eight of the features in their oral stories. Although the contracted copula (it's, she's) and possessives were counted, they did not regularly occur in the pupils' stories.

In an attempt to account for this the English texts (Day by Day English Course, 1963, Longman) and syllabi used in the schools were examined. Possessive noun forms were introduced in the standard 3 syllabus, yet pupils in this study have not incorporated them into their speech. This may be due to the instrument, language experience stories, used in data collection. Ts onope and Otaala (forthcoming) found, in their structured natural communication study, that it appeared high (3rd) in the sequence of acquisition for Setswana speakers. This discrepancy will have to be examined at a later time.

Upon examination of the English texts it was discovered that the contracted copula form does not appear in the text. It also rarely appears in the speech of Batswana speaking English. Since the pupils have very little contact with this form it is unlikely that it would be incorporated into their speech.

Results

Features	Group Score	Group Score	Rank (Order)
	Std. 3 & 4	Std. 5 & 6	
Plural (s)	72.22	93.14	1
Pronouns	85.25	90.53	2
Articles	82.85	81.22	3
Progressive	92.22	75	4
Past irregular		56.66	5
Plural (es)		55.55	6
Past regular		52.86	7
Present Indicative		41.12	8



#key

---- denotes Std. 3 and 4
 _____ denotes Std. 5 and 6

Tsonope (forthcoming) studied the acquisition sequence of English morphemes by 60 Setswana speaking pupils attending Standard 6 in rural schools. The study used a prototype of the Bi-lingual Syntax Measure (Burt, Dulay and Hernandez-Chavez. 1975) to elicit spontaneous speech. Group score and group mean methods were used to tabulate the results. Group scores of five features, plural(s) pronouns, articles, past regular, and 3rd person(s), held in common by the studies were rank ordered. The correlation, $\rho = .90$ $p < .05$ (Spearman), indicates that there is a similarity between the acquisition order of these English features by pupils attending rural and suburban schools in Botswana.

An error frequency count was completed on the original data in order to identify other features that pupils might have difficulty using. The error frequency count done on Standard 3 and 4 stories indicates that although articles and pronouns are accurately used 82% and 85% of the time respectively, the highest frequency of errors was in these categories. The omission of preposition is the most significant new finding of the error frequency count for standard 3 and 4. More prepositions were used in Standard 5 and 6 but incorrect substitutions occurred frequently. Errors most commonly made by Standard 5 and 6 pupils were the omission of articles, 3rd person (s), be verb and regular past (ed). The word 'has' caused some difficulties for pupils. The word 'is' was often substituted for 'has'. Also, the wrong form of the irregular tense was often supplied.

Recommendations

The marked difference between the number of different features used by the lower and upper standard pupils implies that when pupils are taught content subjects in English their production of English feature is more varied. Using English to teach content subjects allows for "the use of language in numerous situations where meaning is more important" (Stevens 1983.:268) than form. To increase the number of features produced by pupils in standard 3 and 4, English lessons could be combined with content area lessons periodically. Many of the topics in the English syllabus are also covered in the content area syllabi.

A few examples of topic overlap follow:

Std. 3

English

Social Studies

Science

Maths

The Radio

Communication

Colours

Sorting & Classifying

Parts of the Body

Care of the
Body

On a farm - crops

Our District - the
lands

Water

Our District - rainy
and dry seasons

Watercycle

Capacity

Clothes

Games

Animals

Animals &
Wildlife

Std. 4

English

Social Studies

Science

Maths

Occupations

Local economy

Calendars - Time

Local Communication

Seasons

Time

Climates & Seasons

Geography of the
Community

Wild Animals & Birds

Animals and
Birds

Games

Culture of the
Community

The Pupils' stories contained a number of patterned sentences. Generally, the pupils' used these rehearsed patterns in appropriate contexts. Rehearsed patterns can be useful in everyday communication, such as greetings and leavings, but the opportunity rarely arises to use "This is a ..." in a communicative situation. Since for many pupils, primary education is the end of formal schooling, it is important for these pupils to be able to communicate in English when they leave Standard 7.

Techniques and activities that will prepare pupils to function in English should be added to the class teachers' repertoire.

The following are possible techniques and activities that could be included in teacher workshops.

Total Physical Response
Simulations of Situations

Puppet dramatizations

Plays

Songs

Listening to stories read aloud

Using pictures for Oral Description

Using Real Life Questioning Techniques

Field Trips

Games - active outdoor games and board games that require oral production

The implementation of these techniques in the classroom may help eliminate some of the errors pinpointed in the error frequency count. It may also be useful to prepare teaching aids and materials to help the teacher with these specific points.

The author would like to thank Joe Tsonope and Iva Zajicek for assisting in data collection and commenting on the final paper.

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