

~~Final Report~~

Dr. Patrick D. Lynch

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I. Introduction

The second visit of the external evaluator of the Primary Education Improvement Project began on October 8, 1982, and concluded on October 21, 1982. The evaluator met with Mr. J. Swartland, Mr. P. Sephuma, Ms M. Lesolle, Dr. U. Kann and Ms K. Kuete of the Ministry of Education; headmistresses of two primary schools; Dr. Knox and the members of the project contract team; Dr. M. Evans of Ohio University; Dr. E. Otaala of the University of Botswana; and worked with Dr. E. Axtell of the Ministry of Education. His last conference was with Mr. P. Guidet and Mr. J. Gant of USAID. He visited primary schools in Gaborone and Magothane, the second of which is a rural project school. The Een Thema school in Gaborone is not a project school.

The first visit of the external evaluator was made in January, 1982. At the end of that visit, the evaluator left a plan for the evaluation of the project, with short range and long range steps to be followed. After the evaluator returned to the United States he kept in touch with Dr. Axtell, the on-site evaluator, and the Chief of EHRD, USAID/Botswana, concerning implementation of the evaluation plan. Meanwhile, several evaluation steps were carried out in Botswana, including:

1. The formation and regular meetings of an ad hoc evaluation committee comprised of Mr. Swartland, Mr. Sephuma, Dr. Axtell, Dr. Otaala and Dr. Knox.
2. Evaluations of each workshop, with feedback to the PEIP team. These were done at the conclusions of three workshops.
3. Considerable progress on a study of pupil achievement and characteristics, as well as school and teacher characteristics, related to the impact of the PEIP project on classroom teaching, was made by the Curriculum Development and Evaluation Department of the Ministry of Education.
4. A decision to bring in a specialist in classroom observation methods was made. Plans will be developed to utilize his skills during the period June - August of 1983.
5. Dr. Knox and the PEIP team prepared the first report on the Ohio University contract, which detailed the team's activities.
6. The evaluation plan left by the evaluator was discussed by Ministry of Education personnel, the PEIP team and USAID staff with regard to its implementation. Dr. Knox also discussed the evaluation plan at an international meeting held in Zimbabwe.

- 7. The assessment of B. Ed. and Diploma students at the University of Botswana is progressing satisfactorily. Selection procedures are proceeding without evident problems.

II. Observations

The observations and recommendations made relate to three topics: goals of the project, the roles of Education Officers and institutions related to the project, and future plans for Ministry - University relationships. Several aspects relate to each of the topics, so some topics are less specific than others. The points that follow are not in order of importance.

- A. The PEIP team has developed teacher skills in the pilot schools, using the plan for multiplier effects. The project staff are very effective and the project is well administered. Staff morale is high.
- B. Teachers in pilot schools are using the skills and materials developed in the workshops. Teachers and Education Officers are enthusiastic about the PEIP project and the workshops.
- C. Performance of B. Ed. and Diploma students at the University of Botswana is acceptable, and the anticipated failure rate is not excessive. The performance of UB primary education students is favorable in all subjects so far.
- D. Back-up for the project from the Ohio University campus is exceptionally good. The external evaluator discussed with their campus coordinator some additional information which the former will provide concerning international projects in teacher education.
- E. Relations between the Ministry and University PEIP and administrative staff continue to be excellent. However, some certification steps now under discussion eventually could prove to be problematical. Relations between University-Ministry and Teacher Training Colleges have yet to be worked out.
- F. Workshop goals apparently need further attention, with participants clearly informed as to those goals and objectives. Several participants have written that they want more attention paid to the revised curriculum.
- G. The esteem in which the PEIP team members are held by professionals in the Ministry of Education and the schools is impressive. The professional involvement of the team members in various organizations and activities has helped create this climate of trust and esteem.
- H. The University Diploma and Degree programs are well under way, and many courses required for primary education have been approved by the University. The future commitment of PEIP staff to these courses will be extensive, and will require them to lessen involvement in in-service activity. Replacement or addition to the Primary Education Department staff will be a problem if sufficient numbers of Botswana are not sent off for training.
- I. Ministry officials desire more participation in planning of in-service workshops and activities by TC representatives, Head Teachers and curriculum specialists from the Ministry.

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J. Education Officers are faced with extensive new and conflicting role expectations. The need of these officers for professional help is great. These officers have in their power the means to assist greatly the reform of primary education or to retard that reform. In several other countries the attitudes of supervisory personnel have been recognized as a key to implementation.

K. The Primary Education Improvement Project is at a critical point. New personnel who might be added, modifications in direction, future plans by the staff and involvement of people and institutions all require planning and coordination. The PEIP project as part of two related systems, the Ministry of Education and the University of Botswana, is an example of a special change-oriented subsystem. Its relationships are complex, special and subject to high expectations which in fact may be conflicting. The establishment of priorities by such a subsystem is difficult, but an essential activity.

L. The selection of Botswana for training in the United States has been slow. Those selected have been identified for special positions in the Primary Education Department of the University. The University of Botswana has a faculty which reflects excellence in preparation, from diverse as well as distinguished institutions. The future primary education staff will have to match this excellence in order to preserve the integrity of the Primary Education Department and the education faculty.

M. There is a widespread expectation that a specialist in classroom behavior observation will spend at least 3 months during the middle of 1983. Mr. Sephuma wants training of Head Teachers, Education Officers and TTC tutors, in addition to the other previously-planned activities of the specialist. Evaluation of the project would require a three-month stay by the specialist, but extensive in-service activity will require more time, either continuously, or in return three or four month visits.

N. The PEIP team deserves praise for its anticipation of needed system changes, and the number of ways it has made resources available to the Ministry and the University. Examples are the work of Dr. M. Evans in working on the problem of certification and Dr. A. Lee in planning the degree program.

III. Recommendations

The following recommendations are based on the observations, and reflect perceptions and opinions of Ministry of Education, University and PEIP officials and staff. The only recommendation requiring expenditure of a significant amount of money is the recommendation concerning the classroom observation specialist. Other recommendations, however, do involve the time of various people. The recommendations have been grouped according to three topics: goals, education system relationships, and activities recommended for the external evaluator and the evaluation.

A. Goals and Objectives.

1. Given the commitment of the Ministry of Education to emphasizing higher cognitive level teaching and learning goals and objectives in the revised curriculum and in teacher preparation, as stated in the National Commission on Education report of 1977, it is recommended that these goals be given explicit emphasis in the in-service activities. It is presumed that these goals are also emphasized in the pre-service programs at the University.

Out of this framework of goals for both revised curriculum and the in-service orientation and preparation of teachers, specific objectives for the workshops can be elaborated and communicated to the participants. Necessarily, this implies a limited focus for all concerned.

In order to help clarify the roles of the PEIP staff, increased selection of professional objectives, in accord with long-range goals is needed. This will help to avoid conflicting and excessive expectations which may seriously affect the project as more demands upon staff time become apparent. Copies of Joyce and Weil's two volumes on models of teaching have been left with Dr. Knox. They illustrate goal frameworks for teacher training. They provide a variety of frameworks to which selected behaviors from the Georgia materials may be related.

Long range goals are identified in the project document, with target groups specified. The kind of goal framework which is necessary, in addition, is a conceptual orientation, which relates to the kinds of qualitative directions which in-service and pre-service programs may take. These are in addition to quantitative goals - or how many of what type of professionals will be reached by the project.

The long-range conceptual goals (the training in higher-level cognitive processes) provide a framework for the short-range goals, such as those for workshops.

The specification of long-range goals provides direction for each person's own activities; the team members' activities relate to the long-range goal framework. The more clearly these are specified, the more clearly the staff members' work relates to each other, and the more clearly future objectives can be specified for the team and individuals in it.

The evaluation committee notes of October 11, 1982, referred to the need for relating workshop activities to the revised curriculum. The Georgia Teacher preparation and orientation materials can be used in

the light of the elaboration of the goal framework. Selection of specific objectives from the Georgia materials can provide directions for workshops and for the teacher behaviors which will be observed in the evaluation for evidence of change in teachers' and pupils' behavior in classrooms. The classroom behavior observation specialist can help the team select appropriate teacher behaviors for observation, as these behaviors are related to the objectives of workshops and teacher preparation programs.

- 2. It is recommended that a period of planning, preferably 5 days, be set aside by the PEIP team sometime in 1982, or January, 1983, so that short term objectives can be set, as well as a clarification of a long-range conceptual goal framework which can provide a setting for the short-range objectives. This planning activity should involve representatives of the curriculum planning people of the Ministry, a few TTC tutors and Education Officer representatives. This planning session and subsequent planning can have the effect of emphasizing more sharply overall workshop objectives, specific workshop objectives and each presenter's objectives. The project paper of 1981 is a document which presents expectations as targets, but needs elaboration with respect to conceptual or qualitative directions.

E. System Relationships.

- 1. It is recommended that the Chief of Party of the PEIP team continue having easy access to officials in the Ministry of Education, especially the Chief Education Officer from Primary and Teacher Training. These relationships are harmonious, working well and constructive.
- 2. It is recommended that working relationships with organizations and groups within the Ministry of Education be clarified. This process may be seen as part of the planning, which is necessarily a continuous process. This clarification will require consultation with the Ministry and the University in order to construct an updated organizational chart.
 - a. Plans to work intensively with Education Officers, upon whom much of the success of the project ultimately rests, should be made. In-service training, courses at the University and informal relationships with this group can be used for helping them clarify their roles as supervisors, in-service resource people and inspectors. They feel a great role overload as a result of the new directions in primary education, and the PEIP project, in close consultation with Ministry personnel, can be of great assistance in helping them establish new roles.

- b. Working relationships with Teacher Training Colleges, concerning in-service training and revision of the teacher training programs, need to be planned. The project paper calls for PEIP involvement with the TTC's, but requires further specification. The PEIP staff have plans to work with the fourth TTC, now being established, and the relationships between the University and the Ministry will require cooperative planning.
- c. A role for education centers in in-service training might well be established, in cooperation with the Ministry, especially the Education Officers. *They are doing this* One suggestion for these centers is that they play a role in upgrading untrained teachers. The overall planning process will take into account the potential value of these centers.
- d. The role of the Teaching Aids Production Unit as it relates to PEIP and in-service work might well be clarified. Its services appear to be valuable, and its potential relationship to the new type of TTC ought to be explored.
- e. Taken separately, the relationships with the above institutions and groups with PEIP would easily be seen to constitute more roles than a small group of people can exercise. Selectivity has to be exercised in the planning process with respect to how relationships are exercised and the time spent on these complementary roles.

Participative planning, with PEIP personnel playing roles as planners and resource people, rather than people upon whom all the burden of responsibility falls, is preferable because it assigns responsibilities to people and organizations which can begin to assume new types of roles. A systems analysis view of Ministry - University - PEIP relationships allows for complementary roles and responsibilities, rather than a project (sub-system) seeming to act in isolation.

3. The PEIP project as a Department of Primary Education has performed with distinction. Some very minor recommendations are offered.
- a. The role of administration and supervision courses in Training Education Officers should be considered. The importance of such courses will be seen as increasingly important as the Ministry program graduates assume positions of leadership.

b. Careful consideration has been given by the Primary Department personnel to future professional roles for those selected for advanced degree training in the United States.

1. It is recommended that the Ministry of Education cooperate in freeing able people to pursue higher degrees.
2. It is recommended that Botswana sent for advanced degree training in administration-supervision, educational planning and evaluation attend a variety of institutions where the most powerful programs in these specializations are available. (Examples are the University of Indiana, UCLA and the University of Illinois in evaluation; Florida State University, University of Florida and University of Michigan for educational planning.)
3. Follow-up of graduates of the program, to the degree possible, would be a powerful evaluation tool to determine the effectiveness of the University pre-service programs.
4. The goal framework referred to in the first recommendation is applicable to the type of graduate prepared in the University program. Graduates who are technically competent are valuable, but those who are conscious of the type of cognitive formation expected in the revised primary curriculum and the reform of primary education are more valuable. Examples of models of teacher preparation and behavior are found in Joyce and Keil's works, as mentioned earlier.

Botswana is exceptional in that it is moving away from memorization to higher cognitive processes in primary education. The full effects of that shift cannot now be seen, but will involve system changes which are extensive, penetrating to the individual, as well as to the role of people in the Ministry of Education, and to the role of every teacher. Eventually, the secondary system will be affected by the input of a more critical student.

4. part of a continuous participative planning process, the long range effects of the PEIP project, and of the primary education reform, of which PEIP is a part, can be predicted or anticipated to some extent. It is important that these system changes be anticipated

so that dysfunctions can be foreseen and appropriate steps taken to plan the PEIP team's activities and directions. Literature on similar projects in developing countries can be of some help in this regard, but planning involving people from many sub-sectors of education, as well as from outside education, is of great help in anticipating the social and economic effects of upgrading teachers; or of creating a pool of highly qualified students who are unable to enter secondary school; or the perception that the Primary School Leaving Examination must be modified to reflect new emphases or to serve some other function, are possible examples.

5. The PEIP project was envisioned as an intervention at several educational levels: upper level, middle level, school level, so it is a multilevel approach to change. In some respects this attempt may have been too ambitious for the human resources which could be allocated. It is not too early, at this point, however, to see that modifications, or additions, to the project paper will be needed so that the Ministry of Education, the University, USAID and PEIP staff can together agree on necessary changes in emphases. This is not to say that the goals stated in the project paper are unrealizable, but that the means to reach those goals must be recognized and planned for as soon as possible, so that conflicting expectations of PEIP do not mature into serious conflict. It is particularly important that the planning process be undertaken while the original sponsoring officer is still in the country, and while all relationships among agencies are harmonious. The participative planning can strengthen the project plan and insure its success.

A final example of needed planning which is of an inter-system nature (between the Ministry of Education and the national planning-budget office) is the future teacher certification plan. The Ministry requested this planning and it offered PEIP a fine opportunity to relate many sub-sectors of the Ministry and agencies outside the Ministry to an anticipated system change within the Ministry. The long-range effects of such a change will have political, economic, and social effects, as well as effects on the system.

The Ministry of Education is now critical, a well-organized, efficient, and the Ministry of Education is well aware. In addition to this, the question of preparing functions to substitute inevitably has effects which create resistance as well as providing the advantages of more resources.

As part of the planning process, it would be advisable for the Steering Committee and Advisory Committee of the project to meet with the PEIP Chief of Party on a regular basis so that the planning process could be begun under the auspices of the Ministry and the University, and that the planning activity could be sustained.

6. It is strongly recommended that people of the highest ability be selected for master's degree training, so that they may return as soon as possible to take the places of the PEIP team on the University faculty. The University has very highly qualified faculty, and it would be impossible for people of less than high ability to take their place in such an institution. The preparation of Head Teachers, TTC tutors and other administrative personnel requires the best possible people. While the Ministry of Education would be temporarily yielding their services in the TTC's, the educational system would before long be strengthened greatly by the return of highly qualified, able people to the University.

C. Evaluation Progress.

The following recommendations are offered concerning aspects of the evaluation process and personnel, including the contractor. They are not listed in order of timing or importance.

1. Preparation should be started for a classroom observation expert, who could serve the needs of the evaluation of PEIP, and to the extent possible, in-service training, the Teacher Training Colleges and the University. This person should arrive not later than June, 1983, and be attached to the Ministry of Education, Department of Primary and Teacher Training. A long-term person might hold a part-time position with a Teacher Training College or the University. Depending upon available resources, several possible patterns are possible for this person:
 - a. One extended visit of 3-4 months to work with University staff, the evaluation of teacher behavior, and as many education officers and TTC staff as is feasible within that period of time. In such an event, training of the University staff and evaluators assumes major importance.
 - b. A second possibility is to have the person for 3-4 months in 1983 followed by another 3-4 month period in 1984. This would be mainly to work on evaluation problems, with some limited in-service work with Education Officers and TTC tutors. It is preferable to a. above because a check could be made on how the observation methods are being used. The latter is important because classroom observation is a powerful method family which can be used against the status.

- c. A third alternative is a year-long assignment in which evaluation, in-service training and work with the University would be possible, with priorities to be determined by the Ministry of Education. Even if the person comes for a year, a follow-up visit will probably be advisable later, to determine if the methods are being used properly.
 - d. A shorter term than 3-4 months would not allow the Ministry of Education to take sufficient advantage of the expertise in the way it deems necessary. A two-year assignment might be possible, but would have to be considered in the light of other longer-term requirements.
2. The original evaluation plan should be followed, with modifications where necessary, made as a result of consultation with appropriate Ministry, University, PEIP and USAID personnel. The survey of schools to determine effects on pupils and schools has begun. The sample of schools appears to be reliable and practical. It may become necessary to add data to that outlined in the original plan submitted in January, 1981.
3. The external evaluator should continue his role as consultant to the Ministry of Education concerning the PEIP project. Specifically, it is recommended that he:
- a. work with Dr. Max Evans of Ohio University in order to furnish research relevant to the PEIP project. After March, 1983, when the external evaluator returns to the United States from Brazil, he will be in contact with Dr. Evans, who is the project support officer at Ohio.
 - b. work by mail or telephone with Dr. Lynn Stoll, the Ministry of Education evaluation officer for PEIP, concerning progress of the evaluation plan and specific requirements, such as establishing contact with the expert in classroom observation, the next visit of the external evaluator and training material needed for the evaluation.
 - c. return to Itapira during the period June - August, 1982, for a period of 2 - 3 weeks to observe the use of the classroom observation methodology. The group of 10 pupils in 10 schools in sampled schools and to plan further evaluation steps.
 - d. work with Dr. Lynn Stoll during the period October, 1982 - June, 1983, concerning the progress of data collection on the survey of sampled schools. The existing plan for data collection is working well. The external evaluator can help in interpreting data, review its completeness and secure feedback on the data from experts in the field of school effects. The external evaluator can also coordinate all reports to the Ministry of Education.

as new research on school effects, particularly in developing countries, becomes available. The new trends in this research area may influence the modification of the evaluation plan in Botswana.

4. A revised workshop evaluation plan is being constructed to allow for objectives to be stated and to receive feedback from participants regarding their growth in the stated objectives. This new plan will allow for more reliable and flexible assessment of the in-service workshops.
5. Computer facilities are limited, and this limits the effectiveness of an evaluation, particularly one which includes assessment of schools at different times, as this evaluation plan calls for. It is recommended that a computer specialist be brought to Botswana, with USAID assistance, who could be of help in processing evaluation data, as well as establish a more viable capability within the Ministry of Education as a whole for research and evaluation.
6. The mid-point evaluation of the PEIP project should be planned for during 1983, by the Ministry of Education, USAID, the PEIP team and external evaluation consultants. The external evaluator should complete that step, called for in the project paper, during his next trip to Gaborone in 1983.

III. Concluding Note

The most difficult stage in any educational plan is implementation. The more complex the plan, the more difficult the implementation. Few educational plans or projects have been as thoroughly evaluated as this one has been thus far, even though both the project and the evaluation of it are in their early stages.

The PEIP project is highly regarded by educators for good reason. As the project attains the targets for which it was established, the Botswana education system will be enriched by its contributions. The primary education system has marks of excellence now, and the commitment of the Ministry of Education and the Government of Botswana to excellence in primary education will result in a truly world-class educational system in the near future of the world.