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LIBERIA PRIMARY EDUCATION PROJECT (PEP)

FINAL REPORT

September 1990

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This document fulfills the requirements of the contract for a final report covering project accomplishments, methods, and recommendations.

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I. EXECUTIVE SUMMARY

A. BACKGROUND

In the late 1970's, the Liberian Ministry of Education (MOE), in collaboration with the United States Agency for International Development (USAID), began a program of primary education reform. The goal was to upgrade the quality of education in public primary schools nationwide through the use of programmed instructional materials based on the national curriculum. Concurrently, the MOE worked with the World Bank on a primary education textbook project. Phase I of this program, the Improved Efficiency of Learning (IEL) Project, completed the design, testing and validation of the new programmed instruction system in a limited number of schools. The integration of available textbooks was added to the system as a result of an Integration Study prior to the beginning of Phase II.

Phase II, the Primary Education Project (PEP), began in 1988 with the task of bringing the new instructional system to all public primary schools in Liberia. As the technical services contractor, Academy for Educational Development (AED) supplied two full time Technical Advisors (TAs) and several short term consultants who worked under Annual Work Plans approved by the USAID Mission and directly monitored by the USAID Project Manager and the Human Resource Development Officer.

The principal activities of the Project were -- improving the capacity of the Ministry of Education to supervise and administer the reformed primary education system; providing training and technical assistance to teachers, school principals and education officers; printing and distribution of the programmed learning materials; and training principals, education officers, instructional supervisors and Peace Corps volunteers to serve as skilled instructional supervisors.

B. PROJECT IMPLEMENTATION

1. The Setting and Situational Conditions

A small cadre of qualified and dedicated Liberian educators, who had worked several years developing the new system, were assigned to the Bureau of Primary Education when it was established in 1987. This created a positive environment for the implementation of the project within the newly reorganized Ministry of Education. This was enhanced by genuine collaboration and cordial relationships between the MOE and USAID/Liberia. Although there were initial constraints because these were new implementation arrangements, they were overcome as the major parties held to the common goal of reforming the primary education system.

During operation of the Project, almost all of the principal figures involved from USAID, GOL and AED remained unchanged. As a result, there was continuity of program activities and a commonality of purpose supporting Project activities.

After the project got underway, several new schools were discovered in the country which were not known of during the design of the project. The Minister of Education exerted significant leadership at that time to include these new schools into the PEP program. This required a significant acceleration of the training activities planned over the life of the project. As a result, End-of-Project Status (EOPS) indicators for in-country training activities were almost fully achieved within the first two years. By March 1990, of the 600 schools originally targeted for introduction of PEP over the five-year life of the project, 591 were already using the reformed system.

Two events intervened to bring the project to early closure. The first was the phase-out of USAID/Liberia projects because the Government of Liberia did not meet outstanding debt obligations under the Brooke Amendment (an amendment to the Foreign Assistance Act which outlines a process by which the U.S. government reduces foreign aid to countries who are in arrears in debt payment). The phase-out schedule allowed for an additional 300 public schools to be brought into the new system by February 15, 1991, the planned project termination date. However the second event, the acceleration of the civil warfare, forced the closure of Liberia's schools and the May 5, 1990 evacuation of Project staff.

2. Project Components/Technical Assistance

The impact of the phase-out and the evacuation was lessened by the acceleration of the project. Consequently, much of what was scheduled for five years was accomplished in two years. The following is a brief summary of these accomplishments.

Strengthened management and administrative capacity of the Bureau of Primary Education

The management of the BPE was strengthened by the use of two major methods. One method was working with the officers of the BPE to improve their capacity to administer. These officers, including the Assistant Minister for Primary Education and several office directors in the Bureau, gained from daily interaction with T.A.'s, senior MOE officials and USAID/Liberia officials. Over time, this resulted in strengthening their ability to administer the reformed primary education system. The second method involved introduction of several new administration procedures to the BPE operations. For instance, monthly planning meetings of the BPE senior staff were instituted, new job descriptions were written; specific plans of action were initiated to deal with existing problems; and, routines were established that strengthened recurrent operations. The revitalization of both the Production and Distribution department and the Accounting Department added to the general capability of the BPE.

In-service Training of Teachers

Before the project was terminated because of civil warfare, 2,010 teachers and principals were trained in the use of the new materials and methods. To overcome reported problems with previous in-service training, a new training approach was instituted; the new approach was based

on the learning needs of adults. The new training approach, along with redesigned training materials, were used in an eight day training of trainers workshop that prepared nearly 40 trainers to use the total curriculum. The new training approach, which involved many active learning techniques, led the trainers to develop several classroom teaching aids, i.e., posters, illustrations, charts, activity sheets and handouts. Also developed were videocassette recordings for use by the trainers during specific parts of the training curriculum. Each year three identical in-service workshops were held on a staggered schedule at up-country sites. Each workshop lasted five weeks during school breaks.

The second of the three types of in-service workshop led to the awarding of the "C" Certificate, the first level of certification available for teachers. This workshop served 363 second year teachers. These workshops were held concurrently with the three workshops each year.

In-service Training of Supervisors

A training program was developed and implemented to give instructional supervision skills to the BPE supervisors, District Education Officers, Peace Corps volunteers, principals, and a few others. 214 persons received this training and 200 of these were given schools to supervise. A short-term consultant assisted with the development of the supervision workshop curriculum which was integrated into the training approach described above. The active learning approach was augmented with videocassette recordings and with considerable demonstration and practice of the identified supervision skills.

Development of Instructional Supervision Capability

School site instructional supervision, integrated with the various in-service training programs, was gradually implemented as BPE supervisors, Peace Corps volunteers, education officers and some principals completed the basic in-service workshop and the special supervision workshop. By the start of the 1990 school year, a total of 64 trained instructional supervisors had been assigned to schools. Additionally, 136 principals had received the special supervision training and were prepared to exercise instructional supervision in their own schools. Lack of transportation was the biggest constraint facing instructional supervisors. The withdrawal of motorbikes from the Peace Corps volunteers was a problem. The one project 4-wheel drive vehicle per county was not sufficient for the number of supervisors serving that area. The instructional supervisors and principals trained in March, 1990 were unable to practice their new skills because civil warfare closed the schools.

Pilot Radio Program

Three short term consultants were used to implement the pilot radio program. The first one completed several technical field tests of various Liberian radio station broadcast capabilities, recommended stations to use, and recommended the purchase of a radio receiver for school use. The second consultant developed an evaluation plan for the pilot radio program along with a

baseline evaluation instrument. The plan involved pre and post tests administered to three different groups of teachers/principals. The printing of the tests, the administration of the tests, the coding of the completed tests and the entry of data on computer files were accomplished by BPE staff and local firms. The consultant used the data to produce a final evaluation report.

A third consultant worked nearly 6 months with the five BPE radio producers in the production of 60 radio programs (20 each in three subject areas) that were broadcast between June and November, 1990. The consultant also organized the PEP Radio Production Unit, trained the radio producers and the Unit's Managing Editor. The radio programs, aired during the school day's recess time, were designed to expand upon the training received in the workshops. On Monday and Wednesdays the programs benefitted 2nd grade teachers; on Tuesday and Thursdays the programs benefitted 5th grade teachers; and the Friday programs benefitted principals. A specification committee, script committee and a production committee gave review and approval to individual programs during the production process. The programs were aired by the three regional stations of the Liberian Rural Communications Network.

The final evaluation report revealed that the pilot radio program did have a positive impact on the administrative performance of school principals and the teaching performance of second and fifth grade teachers. The radio program alone did help to improve about one-third of the skills measured. It also found that the combination of feedback from field supervision visits and the broadcast of radio programs improved teacher and principal performance on almost every item. More than 99% of the teachers and principals reported that they liked the radio programs, that the programs were helpful, and that there should be more programs.

Criterion Referenced Test

Preparation of a Criterion Referenced Test (CRT) was begun by using the work completed in 1985 by a consultant whose death prevented the conclusion of his work. During trips in late 1989 and early 1990 a new consultant accomplished the following.

- Reviewed the PEP measurement objectives and determined that the CRT was the appropriate type of test for PEP
- Reviewed the 1985 CRT prepared by Dr. Edward Kelly and determined that considerable revision would be required
- Organized subject matter specialists to assist in the revision of the CRT
- Completed tests in Language, Reading, Social Studies, Mathematics, and Science for each of the six primary grades -- 30 tests in all
- Selected a random stratified sample of PEP schools for administration of the CRT and developed a strategy for administering the test

The closing of the schools and the forced evacuation of the Project team prevented the administration of the CRT planned for November, 1990.

Participant Training

The contract provided opportunity for 5 participants to earn Master's degrees at U.S. universities in the areas of teacher training, supervision, and/or educational evaluation and it provided opportunity for 6 persons to take one semester of specialized non-degree training. Two long term M.A. candidates were selected for training but they were not cleared for departure before the phase-out decision was made. Consequently, no Liberian was permitted an opportunity for participant training.

C. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- The reformed primary education system is a viable system.
- Acceleration of the project was a wise and fortuitous decision resulting in many EOPS targets being met nearly 3 years ahead of schedule.
- Long-term participant training, if early termination of the project had not short-circuited it, would have reinforced short-term in-country training significantly.
- Acceptance of the system among private and church related schools became evident when nearly 40 schools adopted the system in 1990.
- The reformed system, reinforced by instructional supervision from trained instructional supervisors, significantly enhances the teaching skills of Liberia's primary school teachers, the large majority of whom are professionally underqualified for their critically important teaching responsibilities.

Recommendations

- When conditions warrant, USAID should assist the Liberian Ministry of Education in resuming the Primary Education Project to achieve (and re-achieve as necessary) the original objectives of the project.

II. INTRODUCTION

This chapter briefly reviews the background leading to the establishment of the Liberian Primary Education Project, describes the objectives of the project, and discusses implementation activities.

A. BACKGROUND

The Liberian Primary Education Project (LPEP) was part of an effort by the Ministry of Education to reform the delivery of primary education to the children of Liberia. The project, and the project preceding it, Improved Efficiency of Learning project, were funded by USAID. The LPEP was intended to provide technical assistance and resources to establish the new primary education system in nearly 600 public schools.

In the late 1970's, the Ministry of Education took a serious look at the needs and constraints of the primary education delivery system. They found that less than half of school-aged children attended any type of school; few schools had adequate and appropriate instructional materials; and two-thirds of the primary school teachers were underqualified. Poorly equipped and poorly staffed rural teacher training institutes supplied only a small fraction of the teachers. After conferring with donor agencies, the MOE initiated two projects. One, sponsored by the World Bank, was based on continuing and strengthening the conventional system by developing and printing textbooks in the various primary school subjects. These textbooks were to be made available at cost to students. This project proceeded to develop and print textbooks but faced serious constraints. The most serious constraint was the cost of producing the textbooks. Few public school parents had sufficient income to buy textbooks for their children. A second problem was the lack of a countrywide distribution system. These two problems were further complicated by the inability to control the warehousing, inventory tracking and monitoring the sale of the printed textbooks.

The second project, called the Improved Efficiency of Learning (IEL), was designed following a review of Liberia's prevailing constraints in delivering primary education. The project recognized that the country did not have, nor was likely to have in the future, the resources to support a conventional primary school system. One constraint included an untrained teaching force which could not be brought up to traditional standards because of prohibitive cost and time required to retrain the entire teaching force. A second constraint was both the inability of the government to provide instructional materials for teacher and student use and the inability of parents to purchase instructional materials for their children. A third constraint was the lack of relevant instructional materials reflecting the national curriculum. The fourth constraint was the inability of field officers to function as instructional supervisors. The strategy of the second project was to implement a two phase plan that would result in the reform of the primary education system in Liberia.

During the first phase the Ministry of Education and the U.S. Agency for International Development developed a low-cost approach to primary education based on the principles of

sequenced learning. This approach, in addition to its cost effectiveness, was comparatively easy to adopt by untrained teachers who could be trained in-country in a short period of time. Sequenced learning involved two forms of programmed instruction-programmed teaching and programmed learning. Programmed teaching, an instructional design format for grades 1-3, uses modules containing objectives, scripts and materials for teaching the content of the module. The modules also provide methods for questioning students and suggestions on how to elicit, correct, and evaluate student responses. Programmed learning is used by pupils in peer groups beginning in the second semester of grade 3 through grade 6. The learning process is self-directed and self-paced with the teacher monitoring, helping, and reinforcing positive learning behavior. The first phase of the project was successful in developing and testing programmed materials for grades 1-6 in the subjects of Math, Science, Social Studies, Language (English) and Reading. Each subject was based on the newly approved national primary education curriculum.

The second phase was delayed while an Integration Study addressed the problem of reconciling the system of sequenced learning and the system of conventional textbooks. The Ministry of Education demonstrated its support of the reformed system of primary education during the period of the Integration Study by introducing additional schools to the system, training teachers and principals and expanding the ranks of the Instructional Supervisors. During the first project phase and the Integration Study phase, the sequenced-learning methodology became operational in 159 primary schools in ten counties of Liberia, involving 1,115 teachers and 28,000 pupils.

By 1988 the results of the Integration Study provided the basis for funding the second phase by USAID, called the Liberian Primary Education Project. The purpose of the project was the nation-wide dissemination of the sequenced learning methodology and teaching materials to all of Liberia's primary schools. The Project's resources were intended to introduce the reformed primary education system by:

- training teachers and principals in the methodology and materials of the reformed system
- training Principals, District Education Officers, Peace Corps volunteers and project Instructional Supervisors in the skills of instructional supervision
- establishing viable instructional supervision of teachers for the schools joining the reformed system
- printing and distributing packaged instructional materials to each school introduced into the system
- strengthening management and administrative capacities within the Bureau of Primary Education and complementary Ministry of Education divisions

On May 26, 1988, the Academy for Educational Development (the Academy) signed a contract with the United States Agency for International Development (USAID) Mission in Liberia to

provide technical advisory services to the Government of Liberia (GOL) in support of the Liberian Primary Education Project. The two Technical Advisors arrived in the field July 18, 1988.

B. GOAL AND PURPOSE OF THE PROJECT

The Project's goal was to upgrade the quality of education in public primary schools nationwide. The Project's purpose was to implement an effective primary level learning system nationwide through the use of programmed instruction methods and materials developed in phase I, integrated with available textbooks.

C. IMPLEMENTATION

USAID officials assumed major oversight and management of the project, providing a Project Manager to oversee the work of the Ministry of Education and the contractor. Also, project funds spent for commodities, training costs and printing costs were directly controlled by the USAID Mission.

AED hired two full time Technical Advisors and several short term consultants who worked under Annual Work Plans approved by the USAID Mission, and directly monitored by the USAID Project Manager and the Human Resource Development Officer.

During operation of the Project, almost all of the principal figures involved from USAID, GOL and the Academy remained unchanged. As a result, there was a continuity of program activities and a commonality of purpose supporting Project activities. For the Academy's field staff, Dr. William Kromer was the Chief of Party and Advisor in Educational Administration, and Dr. William Fanslow was Teacher Training and Supervision Advisor. In the Academy's home office, Ms. Sharon Franz was Officer-in-Charge, Mr. Earl Yates was Home Office Coordinator, and Ms. Anna Grady was Project Assistant. Mrs. Janice M.T. Vani was the Ministry of Education Project Director/Assistant Minister for Primary Education and Mr. E. Othello Gongar was the Minister of Education. The senior staff assisting Mrs. Vani remained constant for the entire project period. At USAID, though there were three Human Resource officers, Dr. Stanley Handleman saw the project through from its inception to his departure in 1989. Dr. Esther Guluma served as the Project Manager throughout the Project.

The implementation schedule was accelerated by frontloading the use of Project resources and significantly increasing the number of schools introduced to the reformed system during 1989 and 1990. Acceleration resulted in the accomplishment of many End of Project Status Indicators (EOPS) within the first two years of the Project.

III. PROJECT SETTING AND SITUATIONAL CONDITIONS

A. INSTITUTIONAL ENVIRONMENT OF THE PROJECT

The Liberian Primary Education Project began with a favorable set of circumstances that created a positive implementation environment. The development of the system of reformed primary education including methodology and materials and the reconciliation of the reformed system with the use of available text-books created a solid foundation for the project to implement the new system. The small cadre of dedicated and professional Liberian educators, who had worked several years developing the programmed materials, were assigned to the newly formed Bureau of Primary Education. Thus the project began with a locally developed system of sequenced learning materials and methodology, and a skilled and sincere staff operating within the structure of the reorganized Ministry of Education. Top level Ministry of Education support was provided by the Minister of Education, Mr. E. Othello Gongar who, as Deputy Minister for Planning, had given leadership to the two previous projects and to development of PEP.

Institutional constraints, however, did exist. A prime constraint was lack of acceptance of the new Bureau of Primary Education by other MOE personnel who either resented the loss of office space or became envious of the resources available to the new Bureau. Vehicles, computers, office supplies, copy machines and other items were readily available to the project/Bureau staff in contrast to the typical MOE office that lacked such common items as pencils and paper. In addition, the new Bureau had two Technical Advisors and key USAID staff as allies in dealing with their work load. The relocation from the up-country site of the previous Project to the Ministry of Education proved to be problematic for some of the Project staff. Changing the mindset of Project staff to function within a large bureaucratic organization took some time. The new arrangement placed nearly impossible expectations on the Project Director/Assistant Minister for Primary Education. The difficulty was in giving full time leadership to the project while being responsible for the operation of all the non-project schools. This problem diminished over time as the majority of schools were introduced into the reformed system.

The established working relationship between key USAID personnel, the Minister of Education and the MOE Project Director helped in maintaining a positive institutional environment for the Project. The Human Resource Development Officer and the Minister of Education collaborated in making the decision to integrate the Project into the MOE. This and other actions demonstrated the ability of the Minister and USAID officials to work together in addressing project needs and the difficult issues associated with the Project. USAID assistance with the Education Sector Assessment and the Educational Policy Conference was further evidence of a viable working relationship that strengthened the institutional environment of the Project.

Similarly, the visit of the Minister of Education to AED prior to the fielding of the T.A. team was instrumental in accommodating the contractor's entry into the institutional environment. The Minister's consultation with the AED home office staff and the Chief of Party set the stage for the quick integration of the T.A.'s into the operation of the Project.

B. ACCELERATION OF PROJECT ACTIVITIES

The original intent of the project, being a 5 year project, was to bring 20% of the primary schools into the reformed primary education system each year. However the dire conditions of existing school programs argued for increasing the percentage of schools introduced during the early years of the project. Then it was discovered that the number of schools had been underestimated; increasing the number of schools to be transformed by 50%. At the initiative of the Minister of Education and with the approval of USAID and AED, a decision was made to accelerate the introduction of the reformed system to a larger number of schools. The numbers of schools increased from 50 in 1988 to 175 in 1989. In 1990 218 public schools were introduced to the reformed system and 39 private and church schools were added in collaboration with Plan International (an agency giving assistance to small rural, private schools) and the Church Related Educational Development Organizations (an USAID funded NGO giving assistance to church schools). By March, 1990 a total of 591 primary schools had received training and instructional materials and were part of the reformed primary system. This is only 9 schools less than the 600 school targeted for the end of the project (1993). The Annual Work Plan for 1990-91 included the remaining public schools (300) and 150 private and church related schools for training in early 1991. Thus by March 1991 a total of 1035 primary schools would have been prepared for the reformed primary education system. Acceleration, as can be seen above, significantly increased the number of schools introduced to the new system without additional cost to the project.

Acceleration also had a positive impact on the number of teachers trained. 3126 teachers were targeted to be trained by the end of the project in 1993 and, by March 1990, 3125 teachers had been trained during Phase I and Phase II (cumulative total for IEL and PEP). The 1990-91 Annual Work Plan projected an additional 2000 teachers to be trained and 1500 previously trained teachers to be upgraded. Thus by March, 1991 over 5000 teachers would have been trained which is more than double the EOPS number. Again all this was to be accomplished without additional funds.

C. IMPACT OF THE NON-PAYMENT OF GOL BROOKE SENSITIVE DEBT AND THE OUTBREAK OF CIVIL WARFARE

The wisdom of accelerating the introduction of schools to the reformed primary education system became strikingly evident when USAID/Liberia, early in 1990, decided to phase-out their projects because of the failure of the Government of Liberia to pay Brooke sensitive debt. After considering each project individually, USAID/Liberia established February 15, 1991 as the new end of project date for the Primary Education Project. USAID/Liberia also announced that the AED Annual Work Plan due date would be postponed so that the Plan could become the vehicle for determining priority activities for the remaining months of the project. Representatives of the MOE, USAID/Liberia and AED met to determine the priorities that would remain in the workplan. Involvement of senior MOE officials in this effort was delayed because of the absence

of the Assistant Minister for Primary Education who was overseas. This led to a delay in submitting the workplan but some progress was finally made concerning the key items to include in the workplan.

This activity was taking place against the background of escalating civil warfare which limited project access to several counties. In late December, 1989, the armed forces of Liberia, in reaction to an invasion by rebel forces, attacked and looted the civilian population of Nimba county. This succeeded in motivating large numbers of people to fight against the government...leading to ever increasing clashes between civilian reinforced rebels and the government forces of President Doe. By the end on April 1990 the continued escalation of warfare led to the evacuation of family members of American personnel.

On May 5, 1990 the two Academy T.A.'s were evacuated. Evacuation was accompanied by a 90 day Stop Work Order that placed the two T.A.'s in the AED Washington, D.C. home office for continued work on project activities.

The Stop Work Order requested that AED, where possible, employ the T.A.'s on other home office project activities. By mid July, 1990 the Teacher Training and Supervision Advisor, Dr. William Fanslow, completed his two year contract and returned to the University of Massachusetts. The 90 day Stop Work Order was extended for 30 days, effective through August 31, 1990. The COP continued to work at the AED home office on various projects and took some vacation time. As their last project task, the COP and the Teacher Training and Supervision Advisor prepared this final report, which was edited and submitted to AID by the project's home office staff.

D. REDUCED TECHNICAL ASSISTANCE

The contract provided for 10 person years of professional long-term technical assistance. Five years of long-term technical assistance was for an Advisor in Educational Administration who would also be the Chief of Party. Five years of long-term technical assistance was for an Advisor in Teacher Training and School Supervision. The phase-out of USAID/Liberia projects because of GOL non-payment of Brooke sensitive debt reduced the number of person years to two for the Advisor for Teacher Training and School Supervision and reduced the number of person years to 26 months for the Advisor in Educational Administration/Chief of Party. Similar reductions were made in the 10 person year allocated for local hire support staff. The Administrative Assistant served for 23 months.

The two advisors served as counterparts to several MOE officers in accomplishing the following major responsibilities:

- strengthening the management and administrative capabilities within the Bureau of Primary Education and complementary Ministry of Education divisions

- training teachers and principals in the use of the methods and materials of the reformed system
- training various classifications of Instructional Supervisors and establishing a viable system of instructional supervision for the schools introduced to the reformed system
- printing and distribution of the packaged instructional materials for each school introduced to the reformed system

During the abbreviated life of the project, a total of 4.1 person years of long-term technical assistance was provided, and a total of 13.7 person months of local hire staff support was provided.

Thirty (30) person months for short-term technical assistance was originally planned for the life of the project. But, because of the project's early termination, only 17.7 person months were provided. Due to the frontloading of the project, many short-term consultants were utilized early in the Project. The following gives the details of the person months worked by each short-term consultant and the focus of their work:

The Supervision Consultant (1.5 person months: 10-30-88 12-8-88) assisted in preparing the curriculum for the Supervisor's Workshop.

The Radio Technician Consultant (.5 person months: 1-1-89 to 1-13-89) completed several technical field tests of various Liberian radio station broadcast capabilities.

The Radio Baseline Study Consultants (1.2 person months: 2-4-89 to 3-2-89) completed an evaluation plan for the pilot radio program and developed the baseline evaluation instrument.

The Radio Baseline Study Consultant (.8 person months: 3-26-89 to 4/18/89) finalized the baseline radio questionnaire and trained Liberians how to administer the questionnaire.

The Radio Production Consultant (6 person months: 2-26-89 to 8-15-89) organized the PEP Radio Production Unit, trained the radio producers and assisted in the production of 60 radio programs for broadcast during the radio pilot period.

The Radio Baseline Study Consultant (1 person month: 3-13-90 to 4-13-90) completed the final report of the Radio Impact Evaluation.

The Criterion Referenced Test Consultant (1.5 person months: 11-8-89 to 12-20-89 and 2-14-90 to 3-10-90) rewrote 30 Criterion Referenced Tests and selected a stratified random sample of PEP schools for administering the CRT.

The Accounting Consultant (1.2 person months: 12-4-89 to 5-11-90 part-time) installed a revised manual accounting system, developed a complementary computer accounting system and trained counterparts to operate the new systems.

IV. DESCRIPTION OF PROJECT COMPONENTS

A. ADMINISTRATION OF THE PROJECT

1. Field Office

The key implementation agency for the Primary Education Project was the Ministry of Education (MOE). Consequently the contractor field office was housed in Bureau of Primary Education section of the MOE. That location gave the technical advisors convenient access to all of their MOE counterparts. Two of the three offices were immediately available for occupancy but the third office was not available until 9 months later. A maintenance problem prevented the use of the computer system for 5 months. The field office was able to function well once these constraints were resolved.

The field office operating structure remained constant throughout the life of the Project:

- The **Chief of Party** served as the administrative head of the field team and was chiefly responsible for day-to-day working relations with USAID/Liberia and host country agencies. He managed the long-term and short-term technical assistance portions of the Project and took direct responsibility for developing the pilot radio program and the Criterion Referenced Test program. He was responsible for a number of counterpart relationships that strengthened the management and administrative capacities within the Bureau of Primary Education and complementary divisions of the Ministry of Education.
- The **Teacher Training and Supervision Advisor** provided counterpart relationships with the Director of Training and the Director of Supervision, Bureau of Primary Education. Both responsibilities involved extended periods of time spent at up-country schools and training sites.
- The administrative assistant position was filled, over time, by three persons. The first person, due to family concerns, was not able to fulfill the expectations of the position and was replaced with a part-time temporary person. Eventually a highly competent and dedicated local professional was hired to serve as the new administrative assistant. One person served the project as the secretary/word processor and three persons eventually served in the two project driver positions.
- The field office accommodated the several short-term consultants by providing office space, local travel and other logistical assistance. The Chief of Party provided liaison and support services for consultants.
- Communication between the AED field and home offices was greatly enhanced once an international phone line was obtained for the field office. This allowed the use of computer modems for transmitting information between the two offices. Transmitting

files each week between the two offices improved the quality and quantity of communication and provided a hard copy record of these communications. Communication via modem proved to be superior and more cost effective than voice phone communication although both were sometimes limited by inconsistent telecommunication service.

2. AED Home Office

The home office operating staff remained constant throughout the life of the Project:

- The Home Office Coordinator reviewed and contributed to Annual Work Plans, special action documents and other project initiatives. He visited the Project each year to relate directly to the field initiatives and to coordinate with USAID/Liberia officials concerning operational elements of the Project. The Academy's Senior Vice President for Education, Exchange, and Student Services also visited the project as part of a trip through Africa observing AED projects.
- The Home Office Project Assistant provided backup logistical assistance on a daily basis. This included responding to requested support for USAID/Liberia procurement information needs. She visited the project to train the new administrative assistant in administrative procedures and the AED imprest system. She provided direct home office information to the field office using a modem backed up by mail and phone usage.
- The Home Office provided office space and equipment for the two Project T.A.'s during the post-evacuation period.

3. Reporting to USAID/Liberia

The following reports were submitted to USAID/Liberia during the life of the contract.

- Annual Work Plans for:
 - the July 21, 1988 to February 28, 1989 period
 - the March 1, 1989 to February 28, 1990 period
 - the March 1, 1990 to February 15, 1991 period
- Monthly Progress reports for every month, with the exception of the first 3 monthly reports which were contained in a quarterly report
- Annual reports for each of the Annual Work Plan periods.
- Special reports as requested by USAID/Liberia

- Revision of 5 year budget projection
- Report listing ideas for phase-out of the project

B. TECHNICAL ASSISTANCE

1. In-service Training of Teachers and Principals

When PEP became operational in Liberia, an estimated two thirds of the primary teachers in the country were underqualified -- most were high school graduates without any teacher training. A few had not completed high school. Few of these teachers were aware of the new materials and methods used by PEP and many were suspicious of a system they perceived to be non-conventional. Against this backdrop an in-service teacher training workshop would be developed and implemented to introduce these teachers to the methods and materials of the new PEP system.

Early observation of existing PEP classrooms in Monrovia and up-country areas indicated that some teachers had not completely internalized the concepts of the PEP program. These teachers had completed a training workshop and had access to a handbook that explained the methodology of the new program and the philosophy behind it. A few may have had access to an illustrated brochure that focused on teacher skills needed to implement programmed teaching in the first three grades. Yet they were struggling to implement the system in their classrooms.

After visiting PEP schools and discussing their observations and conclusions with Ministry of Education (MOE) and Peace Corps Volunteer (PCV) field based instructional supervisors, the TA and the MOE Directors of Supervision and Training agreed on a number of recommendations for the up-coming annual teacher training workshop. These were presented in a meeting with the Project Director/Assistant Minister of the Bureau of Primary Education, the COP, and the Director of Materials Development and Evaluation. The recommendations were agreed on and a training committee was formed to implement the recommendations.

The PEP program logically divides into two parts -- Programmed Teaching, which includes content and methods used in grades one, two, and the first semester of three, and Programmed Learning, which includes content and methods used in the second semester of grade three through grade six. The handbook had a section describing and discussing each of these. A third part was organized because it contained some operations and activities common to both Programmed Teaching and Programmed Learning -- testing, record keeping, maintenance of materials, etc. It was called Combined Topics. These three parts, Programmed Teaching, Programmed Learning and Combined Topics contained the major content of the teacher in-service workshops.

The next task was to develop the curriculum materials for the workshops. Resource persons inside and outside the MOE who had particular expertise were selected to research, develop, and write topics in the identified areas. Before research and writing of the topics began, a workshop

was held for the curriculum developers to consider a paper provided by the TA entitled, "Adult Learning" (see Appendix A). The central message in the paper was that adults have different learning needs than children. Because adults have previous experience to draw on, adults learn better when they are actively involved, adults are concerned about physical comfort while learning, etc. The concepts of adult learning and needs were discussed and a model of adult learning emerged -- "The PEP Adult Learning Model for Skills" (see Appendix B) -- and served as a guide for developing the workshop curriculum. The "Model" became an integrating force for the development of each workshop.

Conversations in the field with teachers who had received training indicated that previous workshops were conducted very traditionally. Many found them boring, some received contradictory information, and others said the trainers were not prepared. Lecturing had been the predominate method used in previous workshops. Now, the Adult Learning Model emphasized Demonstration, Practice, and Feedback as necessary when a skill was being taught. The presentation of all of the topics in the handbook had to be re-thought in terms of the model. The writers met frequently to critique, help, and support each other in this task. This focus on active teaching and learning created a need for producing illustrations, handouts, and videocassette recordings. Two graphic artists were already employed in the project and were made available to individual curriculum developers. The active teaching focus created a demand to use video tapes for parts of the curriculum. Video cassettes could be used to present uniform and correct demonstrations of teacher skills in actual classrooms. With this in mind the project purchased VCR equipment, trained MOE technicians in the use and maintenance of the equipment and encouraged the curriculum developers to incorporate video cassettes in the materials they were preparing.

The curriculum developers worked alone and in groups. After receiving assignments, they met together to exchange and discuss ideas on how to incorporate "demonstration" and "practice" into the presentation of their topics. Working for about a week individually, the developers again met as a group to present and critique their work. They again retired to individually put the finishing touches on the topics. Also following the group critique, the artists and VCR technicians were able to plan and begin the production of training aids.

When the development of the curriculum was completed, a workshop was planned to train the trainers. The trainers included all of the instructional supervisors, both MOE and PCV. Also, several faculty members from the two rural teacher training institutes, the University, and Cuttington College were invited to be trainers. Their participation served two purposes, to complement the training staff with competent teacher trainers and to begin to bring the teacher training institutions of Liberia into the PEP. The training of trainers workshop was held one week before the teachers' workshop to accomplish the following:

- The "The PEP Adult Learning Model for Skills" was presented, demonstrated, and discussed. Attitudes and behaviors of trainers in previous workshops had to change to follow the new format and philosophy. New trainers needed an orientation and

introduction to the new format and philosophy. This part of the workshop was designed to accomplish this.

- The curriculum developers presented the topics they had developed with suggestions on presentation and practice. Trainers were assigned to teach only one of the three areas, but they received information about all topics in all three areas. This gave the trainers a total picture of the workshop and helped them see where their area fit. This also helped them assist teachers who might be confused or have questions about related topics.
- Following the presentations, the trainers determined the order of presentation of the topics and developed the workshop schedule -- large group presentations, small group activities, practice sessions, etc. for their particular site. By assigning the trainers to develop the plan of implementation and workshop schedule, they became involved in a necessary process of preparing and presenting the total workshop. They were given part ownership of the curriculum through their cooperation with the curriculum developers. This ownership created a commitment that might otherwise have been absent.

The trainers took the "Adult Learning Model..." and its philosophy seriously. This was demonstrated by the request of the trainers for more materials for making training a reality. As the trainers' workshop progressed, when the teachers' workshop began, many classroom walls were covered with training and learning aids. More importantly the trainers for each site organized themselves according to the topic taught and developed a team approach to their instruction. This included practicing together, critiquing each other and sharing ideas for improvement. This continued when the trainers began instructing at each site. Each day the teams met to discuss their effectiveness and to fine-tune preparations for the next day.

1989 Teacher In-Service Training Workshop Summary:

Total Trainers Trained:	36
Total Teachers Trained:	1080
In 1st workshop (Methods/Materials):	951
For "C" Certificate (2nd year):	129
New Schools Represented:	175

Three identical five-week workshops were held in three different locations to accommodate teachers throughout the country. In addition to the training program, board and room were provided. One workshop was held at the Kakata Rural Teacher Training Institute, a one hour's drive from Monrovia; one at Cuttington University College, a two hours' drive from Monrovia; and one at Zorzor Rural Teacher Training Institute, a four hours' drive from the capital.

Difficulty was experienced in finding facilities adequate for the number of teachers that would attend the workshops. Accommodations for 300-350 teachers at each site was necessary, and aside from one hotel in Monrovia, only education institutions had potential facilities. Cuttington College easily met the program's needs. The two teacher training institutes (TTI), a high school in the middle of the country, and a technical training college in the eastern part of the country were the possibilities. All were government schools that had been built in the 1950's with donor aid. Due to declining enrollments and little or no maintenance, the conditions in the facilities could not support the numbers of teachers planned. The primary problem at these sites was lack of beds and running water. By advancing project funds for room and board, necessary repairs were completed and materials purchased at the two TTI's to make the facilities available for the workshop.

Each workshop lasted five weeks. They opened one week apart to accommodate the various opening and closing arrangements for the three locations across Liberia. Classes met for six hours per day, five days per week. Each area of the curriculum was given an equal time period. Each trainer was responsible for one area of the curriculum. Each class met with three trainers during the workshop; each trainer presented an area for several days and moved to the next of three classes for which he or she was responsible.

Information about the 1989 2nd year workshop for teachers preparing for the "C" Certificate:

A second type of workshop was implemented at the Cuttington College site. This was the second workshop of a three year program to up-grade teachers with high school diplomas to "C" certificate status -- the minimum professional teacher certification. The first phase of the program was the regular PEP workshop, the second phase was up-grading in the four primary content areas -- Reading, Math, Science, Social Studies, and the third phase was not settled but would include supervised classroom teaching. This second type of workshop paralleled the PEP workshop in time and site, but had its own classes and trainers. The trainers were regular staff of the college's teacher training program; they also designed the curriculum. 129 PEP teachers attended this workshop.

Preparations for the 1990 teacher workshops:

At the close of the 1989 Teacher Training Workshop, the training materials were systematically evaluated. Specifically designed evaluation instruments were completed by each trainer in each area. The TA met with the trainers at each site to discuss their evaluations. Often during the discussions additional comments were made that helped in revising the materials in preparation for the 1990 Workshop. All comments were systematically recorded. The evaluations from the three sites were combined, and the comments for each topic were summarized. This information for each topic was used by the persons responsible for rewriting, revising, or editing the training materials for the 1990 workshop.

One significant modification in the training materials for 1990 was the elimination of the entire "Combined Topics" area. It became clear in the evaluations that the topics in this area were

either redundant or would be more understandable to the teachers if they were part of the Programmed Teaching (PT) or Programmed Learning (PL) areas. When realigned into two areas, there were 12 topics in the Programmed Teaching and 13 in the Programmed Learning.

As a result of the evaluation, an Overview presentation was designed, written, and implemented and a unit on Phonics was revised, re-written and included as a separate topic. The Overview was attended by all participants on the first day of classes before they started the PT or PL sessions. The Overview was designed to give all participants an historical and ideological background in the PEP that would better enable them to understand the program generally before getting into the specific areas. The Phonics unit introduced in the 1989 Workshops was deemed successful, but the evaluation indicated that most trainers and participants felt it did not go far enough. Many of the participants needed training and practice in phonics as their pronunciation of English was poor; this training was not included in the 1989 Workshop. The Phonics unit itself was revised and a trainers' manual written that not only guided the trainers to teach the participants how to teach phonics, but also how to help the teachers improve their pronunciation.

A total of 17 writers revised the 25 topics plus the Overview and Phonics included in the 1990 curriculum. The writers were MOE and PCV instructional supervisors, Principals and teachers from Government schools in the Monrovia area, and a member of the University of Liberia staff. Most had been trainers in the 1989 Teacher Training Workshops. Each writer received copies of the 1989 training materials they were to revise together with copies of all of the relevant evaluation results and comments. They were asked to include any suggestions for improvement made by the staff, trainers, and/or participating teachers. Each writer was assigned an editor in PEP to assist in his/her task. The editors were the Directors of Training, Supervision, and Evaluation and Materials, and the Technical Assistant for Training and Supervision. The Handbook was also edited and revised at this time. During the academic year teachers and principals of PEP schools and all other PEP staff were asked to note any errors in the Handbook and submit corrections to the Director of Supervision. These were collected and became the primary source for editing and revising the Handbook. Also, long lists were moved to appendices, chapters were separated by fly sheets, and a new numbering system based on chapters was incorporated; these latter changes accommodated a second use of the Handbook -- to facilitate use in the field. The materials were written, edited, re-written until the editorial staff agreed they were of the quality desired for publication.

Five additional booklets were published -- a Teacher's Guide for PT and PL and a Trainers' Manual to be used with each of the Teacher's Guides and a Guide for Teaching Phonics. Part of the curriculum development for the 1989 workshop was the development of handouts, teaching aids -- charts, filled-in forms, illustrations, exercises, etc. These together with a narrative explanation of each topic were collected, bound, and were the Teacher's Guides for each area. They served as a textbook in the workshop and a self-help guide in the field. The Teacher's Guides contained all relevant information on each topic necessary to help teachers begin to use the PEP methods and materials in their classrooms. The Trainers' Manuals were designed to supplement and extend the materials contained in the Guides. They contained transcripts of suggested lectures, ideas for training aids, ideas for practical exercises in class, complete

computations for "Recording Student Progress" exercises, etc.. Sample lesson plans with suggested times were also included for the teaching of some topics. As the title implies the Manuals were designed to be used by the trainers with the Guides, and they were used specifically in the 1990 Training of Trainers' Workshop which preceded the Teacher Training Workshops.

Concern that the sites should be better prepared to accommodate the 1990 workshops resulted in the development of a check list of the equipment and facilities required for each workshop. The check list was used by the BPE Director of Training and an instructional Supervisor when they visited sites for the 1990 workshop. They toured the site with appropriate site administrators filling-in the check list and pointing out problems. After the tour, steps to correct problems and advance payments were discussed. The team would inspect the site well in advance of the workshop to make certain timely and adequate corrections had been or were being made.

A train the trainers workshop, held prior to the three teacher training workshops, was patterned after the 1989 workshop. It again prepared the trainers to work as site teams using active learning techniques.

1990 Teacher In-Service Training Workshop Summary:

Total Trainers Trained:	42
Total Teachers Trained:	1,059
Teachers Trained in First Workshop (Methods/Materials:	
Lutheran Training Institute	214
Tubman Technical College	445
Kakata Rural Teacher Training Institute	
First session:	342
Second session: Plan Int./CREDO	58
Teachers Trained for "C" Certificate (2nd year):	234
Total New Schools Represented:	257
MOE:	218
Private/Church Schools:	39

Three identical four-week workshops were held in three different locations to accommodate teachers throughout the country. In addition to the training program, board and room were provided. The sites used for the 1990 Workshop were in locations that were more convenient to the participants. The Kakata Rural Teacher Training College served the western part of the country; The Lutheran Training Institute served teachers in the center of the country, and the Tubman Technical Training College served the east.

Each workshop lasted four weeks. They opened one week apart to accommodate the various opening and closing arrangements for the three locations across Liberia. Classes met for six hours per day, six days per week. Each area of the curriculum was given an equal time period. Each trainer was responsible for one area of the curriculum. Each class met with two trainers during the workshop; each trainer presented an area for several days and moved to the next classes for which he or she was responsible. Evaluations by trainers and participants revealed that the new training materials were well received and were an improvement over the 1989 materials. Teachers were pleased that the materials were organized for continued use in their classrooms.

An additional workshop was held after the close of the regular teacher training workshops. This five-week workshop was for private schools and church related schools new to PEP. The PEP worked through two organizations that provided support and funding for the workshop -- Plan International and Church Related Educational Development Organizations (CREDO). These organizations identified the schools and teachers to be trained, provided transportation, provided room and board and arranged and paid for the production of the PEP materials and semester boxes. The PEP provided training materials, a site coordinator and 4 experienced trainers. The Kakata Rural Teacher Training Institute was the training site. A total of 58 teachers and principals were trained; these represented 39 schools.

Information about the 1990 2nd year workshop for teachers earning the "C" Certificate:

A second workshop was implemented at the Booker T. Washington Institute site. This was part of a three year program to upgrade teachers with high school diplomas to "C" certificate status -- the minimal professional teacher certification. The first year of the program was the regular PEP workshop, the second year was up-grading in the four primary content areas -- Reading, Math, Science, Social Studies, and the third year was not settled but would include supervised classroom teaching. This workshop paralleled the PEP workshop in time, but had its own classes and trainers. Significantly, the workshop was organized and managed by the Assistant Minister for Teacher Education. This provided a clear example of integrating the new primary education system into the regular operation of the MOE. The trainers were regular staff of the Teacher Training Colleges who also designed the curriculum; 234 experienced PEP teachers attended this workshop.

2. In-service Training of Supervisors

Supervisor In-service Training Workshop Summary:

	<u>1989</u>	<u>1990</u>	<u>TOTAL</u>
Supervisors Trained:			
Principals	44	92	136
District Education Officers	27	16	43
Peace Corps Volunteers-IS's	12	6	18
Ministry of Education-IS's	2	1	3

Nimba County Rural Development Program	8	8
Monrovia Consolidated School System-IS'	6	6
TOTAL:	93	121
Trainers Trained	11	22

With the brief exposure of the initial training workshop, teachers were not able to implement all aspects of the program effectively. To give support to teachers starting the new system and to "fill in the blanks" as they progressed, field supervision became an important part of the program.

Historically, supervisors in Liberia had been limited primarily to with administrative matters -- collecting fees, gathering data for the Ministry of Education, and assigning teachers. No one was supervising instruction.

Instructional supervision began when a few of the Liberian educators who had developed the PEP materials were assigned as Instructional Supervisors (IS) to work directly with teachers in new PEP schools. They supplemented the training begun in the workshops and gave support to the teachers. The IS's effectiveness in working with the teachers depended on the ability and talent of the individual because no program was available to train them for this important role. A one day workshop was held in 1988 when IS's came together to discuss problems they had faced in classrooms and to help each other with suggestions. It became evident that the IS's needed training in supervision skills; more IS's were needed; and principals could be given instructional supervision skills after they had a year's experience with the PEP program.

The IS staff in the MOE was supplemented by Peace Corps Volunteers (PCV), but even this could not cover the new schools being added to the program. Two decisions were made by Ministry officials that would help overcome this shortage: 1. All District Education Officers (DEOs) were to be trained and would serve as IS's. 2. All principals would receive IS training the year following their training in the teachers' workshop. After training the DEO's were expected to work as IS's in their districts as well as carry out their administrative duties. The training would prepare principals to work more effectively with teachers in their classrooms and to support the work of the IS's assigned to the school.

Prior to the present program, no formal training in a systematic supervision program had been attempted. After field observation and study by the TA and the Director of Supervision (DOS), Clinical Supervision was chosen as the "method" in which all supervisors connected with PEP would be trained. Clinical supervision complemented the philosophy of the program and emphasized the helping relationship between supervisor and teacher. This would help counter the view that supervisors came to inspect and evaluate only. Clinical supervision stresses that the supervisor's role is to help teachers identify problems and, more important, to help them overcome the problems.

In 1989 the supervisors' training workshop was scheduled to begin one month after the close of the teachers' training workshop. The project employed a consultant to assist in developing the

workshop curriculum. Prior to the consultants arrival, the TA and the Director of Supervision visited PEP schools to assess the needs of supervisors and teachers. Supervisors had developed individual systems of supervising teachers in the absence of any uniform system adopted by the program. Supervisor effectiveness was uneven at best. Widespread agreement existed among teachers that their primary need after training was someone to help them implement the PEP in their classrooms. The supervisors' primary need was to learn how to do this. Many supervisors interviewed were uncertain about their role. They understood what the teachers wanted and needed, but they also remembered what supervisors did when they themselves were teachers. The teachers needs and supervisor's perception of the traditional supervision role were in conflict. The clinical model of supervision was discussed with some of the supervisors in the field and they agreed it would probably be appropriate.

The TA, the DOS, and the consultant met and discussed ideas for the curriculum and the format of the workshop. The consultant also visited schools to observe teachers and watch supervisors in action. Meetings continued as the workshop and the curriculum took shape. The curriculum was developed around a series of topics. Each topic included a narrative explanation and exercises and/or projects that would give the participants practice in using the idea or concept involved in the topic. This was in keeping with the PEP Adult Learning Model developed for the teachers' workshop. As the materials were developed, the group met two or three times a week to review progress and critique what had been accomplished. Some of the exercises were field tested to determine if participants understood them and could complete them in a reasonable time. Also, some Instructional Supervisors who would be trainers in the Supervision Workshop were consulted regarding the materials as they developed. Many of their suggestions were incorporated.

When the curriculum was complete, a Train the Trainer Workshop was held prior to the beginning of the seven day Supervision Workshop. During the Train the Trainer Workshop the TA and the DOS went through all of the materials developed for the supervision workshop. The trainers discussed the materials and made training suggestions. This gave the trainers the common focus necessary to present a unified philosophy and practice of classroom supervision to the trainees. After the components of the curriculum were "given" to the trainers, they developed the training curriculum and schedule. Again, this allowed the trainers to develop ownership of the program they were about to teach. A large-group, small-group format was chosen by the trainers. The workshop was divided into a series of topics which were presented individually or in related groups in a large-group session. Each of these sessions was presented by one trainer or a team of trainers and was attended by all other trainers and trainees. Immediately following, small-group sessions assembled to discuss the topic(s) discussed, answer questions, and develop the exercises and activities with the consultant. Following this the trainers began planning their presentations and preparing any instructional materials and training aids they would need. This continued through the weekend. The TA met with trainers and assisted them in developing their presentations; supplying additional information and materials as needed.

During the supervision workshop, the trainers met each evening after dinner to evaluate and discuss the day's presentations and activities. The trainers who were presenting topics the next

day also reviewed what they planned to do and explained the activities to be conducted in the small groups. Because of the success of the use of video tape in the teacher training workshop just completed, the same tapes were used in the supervisors' workshop but with a different focus. The tapes were originally produced to demonstrate correct procedures in PEP classrooms. For supervisor training, excerpts of the tapes were used to view and discuss specific teacher behaviors. This worked well but tapes clearly needed to be produced to meet the specific needs of the supervisors -- specific examples of appropriate and inappropriate classroom behavior were necessary to generate the needed discussion about observation and remediation.

Originally the Supervision Training Workshop was to include the MOE IS's, the Peace Corps volunteers and the principals of the schools that received initial teacher training the previous year. As mentioned above, a decision was made at the Ministry to include all District Education Officers (DEO) in the training, later, the supervisors from the Nimba County Rural Development Program (NCRDP) were included.

The workshop was accommodated at the Kakata Rural Teacher Training Institute. All workshop materials had been produced previously in Monrovia and were distributed as needed. The video equipment purchased by the project included portable gasoline powered generators which permitted operation independent of the unreliable local power supply.

End of workshop evaluations indicated that the workshop was generally successful and reached its objectives. Two general criticisms were noted: 1. the relationship between topics presented in the large groups was not always clear; 2. more video tapes with more situations should be produced and used. These were noted and modifications made in the second year program.

The topics and accompanying activities and exercises were appropriate. However, for the second year's workshop a written narrative with the accompanying exercises and activities were brought together in a "Supervisor's Guide" which was distributed to all trainees on the first day. The Guide served as a text book during the workshop and as a field reference when the supervisors returned to their schools and districts. During the academic year after the first workshop, a team from the radio production staff was trained to make video tapes in classrooms. One man in particular became very proficient in the planning, scripting, and on-site video taping of classroom situations, used to illustrate supervision principles and produce tapes for demonstrating these principles in the workshop.

Many of the first year trainers also served in the second year workshop and brought that experience with them. Also, during the train-the-trainers workshop, the integration of the topics in practice was emphasized and the trainers took this into consideration when they organized the topics for presentation and developed the schedule. The experienced trainers were much more sophisticated as supervisors and trainers during the second year. And, during the second year's workshop, a group of experienced supervisors from the Monrovia Consolidated School System was included in the training. This was encouraging as it pointed to acceptance of PEP programs by the wider school community in Liberia.

3. Supervision of Instruction

The introduction of the PEP brought with it the need to help teachers establish the new program in their classrooms by providing follow-up in the field on a regular basis. This was provided by the addition of Instructional Supervisors (IS's), whose role was to provide support and direct instructional supervision for teachers just trained in the methods and materials of PEP. Originally these IS's were recruited from the ranks of the developers and writers of the PEP program. While these people had the necessary knowledge and understanding of the program, they did not always have the necessary skills to supervise teachers. Neither did the District Education Officers (DEO's) have the skill, knowledge or inclination to supervise instruction. Their role had traditionally been limited to administrative concerns. Training of IS's, described in section IV, B, 2 of this report, prepared IS's for their special task.

In helping the teachers get started, the IS's began weekly visits to their assigned schools. The focus was on continued training and the improvement of instruction. To help accomplish this, the IS's were trained to use the clinical model of supervision when working with their teachers. This model focused on teacher goals and a four-step "process" to help teachers reach them. 1.) The IS had a pre-observation meeting with the teacher to agree on what activity(s) or behavior(s) the teacher wanted to have observed and perhaps needed help in accomplishing. The teacher and IS also agreed on what information would be collected in the classroom and how it would be collected during the observation. 2.) The IS would then observe the class or part of the class and collect the data agreed upon. 3.) The IS and teacher would analyze the data together after the class and discuss next steps. 4.) Finally, the IS would make suggestions as necessary, provide any resources at his/her disposal, suggest that the teacher observe another teacher -- i.e. do what was necessary and possible to help the teacher reach his/her goal. For the sake of time the teacher and IS would also discuss the next observation and what was to be accomplished; this served as the pre-observation meeting. Some goals/problems would take a number of IS visits to resolve; others would take one. In the latter case, another goal would be chosen for the next visit.

The number of schools joining PEP increased each year creating a need for additional IS's. Initially this need was met by United States Peace Corps Volunteers (PCV) who were assigned to the PEP. At one time 17 PCV's served as IS's. They lived in the districts where their assigned schools were located and most were assigned a motor cycle for transportation. Also, outstanding principals and teachers in PEP schools were employed as IS's when the MOE budget allowed. Prior to the first Supervisor Training Workshop held in 1989, the MOE decided to require all DEO's in the country to take PEP teacher training and supervisor training and serve as IS's in PEP schools. This significantly increased the number of IS's and helped create a permanent cadre of supervisors. All persons assigned as IS's first attended the annual Teacher Training Workshop as trainees. This insured that everyone had a common base of knowledge about PEP. Upon completion of this workshop and the Supervision workshop they began to function as IS's.

After a year's experience, IS's were used as trainers in the annual teacher workshops. In the 1990 workshops, an attempt was made to place the IS trainers with the trainees with whom they would be working in the field. This would enable them to become acquainted and establish a trainer-trainee relationship before moving back into the school situation. Due to numerous site changes of trainers necessitated by the civil unrest in the country, this plan was only partially successful.

IS's used all means possible to travel to their schools. Some walked or took public transportation when available. Some were assigned motor cycles. These three modes suffered and were not always usable during the rainy season. To alleviate this problem and insure regular visits to all PEP schools, the Mission purchased Toyota 4-wheel drive Land Cruisers. Each county was assigned one of these jeeps with a driver. An experienced IS served as the vehicle coordinator and scheduled the use of the vehicle among the other IS's in the county. Initially, 22 vehicles were delivered. One was assigned to each of the two TA's, one to the project director and the remaining were assigned ultimately to the 13 counties. Some counties because of geography or numbers of PEP schools were assigned two vehicles. Each jeep was assigned a PEP or MOE driver who, in addition to driving, had responsibility for care and simple maintenance of the vehicle. Major periodic maintenance was performed by the local Toyota agency in Monrovia and required that the vehicle be driven from its county location for this service.

The use of these vehicles for their intended purpose was only partially successful. From the beginning, unauthorized use of the vehicles was a problem. It was not uncommon to encounter a project vehicle filled with unknown and unauthorized passengers although most of the IS's assigned to coordinate the use of the vehicles were conscientious and took the responsibility seriously. The intended purpose -- transport of IS's to PEP schools -- conflicted with the desire of a few Ministry officials who wanted the jeeps controlled by themselves and used at their discretion. In one instance a DEO serving as an IS and a vehicle coordinator was suspended for 10 days without pay for not allowing a County Education Officer to use a jeep.

Some new IS's, especially new PCV's and the DEO's, tended to focus on the administrative side of their responsibilities. This was particularly true of those who had not had previous experience in development or experience in instructional supervision. This changed upon completion of the Supervision training when most IS's began to emphasize instructional improvement. The collection of statistical data, coordination of vehicle use, and collection of pre- and post-test radio data were examples of administrative duties that, of necessity, had to be performed. The DEO's continued to be responsible for other administrative duties such as transferring and disciplining teachers.

IS's also held local workshops as needed to address common problems teachers were having and to introduce new or changed methods or procedures in PEP. These workshops were usually held at a school which was a reasonable commute for all of the staff involved and often lasted two days. Lodging was arranged with local families and the cost of food and cooking was shared by those attending the workshop. The content of the workshops grew out of the classroom supervision and usually focused on problems many of the teachers had in common. For instance,

a workshop could be devoted to phonics, the teaching of phonics, and word pronunciation; another to teaching math and a demonstration of math drills and activities. Also, program up-dates and changes in content and methodology were presented and discussed in local workshops.

The TA for Supervision and the PEP DOS worked as counterparts and shared an office in the MOE. They met and worked with IS's -- MOE, PCV, and DEO's -- whenever they visited the Ministry routinely or with specific problems. This office was a constant point of contact between field supervisors and the MOE. During the dry season the TA and the DOS visited PEP schools throughout the country. Previous arrangements were made to meet individual IS's at a school in their area and visit classrooms in all of the schools for which they were responsible. These visits afforded an opportunity to meet with the IS's, teachers and principals together and discuss any problems or needs, clear-up misunderstandings, and answer questions. With the help of the IS and the principal, the "semester boxes" of instructional materials were examined relative to condition and completeness. On returning to the MOE, arrangements were made to replace lost or destroyed materials. Instructional materials in use for five or more years were being systematically replaced. The condition of facilities was also noted. These visits lasted two to three weeks and often covered 2000 miles of dirt road. Extensive notes and records were made of the visits to individual schools and the discussions with the teachers and principals. This invaluable feedback was used to upgrade the handbook and the annual Teachers' and Supervisor's workshops. Much of the content for the Teacher's and Supervisor's Manuals was a result of these field visits.

4. Administration

Strengthening the management and administrative capacity of the Bureau of Primary Education (BPE) was a major objective of the Project. Much of the capacity building was accomplished by on-the-job collaboration with the leadership of the BPE and in several cases, with MOE leaders outside of the Bureau. The key leader within the BPE was the Project Director/Assistant Minister for Primary Education. Also key was the Director of Instructional Materials Development and Evaluation, who was the acting project director for periods of time when the Assistant Minister traveled overseas, traveled in-country on non-project business for the MOE, attended to family illnesses or was ill herself. Several specific organizational behaviors and activities were introduced and incorporated into the operation of the BPE through these two officials. These included:

- Periodic meetings of the director, acting director and COP to review and plan BPE activities which invariably led to meetings with specific BPE units responsible for the activity.
- Monthly meetings of the BPE senior staff to determine progress towards objectives and to coordinate planning for BPE activities.

- **Increased contact and direct relationship with the Minister of Education concerning policy matters and some operational matters.**
- **Developed new and/or revised job descriptions for the following personnel:**
 - **Assistant Minister for Primary Education**
 - **Assistant Project Director**
 - **Administrative Assistant**
 - **Accountant**
 - **Production Unit Director**
 - **Packaging Coordinators**
 - **Inventory and Distribution Coordinator**
- **Developed collaborative relationships with the Liberian Rural Communications Network, Peace Corps, CREDO, Plan International, UNESCO, and other agencies concerning various aspects of BPE operations.**

Much of the increased administrative capability of the BPE came from many daily interactions that eventually had a cumulative impact on the strength of the organization. Many small initiatives slowly became integrated into the various operations of the BPE. The impact became evident when successful events, actions and activities began to happen without special intervention of the technical advisors or the BPE leadership.

However, some administrative capability was increased by deliberately providing examples of processes and/or routines customized for specific problems or roadblocks facing the BPE. The strategy was to present examples in a way that provided appropriate BPE officials with opportunities for assuming the leadership of the process over time. Examples of this include:

- **A plan of action for the pilot radio program was developed by the COP and presented by the COP and Assistant Minister to the BPE senior staff as a draft for their revision and implementation. The process of involvement resulted in a specific direction for the development of the pilot radio program and insured that the appropriate senior staff members took responsibility for implementation of the plan. The process also developed an understanding among BPE staff of the purpose of the pilot radio program, the need to use consultants with different technical skills and the specific benefits for other units of the BPE.**
- **A plan for the revitalization of the Production and Distribution Unit was developed by the COP and presented by the COP and the Assistant Minister to the BPE senior staff as a discussion document. As with the previous draft plan, discussion quickly gave way to understanding of the problem and a recognition of the role to be played by appropriate senior staff members. The process, implemented over time, not only resulted in a**

revitalization of the Production and Distribution Unit, it also resulted in the Assistant Minister and the Production Manager gaining new management skills.

- A 12-month plan to organize the training program around specific events was developed by the COP and the Director of Training. This plan did not have the direct and consistent involvement of the senior BPE staff and therefore had limited management results. However it did equip the Director of Training to forecast and plan the many and complicated events of a large training program more effectively than the previous year.

The capacity of the BPE accounting department was improved by the work of a short-term consultant who assisted in the establishment of manual and computer accounting procedures that created improved accuracy and improved efficiency. Similarly, the BPE computer center became more effective with the addition of new procedures and equipment. In particular, the Assistant Minister came to understand the potential of the computer center and began to give meaningful direction and focus to the operation of the center.

Other evidence of increased capability of the BPE include measures taken to sustain the reform of primary education beyond the project period. BPE management developed specific initiatives towards this end before the civil conflict intervened. These initiatives included:

- Establishing an instructional materials fee to be collected each semester from all REP students and placed in a time deposit. The proceeds of the time deposit would be used to replenish instructional materials.
- Assisting non-governmental agencies to use their own resources to adopt the reformed primary system for their schools.
- Submitting a proposal to UNICEF to assist in funding training and materials production costs.
- Taking steps to place Project staff on the GOL recurrent budget.

In addition, the management capacity of the BPE was indirectly enhanced when actions of USAID/Liberia and the contractor strengthened the MOE. USAID/Liberia, by assisting with the Education Sector Assessment, by assisting with the National Educational Policy Conference and by supporting the development of a five year education plan placed the MOE in a position of enhanced leadership capability. The contractor, through the COP, assisted the MOE in planning and implementing the National Educational Policy Conference and the five year education plan. The COP assisted the Minister in implementing the new relationship between the education officers and the county school boards, and assisted the Minister in developing strategies for strengthening the internal operation of the MOE senior staff. The strengthening of the MOE consequently strengthened the BPE.

5. Pilot Radio Program

Because the project paper allowed for a PEP radio initiative, but did not define or describe such an initiative, USAID/Liberia commissioned a feasibility study of the use of radio broadcasts to support education in Liberia. The study had little impact because it did not outline the process of developing the PEP Pilot radio program as a means for instructional improvement of PEP teachers. The COP developed a plan of action which became the framework for the Pilot radio development. The plan addressed the need for daily broadcasts, aimed at teachers and principals, that would improve instruction for primary students by connecting the content of previous training received by teachers and the content of the instructional modules being used by the teachers in the classroom. Operational procedures and timelines of the plan were clarified when BPE senior staff met with USAID officials and Liberian Rural Communications Network (LRCN) officials.

Meanwhile three areas of specific radio technical expertise needed by the project were identified and USAID/Liberia approved the use of consultants for each one. The first consultant arrived in January, 1989 and completed several technical field tests of various Liberian radio station broadcast capabilities. He recommended, on the basis of broadcast coverage, which radio stations to use and specified the time of day when atmospheric conditions would allow strong reception. He also recommended the radio receiver to be purchased for use in the schools. USAID then contracted with the recommended radio station for the airing of the pilot PEP radio programs and began the process of procuring the radios. One radio was supplied to each school, along with instructions to the principal concerning the use of the radio and the method of involving teachers daily in the broadcasts.

The second consultant arrived in February, 1989 and completed an evaluation plan for the pilot radio program. With assistance from the PEP Evaluation Specialist, this consultant also developed a baseline evaluation instrument, which was to be used to gather the data to assess listenership and the learning impact of the broadcasts among the teachers. The consultant returned in April, 1989 to finalize the baseline radio questionnaire and to train the BPE Instructional Supervisors in the administration of the questionnaire. The questionnaire was administered as a pretest and administered again, after the airing of the 60 radio programs, as a posttest. The posttest contained an additional section that elicited responses about listenership and general feedback about the pilot radio programs. The pretest and posttest were administered to three groups of teachers. The intervention group contained teachers whose school had been supplied with a project radio and was in the broadcast area. The second group contained teachers whose schools were on the fringe of the broadcast area that did not receive project radios. It was conceivable that some of these schools would acquire a radio and some of the teachers would participate in the broadcasts. The posttest would determine this. The third group contained teachers whose schools were outside of the broadcast area and who were, therefore, unable to hear the broadcasts.

The third consultant arrived at the end of February, 1989 and spent six months working intensely with the PEP radio producers to produce the 60 radio programs for broadcast to the PEP schools.

He organized the PEP Radio Production Unit, trained the Unit's Managing Editor and trained the Unit's radio producers. Three of the radio producers had received initial training in an LRCN program. These 3 and 4 others outside of BPE participated in a second course at LRCN prior to the arrival of the consultant. The original three BPE radio producers and two of the new trainees became the team of radio producers with which the consultant worked. One of the original PEP radio producers was selected for special training as the Managing Editor of the Radio Production Unit.

The COP prepared a competitive solicitation for the printing of the pretest and posttest and prepared a solicitation for the entering of data from the completed questionnaires. The contracts were issued to the firm with the best cost and technical proposal and the tests were printed and delivered.

Prior to the delivery of the radios, the radio baseline study consultant returned and held a workshop to train the BPE Instructional Supervisors in the administration of the test questionnaires. The Instructional Supervisors administered the questionnaires to the 2nd grade teacher, the 5th grade teacher and the principal in the schools from each of the three study groups. Nearly 350 schools and over 1000 participants were tested within a two week period of time.

Once the questionnaires were returned, the BPE Evaluation Specialist and assistants coded each questionnaire before packaging them for delivery to the data entry firm selected through a competitive solicitation process. The data entry firm completed a double entry process to insure accuracy and returned the data to the BPE on a computer data disk. The data disk was sent to the baseline study consultant who prepared the pretest report.

Meanwhile the radio producers were completed the first programs in each of three series for the following audiences:

- 2nd grade teachers who were using programmed teaching materials in reading instruction.
- 5th grade teachers who were using programmed learning materials in science instruction.
- Principals who were learning instructional supervision skills.

A specification committee for each series was used to determine the content of the programs. Specification committee members included the curriculum writer for the subject, one radio producer and other BPE staff and administrators familiar with the topic. The radio production consultant was a member of each committee. Once the specifications were approved, the radio producers created scripts which were submitted to a review committee. After comment and recasting of the scripts, the radio producers were given the approved scripts to begin the production stage. The producers used the LRCN production studio on a predetermined schedule to produce the programs. Local hire individuals were contracted to serve as "talents," i.e. radio voices or characters, for each series. These "talents" had to be scheduled during the available

studio time. This proved to be problematic because of the unreliable transportation system and the occasional lack of access to the LRCN studio during scheduled time. Production was also hampered by inadequate communication between BPE and LRCN, and by the inability of the USAID supplier to deliver blank production tapes on a timely basis.

The draft tape of each program was reviewed by the consultant and the review committee for the purpose of suggesting improvements. The improvements were incorporated into the final production. Copies of completed programs were taped and sent to the three LRCN stations for simulcast on a predetermined schedule. Twenty weeks of broadcasts required a total of 60 programs; 20 for 2nd grade English programmed teaching; 20 for 5th grade Science programmed learning; and 20 for principals' instructional supervision needs. Each week, the 2nd grade English program was broadcast on Monday and repeated on Wednesday. The 5th grade Science program was broadcast on Tuesday and repeated on Thursday. The principal program was broadcast on Fridays. All broadcasts were aired at 10:00 a.m. during the schools' recess time. The broadcasts began the week of June 5, 1989 and concluded the first week of November, 1989.

The COP and the BPE Evaluation Specialist prepared for the administration of the posttest by planning the training/ orientation sessions for the test administrators, completing the additional section of the questionnaire, field testing the posttest, and contracting with a printer to print the posttest questionnaires. The BPE Evaluation Specialist and the Radio Unit Managing Editor conducted the posttest training/orientation for the instructional supervisors.

After the 60 programs were broadcast, the BPE instructional supervisors returned to each school and administered the posttest. The completed questionnaires were coded by the BPE Evaluation Specialist and assistants, and packaged for delivery to the data entry firm. The data entry firm compiled the data on a computer disk which was sent to the baseline study consultant for analysis and preparation of the evaluation report.

The evaluation report, based on pretest and posttest data, revealed that the Pilot Radio Program did have a positive impact on the administrative performance of school principals and the teaching performance of second and fifth grade teachers. The radio programs alone (after removing the impact of supervision visits) did indeed help to improve about one-third of the skills measured. It was also found that the combination of supervision and radio improved teacher and principal performance on almost every item except those on which the initial score was so high to begin with that there was little room for improvement. The results of the evaluation indicate that radio and supervision play an important role in improving the performance of those teachers and principals whose skills are not up to the standard of the group as a whole. Almost all of the teachers and principals (99% or more) reported that they liked the radio programs, that the programs were helpful, and that there should be more programs. Notwithstanding these results, the continuation of the radio program was jeopardized by the phase-out of USAID projects. The development of additional radio programs ceased when civil warfare closed all the schools.

6. Criterion Referenced Test

In 1985, Dr. Edward F. Kelly, a consultant under phase I, developed Criterion Referenced Tests (CRT) and administered them to a sample of project schools. The unfortunate death of Dr. Kelly and the conclusion of phase I placed the CRT on hold. When phase II began, the need to measure student understanding of concepts taught and mastery of specific objectives was again recognized. However, the accelerated introduction of PEP to primary schools forced the BPE to allocate staff to functions such as training, supervision and distribution rather than the development of the Criterion Referenced Test (CRT).

It was decided in early 1989 that a consultant would be brought in to assist with basic decisions and to revise, if necessary, the 30 CRT tests. The consultant would work directly with an Evaluation Specialist from the MOE Planning division was temporarily assigned to the BPE (the regular evaluation specialist had departed for a two year Fulbright Scholarship).

It was difficult to find qualified CRT specialists available for multiple trips to Liberia. A Ghanaian consultant was identified who had prior experience with the West African Examination Council. His first trip was during November and December 1989 at which time he accomplished the following:

- Reviewed the PEP measurement objectives and determined that a Criterion Referenced Test rather than a Norm-Referenced Test, was appropriate for PEP.
- Reviewed the CRT developed in 1985 by Dr. Edward Kelly and determined that considerable revision would be required.
- Organized subject matter specialists to assist in the revision of the CRT.
- Began the work of revising the 30 CRT tests and supervised the subject matter specialists doing revision work.

The consultant returned in February, 1990 to complete the revision of the 30 CRT tests, to develop a strategy for administration of the CRT, to develop instructions for the CRT tests, and to select a random stratified sample of PEP schools for administration of the CRT. Tests were completed in Language, Reading, Social Studies, Mathematics, and Science for each of the six primary grades -- 30 tests in all. The consultant worked with the Computer Division of the MOE and with the West African Examination Council. He assessed the capability of their hardware and software to capture the CRT data, process it, and produce the necessary reports. He found that both organizations could process the PEP CRT data if additional hardware and software were made available to them.

The CRT was scheduled to be administered during the last few weeks of the 1990 school year (November). The consultant was scheduled to return for the purpose of training the test administrators and to assist with the handling of data and the analysis of the data. However the

increased civil warfare closed the schools and prevented the administration of the CRT as scheduled.

C. PARTICIPANT TRAINING

The contract provided for 5 participants to earn a Master's degree from U.S. institutions in the areas of teacher training, supervision, and/or educational evaluation. The contract also provided for one semester of specialized non-degree training in the U.S. for 6 persons. The design of the project, placed major responsibility for participant training with the PEP Technical Committee. By the fourth month of the project the Technical Committee was organized. One month later (December 1988) a participant training plan for long-term training was reviewed and accepted by the Technical Committee (see Appendix C).

The plan identified instructional supervision as the major training need for the M.A. candidates and listed the selection criteria. Two candidates were identified by the Technical Committee and the contractor began the process of coordinating the various activities associated with participant training requirements (see Appendix D). The PEP Technical Committee, the MOE and AED could not reach agreement with USAID/Liberia on the interpretation of the criteria for undergraduate grade point average and Graduate Record Exam scores as applied to university admission requirements for foreign students. When this could not be resolved the two students missed the deadline for the Fall 1989 semester.

Shortly thereafter, all long-term participant training programs were stopped by USAID/Liberia because of the non-payment of Brooke sensitive debt by the Government of Liberia. A 90 day Stop Work Order, invoked because of civil warfare in many parts of the country, further complicated the situation. Consequently, no Liberian was permitted an opportunity for participant training.

D. SHORT TERM CONSULTANTS

Thirty (30) person months was allocated for short-term technical assistance. Because of the frontloading of short-term TA in the project, about half of the allotment was utilized during the first year and a half. In total, 13.7 person months of short-term technical assistance was utilized. The following describes the person months worked and products produced by each short-term consultant.

Products completed by the Supervision Consultant (1.5 person months: 10-30-88 to 12-8-88)

- Completed outline of the Supervisor's Workshop
- Wrote instructor's Manual for use in Supervisor's Workshop
- Completed three video scripts
- Completed several handouts for use in the workshop
- Completed draft job description for Education Officers

Products completed by the Radio Technician Consultant (.5 person months: 1-1-89 to 1-13-89)

- Map showing broadcast coverage areas for ELWA and LRCN
- Verified the accuracy of the field intensity measurements made by LRCN
- Confirmed that a received field intensity of 100 microvolts per meter is adequate for intelligible reception
- Confirmed from field tests that 10:00 a.m. broadcasts would contain sufficient signal quality
- Recommended the GE Superradio II as a receiver for use in PEP schools
- Verified from field tests that ELWA on the 49 meter medium wave can be received clearly at all locations at 10:00 a.m.
- Tested two short wave receivers but did not recommend either one
- Recommended broadcasting the PEP programs on ELWA and LRCN stations using medium wave and broadcasting on ELWA using short wave so that all of Liberia would be reached

Products completed by the Radio Baseline Study Consultants (1.2 person months: 2-4-89 to 3-2-89)

- Completed an evaluation plan for the radio pilot
- Developed a set of measurable objectives for each of the three broadcast series
- Developed standards for the revision of specifications for the three series
- Drafted four part baseline evaluation instrument
- Assisted with the revision of specifications of the series
- Assisted counterparts develop schedule of tasks to complete prior to return visit of consultant

Products produced by the Radio Baseline Study Consultant (.8 person months: 3-26-89 to 4-18-89)

- Finalized the four part radio questionnaire
- Prepared a training manual for use in the workshop that will train the radio test administrators
- Developed the curriculum for the radio test administrator workshop
- Assisted in the conducting of the radio test administrator workshop
- Developed log for use by principals to record teacher attendance for the radio broadcasts
- Established a coding system for each questionnaire item
- Recommended the hiring of a local data entry firm to prepare data in machine readable form
- Prepared the baseline report

Products completed by the Radio Production Consultant (6 person months: 2-26-89 to 8-15-89)

- Trained a Liberian to become the Production Chief of the PEP Radio Unit
- Assisted local staff to write 60 approved radio scripts
- Assisted local staff to record 60 radio programs in draft form
- Assisted local staff to complete post-production of 60 radio programs
- Trained and monitored 3 radio production specialists
- Organized and monitored the Radio Production Unit
- Coordinated the use of talent (actors) in producing the radio programs
- Developed a program production schedule
- Integrated the work of the monitor group into the schedule of production activities

Products produced by the Radio Baseline Study Consultant (1 person months: 3-13-90 to -13-90)

- Advised on the writing of the radio post test instrument
- Completed report describing results of the radio pre test
- Completed final Radio Impact Evaluation Report that analyzed the results of the pre and post test

Products completed by the Criterion Referenced Test Consultant (1.5 person months: 11-8-89 to 12-20-89 and 2-14-90 to 3-10-90)

- Reviewed PEP measurement objectives and determined that the Criterion Referenced Test (CRT) was the type of test needed for PEP
- Organized subject matter specialists to assist in revising the CRT, originally designed by Dr. Edward Kelly in 1985
- Completed 30 CRT tests (5 in each of the 6 grades).
- Completed instructions for the 30 CRT tests
- Selected a random stratified sample of PEP schools for administration of the CRT

Products completed by the Accounting Consultant (1.2 person months: 12-4-89 to 5-11-90 part-time)

- Improved the PEP/BPE accounting system, installing a revised manual accounting system of basic double entry accounting principles
- Installed a computer data base system that supports the manual system
- Trained PEP accountant and selected department employees in both the manual and automated accounting system
- Provided recommendation for purchasing data processing equipment
- Established procedures for controlling expenditures and petty cash disbursements
- Established new job description for accountant.

- Identified bank overcharge amounting to \$20,000 and assisted the Ministry in securing a refund
- Identified excessive monthly bank service charges and suggested ways to minimize such charges

E. SUSTAINABILITY

The accelerated implementation of the project and the potential for the phase-out of USAID/Liberia projects were reasons that PEP began to search seriously for means of sustaining the reform of primary education. Four major ideas were in early stages of implementation when civil warfare closed the schools and postponed further action. The four major sustainability ideas were:

1. Student Materials Fee

The PEP Technical Committee approved the establishment of a student materials fee to be paid each semester by PEP students. The collected fees would be invested in a time deposit account and would be withdrawn when PEP instructional materials needed replacement. \$1.00 was the fee recommended to the Minister of Education. The Minister approved the concept of the fee, directed the BPE to organize a system to collect the \$1.00 fee, and to determine how to invest the proceeds. This was interrupted when schools were closed because of increased civil warfare.

2. UNICEF Proposal

The PEP proposal to UNICEF was another initiative interrupted by increased civil warfare. PEP, USAID and UNICEF officials met regularly during March, April and May 1990 to complete a proposal for the funding of training and the printing of instructional materials. However, the subsequent evacuation of all U.N. personnel put the process on hold.

3. Project Staff on Recurrent Budget

The Assistant Minister for Primary Education worked closely with the Ministry of Planning and Economic Development, the Budget Bureau and the Minister of Education to prepare the forms for the transfer of the first group of PEP project staff to the GOL recurrent budget. The budget of the MOE had to be increased to accommodate the transfer and the closing of the schools prevented the completion of the process.

4. Bringing Private and Church Related Schools into the System

During March 1990, two non-governmental organizations, Plan International (PLAN) and Church Related Educational Development Organizations (CREDO) were assisted by the BPE in training teachers and principals from 39 private and church related schools in the use of the reformed primary system and its materials. Complete sets of instructional materials for each of the 39

schools were to be printed by the two organizations using the PEP plates. The printing was at the expense of the two organizations.

Building on this success, qualified professionals from private and church related organizations were to be invited to attend the PEP Train the Trainers workshop in January 1991. These persons could then operate a series of teacher training workshops for any number of private and church related schools freely using PEP materials and training approaches. The plates for the PEP training materials and the PEP instructional materials would be made available to the school with trained teachers. The printing of these materials would be at the expense of the individual school or their respective private or church related organization.

V. CONCLUSIONS AND RECOMMENDATIONS

END OF PROJECT STATUS INDICATORS (Source: Project Authorization Amendment dated June 30, 1987)	
5 YEAR EOPS INDICATORS	STATUS AT TIME OF EVACUATION (32 months prior to scheduled end of project date)
3,126 teachers and administrators will use the integrated approach to primary education.	3,125 teachers were trained to use the integrated approach to primary education (2,010 teachers were trained in Phase II).
80,000 pupils, representing all public primary schools, will be using the integrated approach.	80,500 pupils are enrolled in the schools using the integrated approach. These pupils represent 591 of the 600 schools identified in the project paper. Another 300 two and three teacher schools were subsequently identified and were scheduled for inclusion in the next training workshops (1991)
A fully staffed Bureau of Primary Education (BPE) will be capable of administering the new primary education system.	BPE staffing was completed with a Liberian educator holding every position on the organizational chart for a two-year period of time or more. Attaining many EOPS indicators three years early is a measure of their capability.
A functioning and sustainable system for printing and distributing the appropriate sets of instructional materials before each school year begins.	The revitalization of the Production and Distribution Unit accomplished this as evidenced by the printing, packaging, and delivery of materials prior to the 1990 school year. Although some delivery attempts were thwarted by the armed conflict, the materials were ready on time and full delivery arrangements were made.
An in-service teacher training system using facilities of LRCN for in-school radio programs directed to teachers.	Between June and November, 1989, 60 radio programs were received by teachers and principals in the pilot schools. Three LRCN stations broadcast the programs. Coverage of all schools for the 1990 school year was thwarted by the Phase-Out Plan and warfare.

END OF PROJECT STATUS INDICATORS
 (Source: Project Authorization Amendment dated June 30, 1987)

<p>Student achievement will increase by 20% over the Criteria Referenced Test scores to be conducted in October/November 1988.</p>	<p>Accelerating in-service training took essential staff away from the CRT development. By March 1990, 30 CRT tests were written but administration of the tests, scheduled for the end of the school year (Nov) was not possible when warfare closed the schools.</p>
<p>OTHER INDICATORS</p>	<p>STATUS AT TIME OF EVACUATION</p>
<p>Training of principals and supervisors in instructional supervision skills.</p>	<p>214 principals and supervisors were trained to perform instructional supervision duties.</p>
<p>Training of 2nd year teachers in the second course leading towards the awarding of a "C" Certificate.</p>	<p>363 teachers completed the second course leading towards the awarding of a "C" Certificate.</p>
<p>A system of instructional supervision in operation.</p>	<p>64 trained instructional supervisors were deployed throughout the country. Each county had at least one four-wheel drive vehicle and a few motorbikes to give the supervisors mobility.</p> <p>136 principals received supervision training.</p>
<p>Actions taken to sustain the system of primary education.</p>	<p>Four actions were underway concerning sustainability:</p> <ul style="list-style-type: none"> ● collection of materials fee from students with proceeds used to replace materials. ● UNICEF proposal to cover training and printing costs. ● Placing BPE staff on GOL recurrent budget. ● Assisting non-public schools to adopt PEP.

B. CONCLUSIONS

- **The reformed primary education system is a viable system.**
- **Acceleration of the project was a wise and fortuitous decision resulting in many EOPS targets being met nearly 3 years ahead of schedule.**
- **Long-term participant training, if early termination of the project had not short-circuited it, would have reinforced short-term in-country training significantly.**
- **Acceptance of the system among private and church related schools became evident when nearly 40 schools adopted the system in 1990.**
- **The sequenced learning system, reinforced by instructional supervision from trained instructional supervisors, significantly enhances the teaching skills of Liberia's primary school teachers, the large majority of whom are professionally underqualified for their critically important teaching responsibilities.**

C. RECOMMENDATIONS

- **When conditions warrant, USAID should assist the Liberian Ministry of Education reestablish the reformed system of primary education.**

A

Liberia Primary Education Project
Contract No. 669-0166-C-00-8040-00

Financial Analysis for Final Report
Submitted to U.S.A.I.D.
September 28, 1990

Category	Project Budget	Expenditures to Date	% Budget Spent	Budget Remaining
Labor	\$937,691	\$315,017	33.59%	\$622,674
Fringe Benefits	\$243,800	\$83,738	34.35%	\$160,062
Consultants	\$149,715	\$66,119	44.16%	\$83,597
Travel	\$333,532	\$163,547	49.03%	\$169,985
Other Direct	\$244,440	\$128,554	52.59%	\$115,886
Overhead	\$534,570	\$214,223	40.07%	\$320,347
Subcontractors	\$359,690	\$24,272	6.75%	\$335,418
G&A	\$7,193	\$604	8.40%	\$6,589
PassThru Expenses	\$602,571	\$86,752	14.40%	\$515,819
Participant Expenses	\$0	\$100		(\$100)
TOTAL PROJECT COSTS	\$3,413,202	\$1,082,926	31.73%	\$2,330,276

- * Note that "Expenditures to Date" reflects costs incurred as of August 31, 1990 but does not include other direct costs incurred in August.
- ** Participant Expenses includes \$50 GRE Test fee taken by two selected participants. Since participant training was never carried out, this fee was charged to this line item rather than subcontractor.

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**TRAINER OF TEACHER TRAINERS WORKSHOP
ADULT LEARNING**

Most of the teacher trainers in PEP have been classroom teachers at the primary level at some point in their careers. They were successful as primary teachers or they would not hold the position they now do. This previous teaching experience can be a help to the teacher trainers and it can also be a hinderance. It can help them be more comfortable working with groups of people and knowing that one must plan and organize material that is to be taught. It can hinder teacher trainers because a successful teacher of primary children is not necessarily a successful teacher of adults.

Recent research and casual observation tells us that young children and adults do not always learn in the same way. Teachers have a greater store of knowledge to draw on than children. Even if adults have not had a great deal of formal instruction in school, they have probably learned a great deal from "life" and all personal experiences with other people. This research seems to suggest that teacher development can be encouraged by the following:

1. Significant role-taking experiences: teachers benefit more from actually doing and practicing things than they do from reading and lectures.
2. Careful and continuous guided reflection: teachers need help in thinking about what they are doing and what effect it is having on students.
3. Guided integration of role-taking experiences and reflection: as teachers learn by doing and practicing, they need the help of other professionals to think about how they can use what they have learned in their classrooms.
4. Provision for personal support and challenge: after a teacher has learned new skills from role-taking and reflection, they need help, encouragement and support to put these skills into practice in their classrooms.

As we have learned more about how adults learn, we have begun to apply some of this research and knowledge to the training of teachers. Below are a list of findings that can help us think about training the trainers for the January workshop.

1. Select content that has been verified by research and/or experience to improve student achievement.
2. Involve the trainers in decision making about how the workshop will be conducted.
3. Conduct training sessions (more than one) after the workshop.
4. Include presentation, demonstration, practice, and feedback in all workshop activities.

5. During training sessions, provide opportunities for small-group discussions of the application of new practices and sharing of ideas and concerns about effective instruction.
6. Between workshops and training sessions, encourage teachers and provide an opportunity for them to visit eachothers' classrooms, preferably with a simple, objective, student-centered observation instrument. Provide opportunities for discussions of the observation.
7. Help teachers accept new practices by presenting research and a rationale for the effectiveness in terms teachers can understand. Allow teachers to express doubts about or objections to the recommended methods in small groups. Let other teachers convince the resisting teacher of the usefulness of the practice by relating personal experiences.
8. Help teachers grow in their self-confidence and competence. After the workshop encourage teachers to try only one or two new practices at a time until they perfect them, then try one or two more and so on.
9. For teaching practices that are complicated, take more time, provide more practice (not more talk), and provide more support.

The above information about adult learning and teacher training has implications not only for training trainers but also about training teachers. We should keep these ideas in mind as we develop both workshops.

DISCUSSION

In all teaching, the teacher must consider two things: content -- what is being taught -- and methodology -- how it is being taught. What is the implication of all of this to the trainer of teacher trainers workshop to be held prior to the 5 week PEP teacher training workshop?

A fair amount of time must be devoted to training the trainers in the skills of methodology appropriate for the adult group with whom they will be working. This does not mean that we devote two weeks to methodology and three to content. These two can and should be taught together, because content and methodology cannot be separated in the classroom. The various "skills" of teaching can be described and then used immediately by the instructor to teach an idea in content. In fact, this is an example of a skill that is useful in teaching adults; it is called modelling.

We should take another look at the teacher trainer workshop curriculum and see how we can incorporate the methodology component. As mentioned above be certain to include "presentation, demonstration, practice, and evaluation" for each element of the teacher training curriculum.

Presentation can be reading, a lecture, questioning by the instructor leading to a point, etc. Demonstration can be the instructor or others actually doing what has been presented so teachers can "see" as well as hear about it. Pictures or other visual aids, dramatizations, etc. are also examples of demonstrations. Sometimes a presentation and demonstration can be combined. For instance, a trainer might demonstrate how to list the points of a discussion on the blackboard while actually leading a discussion and writing on the blackboard.

Practice may be the most important of the three elements of training because it enables the teacher being trained to actually try what has been presented, and practice also enables the trainer to "see" and evaluate if the point has been made. In this way it can act as a source of formative evaluation. If the trainer sees the teachers do not understand, immediate action can be taken to correct the problem. If isolated individuals are observed as having problems, the trainer can provide immediate remedial help for that individual.

Item 3 in the list of suggestions for training teachers mentions the need for training sessions after the workshop. We should begin to think about these as we plan the workshop. Actually, we are in a unique situation; the trainers, in many cases, are also the instructional supervisors who will follow the teachers into the field. Knowing what the teachers have been exposed to and have practiced, the trainer/supervisors will see the teachers in action, identify problems they are having, and can organize training session for them. Given enough lead time radio broadcasts could also be used for remediation if a problem seems common to many teachers.

(REF: ADULTLRN.RPT)

APPENDIX C

THE PEP ADULT LEARNING MODEL FOR SKILLS

Adults learn skills best when they go through the following six-stage process:

1. **PRESENTATION.** In this stage skills to be taught are presented in some manner to the adult learner. This is usually done verbally (through either the written or spoken word), but it can also be done with pictures, maps, charts, tables, or by other means. At the end of this stage the learners are aware of the skill they are to learn and have, hopefully, begun to understand it.

2. **DEMONSTRATION.** In this stage the skill to be acquired is shown to the learner. That is, the actual desired behavior is demonstrated. There are many methods of doing this. Some are direct, where the skill is performed more or less exactly as it would be used in a PEP school. Or a demonstration can be presented by using role plays, video tapes, or other means. All of these are forms of modeling desired behavior. At the end of this stage, the learners will have seen a successful example of the behavior to be learned, and their understanding of the skill will have deepened.

3. **PRACTICE.** In this stage the learners, singly or in groups, perform the behavior correctly themselves. If they are not successful, they try until they are, or until time runs out. At the end of this stage, the learners themselves have exhibited the skill (accomplished the behavior), at least at an elementary level. This is, perhaps, the most important stage, and it is also the stage most often neglected or under-emphasized in adult skills training.

4. **FEEDBACK.** In this stage the learners are told or shown to what extent they have mastered the skill to be learned. Not all learners will have mastered this skill to the same degree. Honesty is important here. There is no point in pretending that a learner knows something if, in fact, he or she does not. At the end of this stage, the learners will know how well they can perform the skill in question. This stage is one of assessment or evaluation, but it is probably not wise to use these words in describing it.

5. **REFLECTION / INTEGRATION.** Adult learners need time to think about what they have learned and to reflect on how they can make the best use of their new skill in their jobs. This is often best done with other adults who have just learned the same skill or who have the same job, or both. At the end of this stage, the learners will have begun to integrate their new skill with some of their old skills.

6. **TUNE-UP.** It may be more difficult to use a new skill in a "real life" situation than it is in the 'practice' situation of a workshop or training seminar. Also, some of the finer points of a skill may be forgotten over time. The learners will need opportunities to refresh the skill from time

to time, to build other skills on to it, and to integrate if further with other skills they use on the job. This stage may happen more than once. Each time it happens, the learner will be able to use the skill more efficiently and effectively.

IMPORTANT NOTES

1. A skill is knowledge in action. A person with a given set of skills not only knows what needs to be done, but can actually do what needs to be done. Because presentation, the first stage in the PEP Adult Learning Model for Skills, is often sufficient to transfer knowledge from a teacher to a learner, it is sometimes assumed that the same is true for the transfer of skills. But this is not the case. The successful transfer (teaching) of skills requires a six-stage process.
2. The six separate stages of the PEP Adult Learning Model for Skills form a single unified process. The stages are sequential. They almost always proceed in the order given. It is rare that a stage can be omitted and a successful result still be obtained.
3. When the fourth stage, Feedback, indicates that one or more learners have not yet mastered the skill in question, then the instructor may wish, if time allows, to recycle back to one of the first three stages, and to proceed through the process again. It is important to remember that, for the not yet successful learner, extra practice is more likely to be helpful than is extra explanation.
4. The fourth stage, Feedback, and the fifth stage, Reflection/Integration, happen, to some extent, throughout the entire process. However, the instructor should insure that they happen in a more formal and structured way at the appropriate place in the sequence of stages.
5. The PEP Adult Learning Model for Skills may require more instructional time than does the traditional lecture method, but this increase in the time spent is more than justified by increased understanding and ability on the part of the learners.

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APPENDIX D

TO: LPEP Technical Committee

FROM: Janice M. T. Vani and William F. Kromer

DATE: December 9, 1988

PARTICIPANT TRAINING

A Suggested Implementation Plan and Schedule

Background:

The LPEP project provides long term training opportunity for five (5) Bureau of Primary Education leaders at the masters' level for up to three semesters each and it provides opportunity for six (6) Bureau of Primary Education staff to receive specialized short term training of three or four months duration. Training will be conducted at institutions of higher education in the U.S.A. who are participants in the Cooperative Institute of International Policy Research and Education (CIIPRE).

It is critical that training of participants in the United States meet the needs and objectives of the Liberian Primary Education Project. Participants, upon return from the United States, will be expected to assume increased leadership in project operation and increased responsibility for decision making. They will be expected to share their newly acquired skills and expertise with others in the project and other divisions of the Ministry of Education.

Careful planning and management is required to ensure that external training adequately prepares participants to meet these institutional expectations. It is imperative that participant training begin at the earliest possible date so that the newly trained person(s) can bring new expertise to LPEP as soon as possible. The LPEP Technical Committee has major responsibility for developing the participant training plan and monitoring its implementation.

DETERMINING LPEP TRAINING NEEDS:

Review of LPEP needs reveal that supervision is a high priority and that training of Instructional Supervisors at the Master Degree level would return the greatest benefit to the project. The focus of this training should be on instructional supervision skills and teacher training skills. Critical components of this Master Degree program includes instruction in:

- 1) Supervision of Instruction
- 2) Evaluation and Assessment of Instruction
- 3) Elementary School Curriculum
- 4) Educational Leadership
- 5) nical Counseli

Two current Instructional Supervisors will need to be identified for this specialized training. They could attend the Summer 1989 session followed by the Fall and Winter semesters. Hopefully their degree program would be completed within one calendar year.

The short term participant training needs of the project include the potential for training LPEP personnel in distribution techniques, office management, radio program production and evaluation. Specific short term training requests will be submitted early in 1989 once various needs can be prioritized.

SELECTION CRITERIA - M.A. CANDIDATES:

Suggested criteria to be used in the selection of the participants include...

- a. Be current employee of BPE (two years or more).
- b. Written agreement to return to a BPE position after completion of training and give leadership to the continued reform of Primary Education.
- c. Significant knowledge and experience with LPEP materials and methodology.
- d. Prerequisite experience and background for the area of training to be undertaken.
- e. Be able to meet the required admission standards of U.S. universities and any special entrance requirements of the proposed training program.
- f. Academic ability at the level required by the training program as evidenced by previous academic work.

SUGGESTED IMPLEMENTATION SCHEDULE

ACTION	INITIATED BY	BY WHEN	COMMENT
1. Review of PEP needs that can be addressed by participant training	PEP Senior staff and TA's	10-10-88	Priority is to send two IS's for MA in Supervision
2. Submit recommendations to Technical Committee	COP/Assistant Minister for Primary Education	12-9-88	
3. Decision by Technical Committee re: training recommendations	Technical Committee	12-14-88	Decision to send first two persons
4. Request concurrence from USAID re: recommendations	COP/Assistant Minister for Primary Education	12-20-88	Response in 25 days requested

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ACTION	INITIATED BY	BY WHEN	COMMENT
5. Notify AED/CIIPRE to prepare specialized MA program	COP	1-15-89	
6. Convene committee to study/recommend four year plan to Technical Committee...propose in-country training	COP/Assistant Minister for Primary Education	2-1-89	Needs identified and prioritized
7. Submit 4 year plan for MA, short term and in-country training	COP/Assistant Minister for Primary Education	3-15-89	Technical Committee action
8. Finalize and approve MA, short term and in-country training plan	Technical Committee	5-12-89	Two months to consider and decide
9. Implementation of training plan	MOE, AED and USAID	Duration of project	Follow plan as outlined or changed by Technical Committee

RECOMMENDED MA CANDIDATES FOR SELECTION AND JUNE 1989 DEPARTURE

1. Mrs. Barbara Thorpe Instructional Supervisor
2. Mr. Joseph Kolubah Instructional Supervisor

OTHER INFORMATION

Mr. Saa Wander Samba, PEP evaluation officer, has been awarded a two year graduate program (Fullbright) and will pursue a degree in Educational Evaluation. This is an example of finding additional resources for the training of BPE staff.