AGUIRRE INTERNATIONAL PROJECT BEST EVALUATION TEAM

PROJECT BEST EVALUATION

REPORT TO UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT, HONDURAS MISSION

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EXECUTIVE SUMMARY

The BEST project, which focused primarily on Alternative Basic Education Delivery Systems but also included an educational policy component, was successful in the majority of its components, but had mixed success in one, CADERH.

EDUCATODOS, an interactive radio instruction program, has successfully build an extensive service network, reached its intended target population, met many of its learning goals, and clearly has had an impact on more than 200,000 out of school children and young people, as well as illiterate or barely schooled adults. Weaknesses in evaluation methods and a need for updating of program methods and materials are detailed in the report**. The Team recommends a final period of gradually declining assistance, during which technical assistance would be provided to assist EDUCATODOS in strengthening its academic and administrative systems; during this time phased absorption into the Secretariat of Education's regular structure would be accomplished.**

The CADERH-coordinated vocational educational education network provides quality training services to low-income youth and young adults. It is currently being expanded through a contract with DevTech, Inc. CADERH itself, however, while its materials development, training, and certifications services represent real value added, continues to have serious management and financial problems unrelated to the project. It is an open question whether it will be able to resolve those problems; in addition, it is not clear whether CADERH will be able to become a sustainable, self-funding organization. **The Team recommends that CADERH be informed that AID will provide final, tie-off assistance, provided that CADERH is prepared to undertake a series of actions designed to produce sustainability by the end of the grant period. Assuming CADERH qualifies, assistance would be terminated December 31, 2001.**

After Hurricane Mitch, important work was done under the policy component of BEST to lay the groundwork for comprehensive educational reform in Honduras. USAID Honduras played an active and important role in helping create a consensus in favor of reform, supporting the planning and public discussion of reform plans, and supporting it through effective donor coordination. In addition, the Mission assisted several pilot projects, two of which utilize distance learning, to provide inputs to the anticipated reform program. A national educational reform effort has now been launched. **The Team recommends that USAID give priority to supporting selected components of this effort.**

I. OVERVIEW, KEY FINDINGS AND RECOMMENDATIONS

In this section we present a brief description of the key findings and recommendations resulting from our evaluation of USAID's Basic Education and Skills Training (BEST) Project.

A. SUPPORT FOR EDUCATIONAL REFORM

USAID has played a key role in providing support for efforts to reform the Honduran educational system. Shortly after Hurricane Mitch, a consensus developed among Honduran educational leaders and international donors that the disaster had created a rare opportunity to initiate a comprehensive reform program. This led to a series of actions, which culminated in the presentation and dissemination of a report outlining the reform. The process was accompanied by successful, informal cooperation among interested donors. By early 2000, these informal donor arrangements had evolved into a formally structured organization called the Mesa Redonda de Cooperantes en Educacion (Education Donors Roundtable), generally known as MERECE. USAID played a key role in the process of developing this valuable institution, which also meets regularly with a more recently formed counterpart group of Honduran educational authorities known as La Cumbre (The Summit).

USAID should be commended for its work to date in this area. **We recommend continued work in support of reform, as well as an integrated package of programs to assist with the execution of key reform components.** Our recommendations for specific programs to be considered will be found in our forthcoming assessment and strategy paper.

B. ABEDS (NOW EDUCATODOS)

The major component of ABEDS is EDUCATODOS (ET), a project using Interactive Radio Instruction (IRI) to provide basic education to out-of-school youth and young adults. In its broad outlines, this project has done what it set out to do. An extensive service network has been developed in 11 departments, and 223,897 participants have been provided with an opportunity not previously available to them to learn basic reading and mathematics skills. The program is known and respected. It has involved thousands of volunteer learning facilitators in helping build literacy skills in their communities. The program is obviously of great importance to participants, and has been successful in establishing a growing number of agreements with local municipalities and private industry. The existence of these agreements and the potential for many more bode well for the future sustainability of the project.

In spite of its apparent overall success, we found deficiencies in several aspects of the ET program. We believe that these deficiencies must be remedied. They include:

- A seriously outdated curriculum (radio broadcasts and texts) that is inadequate to prepare its participants either for future learning or for success in the labor force.
- A system of evaluation (both of student progress and of the program itself) which fall short of meeting basic standards of evaluation and research design, so that it is difficult to determine exactly what has been achieved by program participants.
- An overall focus on quantity rather than on service quality and flexibility in responding to the needs of individual learners and educational stakeholders.

We recommend that the ET program be continued, but only if a solid commitment is made to expend the time and money needed to improve its quality. The first priority must be to design and implement a new testing and evaluation system that adheres to accepted standards, so that reports on progress both to participants and to USAID will be more meaningful and reliable. Concurrently, it will be necessary to revise and upgrade instructional materials for grades 4-6 and assure they adequately prepare students to successfully continue on to the new ET grades 7-9 series. It will also be necessary to design and implement a process for ongoing revision and updating of curriculum and materials. Attention must also be given to quality in other aspects of the program, ranging from standard expectations for the quality and consistency of training and supervision of promoters and facilitators, to provision of adequate transportation to enable regular and careful supervision of the facilitators in remote rural areas. ET is a program that has clearly made an impact on the lives of its participants. With the necessary improvements, ET can become an outstanding program that truly prepares its students for successful participation in the labor force of the 21st century, one that can serve as a model for programs elsewhere.

C. PILOT PROGRAMS

ESCUELAS CON EXITO (EE) was a pilot program designed to improve the quality of instruction and student learning in the first grade, in order to reduce the high rate of student failure and repetition in this key grade. School directors and parents were to be encouraged to be active participants in the program. Our review of the program indicated that the techniques introduced were valuable, although they could be improved. A revised version of the program has now been adopted by the Secretaría de Educación and renamed "Salvemos Primer Grado". Despite the name, its coverage is grades 1-3. Efforts are now being made to implement the program throughout the country. **We will recommend that the program be among those considered for future assistance from USAID in its plans for the next five years.**

APRENDAMOS MATEMÁTICA (AM) is a program designed to use IRI to provide mathematics instruction in the early primary grades. Our findings indicate that this program has generally been well received by school directors, teachers and parents, although not infrequently teachers were initially quite resistant to its incorporation into their daily program. We believe the program provides a useful supplementary mathematics experience in a system in which many teachers feel very uncomfortable with mathematics. With regard to sustainability, it appears likely that increasing levels of support can be generated at the local level from NGO's, municipalities, and the private sector. **We recommend that continued support be provided to this program, with improvements as noted in the body of the report, and pending curriculum decisions in the context of the reform.**

TELEBÁSICA (TB) is a program using educational television and texts purchased from the Mexican government to provide instruction in all key subjects for grades 7 through 9. Our review of the textual materials indicated that they ranged from acceptable to high quality. However, in order for the program to be successful, we recommend that teachers be given more training and continued supervision and coaching. An evaluation of TB is currently being conducted by IEQ-II. At this time it is unclear whether TB should be designated for use in formal programs or ABEDS programs, or in both. Given the number of grade 7-9 curricula currently available or under consideration, as well as the pending evaluation, **we recommend that TB continue as an interim program in Basic Education until evaluation results are received and final decisions are made in the SE regarding a standard grade 7-9 curriculum for Honduras.**

D. VOCATIONAL TRAINING WITH BASIC EDUCATION

BEST Project assistance was provided through CADERH (Comité Asesor para el Dessarrollo de Recursos Humanos) to locally managed and financed centers that provide skills training to low income, out-of-school youth. Training centers were built and equipped with project assistance under CADERH's administration. In addition, the project provided funds for CADERH to enhance its capabilities for providing centers with technical services and training materials.

CADERH's management of the project was poorly carried out. Project results fell far short of those anticipated and several of the buildings constructed under CADERH's management are seriously flawed. While CADERH has performed poorly, the training centers receiving assistance, along with many others in the CADERH network, are providing quality training services to low income populations and to the labor markets they serve. They operate with local financing, so sustainability is not in question. Facilities and equipment are well maintained, students are disciplined, teachers are trained in the use of competency based instructional materials, and school directors are dedicated to providing the best training they can with their limited funds..

We recommend that the current program managed by DevTech to expand the number of centers and to reinforce existing centers be implemented as planned. It would, however, be unwise for USAID to go beyond this level of effort without: (1) having an overview of the vocational training efforts of all Honduran institutions compared to estimates of the requirements for labor force entrants to ensure that training resources are contributing to national economic development as well as to the needs of low income, out-of-school youth; (2) engaging in longitudinal studies of the results of training for a sample of graduates from the training centers to measure the longer-term benefits of these programs as well as identify improvements that should be made; and (3) determining if technical support from CADERH or a similar organization will be available in the future to assist training centers in delivering quality services.

In spite of its poor management of BEST Component II, CADERH still fills a critical role in contributing value added to the training provided by the centers. This is achieved through staff training, revisions and distribution of training modules, provision of certification exams, and technical assistance. Training centers indicated that these support services are very important to them for the delivery of quality programs. CADERH's major weakness is its apparent lack of interest in ever becoming financially self-sustaining. There seems to be a general consensus within CADERH that USAID should be a continual source of funding, since the training centers that CADERH supports are built with USAID funding. During CADERH's 17 year history, USAID has provided institutional support to CADERH for nearly 14 of those years.

We recommend that USAID continue to provide institutional support for CADERH during the initial period of DevTech Project implementation. During this period, CADERH and the Mission should come to closure on what level of CADERH support is required to adequately serve the affiliated training centers, what sources of funding CADERH can expect to generate in addition to the Endowment Fund, and how the deficit can be addressed. A change in attitude on CADERH's part about attaining self-sufficiency will be the critical factor in determining whether this additional support, which should be the last, will enable CADERH to become self-sustaining.

E. LESSONS LEARNED AND CROSS-CUTTING ISSUES

The team identified the following issues which were evident in most areas of the BEST Project:

- Needs for training and supervision to accompany changes. We note the need for additional training and continued support and supervision for those teaching in the various components of the project, whether they be teachers or facilitators. Related issues include

the difficulties in providing transportation for effective supervision, and the need to involve school directors in provision of ongoing support, supervision and instructional leadership in their schools and communities.

- Coordination with other donors in assisting with specific key reform efforts without overlap of efforts. It is clear that an explicit organizational structure for donor coordination and collaboration has great promise as a mechanism for articulating a coherent vision and setting a steady forward pace toward educational reform.
- Should USAID work within the Secretaria de Educación (SE) or outside it? Our conclusion is that in order for USAID to maximize its strategic role in the educational reform, it must attempt to address some of the educational system's greatest needs by targeting a small number of strategic entry points. Possibilities in addition to those listed here include targeted assistance to the proposed new Unidad para la Transformacion del Sistema Educativo (UTSE), strategic entry points in the SE to promote effective classroom instruction at the pre-primary level and the early grades, strengthened student assessment and evaluation systems, as well as targeted staff training, and experimentation with new models for the use of technology.
- Curriculum, evaluation and program standards. We identified significant deficiencies in curriculum planning and materials development, in combination with low expectations for field staff's compliance with program guidelines and commitment to specific program objectives. In addition, we noted inadequacies in evaluation research design and implementation that underrmine decision-makers' ability to refine strategies, limit program managers' ability to take corrective action and prevent teachers and facilitators from using the results of formative and summative evaluation to meet the needs of their students more effectively.
- The need for increased responsiveness to customers. An emphasis on responsiveness to customers as a guiding principle in educational service delivery has potential as a tool both for policy reform and improvement of service quality.

Please see **Appendix A**, Lessons Learned and Cross Cutting Issues, for additional detail.

II. BRIEF DESCRIPTION OF TASK

The BEST Project Evaluation Team was asked to determine if the project achieved its purpose and results and identify the factors that have contributed to its success or failure. The Team was tasked with noting key lessons learned as a result of the project and suggesting how these lessons might relate to a new Mission education strategy.

The following specific questions were posed to the Team about the ET program. Should the program for grades 1-6 continue and, if so: (1) which interventions should be included at what funding level; (2) what management structure and implementation methods would be most appropriate; (3) what must be done to assure longer-term sustainability for the program; (4) should the program materials be revised, how extensive should the revision be, and how should these revisions be carried out; and (5) should the program for grades 1-6 be integrated with the program for grades 7-9? Similarly, specific questions were raised with respect to the vocational skills training component of the project. These include: (1) should future support be devoted to vocational skills training; (2) is there a reasonable expectation that the BEST sponsored institutions will become sustainable without continued Mission support and is there anything that can be done to assure sustainability over the longer-term, and (3) if continued support is

recommended under a new Mission education strategy, what should CADERH's role be in implementing that strategy?

Finally, the following questions were raised about the final BEST component--educational policy: (1) which, if any, of the current activities funded by this activity should continue under a new Mission strategy and what should their funding levels be, and (2) what management structure and implementation methods are most appropriate?

A. BRIEF HISTORY AND SUMMARY OF THE BEST PROJECT AND ITS GOALS

The project was developed in 1995 with the goal of "Enhanced economic participation and increased incomes of the poor through investment in people" which was synonymous with the Mission's Strategic Objective No. 1 and Program Outcome 1.3. The Intermediate Results attributed to the project were "Improved Basic Education" and "Increased Number of Vocational Center Graduates Employed." The project was designed as a five-year effort to expand access to high quality basic education and vocational training for out-of-school youth and young adults.

The project has three interrelated components. The first, which was to develop an alternative basic education delivery system for some 250,000 out-of-school youth and young adults, evolved into the ET program managed by a Project Implementation Unit (PIU) under the Secretaría de Educación . The program provides a flexible learning system based on a wide variety of learning sites and class times utilizing written materials, programmed texts, cassettes and radio broadcasts for learning groups led by volunteer facilitators.

Component II, implemented by CADERH, provides for the construction of 15 new non-formal training centers individually managed by NGOs or municipalities, 12 upgrades to training centers previously constructed with USAID resources under an earlier project with CADERH, and the development and distribution of competency based training modules as well as the application of certification exams by CADERH. By Project completion, 12,600 youth and adults were to have received vocational skills training in an estimated 27 training centers throughout the country. An endowment fund was created to permit CADERH to continue to provide technical services to training centers after the Project's completion.

Component III was designed to support educational research towards improving the equity, quality and efficiency of education and to disseminate the results of these and other program initiatives financed by BEST. The funds were included in the cooperative agreement with CADERH, but were subsequently brought back into the Mission when concerns over CADERH management surfaced. Later, some portion of the funds was assigned to ET, but these also were not used. From then until Hurricane Mitch struck, the only use made of Component III was for technical assistance run out of the mission.

B. CHANGES AND ADDITIONS TO THE ORIGINAL BEST PROJECT

1. ABEDS (NOW EDUCATODOS)

Because of the devastation to schools caused by Hurricane Mitch, some BEST funds were made available to accelerate the development of the Grade 7-9 curriculum for ET, so that the needs of many unserved students could be met. This curriculum is being developed under a contract with

IEQ-II. As a result of difficulties with CADERH management, ET has also assumed the management of the funds for pilot activities and research under Component III

2. VOCATION TRAINING WITH BASIC EDUCATION

The Cooperative Agreement with CADERH, signed on October 16, 1995, remained unchanged until early 1998 when payments to CADERH were suspended for several months because the accounting system in CADERH's San Pedro Sula "Centro Modelo" was found inadequate. By mid-year, USAID payments to CADERH resumed but problems related to CADERH's inadequate administration of funds and poor project management continued to slow down the implementation of project activities. By the end of 1998, CADERH had only completed four of the anticipated 15 new training centers, plus a multi-purpose room for one existing center. Given that the project was to terminate on December 31, 1999, USAID and CADERH agreed, in December 1998, to the completion of four additional centers as well as to supply some additional equipment for several existing ones. There were many difficulties in completing these centers due to the post-Mitch construction boom when workmen and materials were hard to obtain and due to CADERH's problems in getting financial resources to the work sites on a timely basis.

As a result of Hurricane Mitch in October 1998, USAID/Honduras decided to provide funds to build 11 new training centers as well as upgrade some existing ones in order to expand opportunities for vocational training. Furthermore, the Mission wanted to increase the quality and effectiveness of the training centers through instructional upgrades, certification programs, and greater orientation and support for business development. Because of CADERH's poor record of project management, the Mission selected DevTech Systems Inc. to provide the above services. While the DevTech activities are not directly under CADERH's administration, they provide technical services and training materials to the centers and funds to CADERH to make these services available.

3. POLICY REFORM AND PROJECT PROMOTION: PILOT ACTIVITIES

In addition to the policy reform activities described in Section V, three pilot projects have been developed with funds from this component:

TELEBÁSICA (TB) is a major activity under Component 3, which operates under the management of a unit in ET. It is based on the Mexican Telesecundario Program, using educational television and texts to provide an entire program for grades 7-9. It is currently being piloted in 35 sites, and will be evaluated in the coming months under a contract with IEQII.

ESCUELAS CON ÉXITO (EE) was designed to improve student learning and thereby reduce failure and repetition in the first and second grades by improving classroom instruction and working with parents. The project was piloted in 39 schools in Francisco Morazán and Intibucá during the school year of 1998. Hurricane Mitch caused serious disruption to the project and all records in Initbucá were destroyed. The project was discontinued after the 1998 school year. However, the Ministry perceived this to be a successful program, and this year has initiated the process of incorporating it into first grade classrooms nationwide, under the name of "Salvemos Primer Grado". Although the Ministry requested funding for the new program from USAID, no funding has been provided under the BEST Project.

APRENDAMOS MATEMÁTICA (AM) is a supplemental mathematics program for the first three grades using IRI. Its pilot activities bagan in the spring of 1999 using local currency managed by CADERH. The program is implemented by the Fundación para la Educación Ricardo Ernesto

Maduro Andreu (FEREMA). The first grade program has now been introduced nationwide, and piloting of the second grade program is now taking place in 10 departments.

III. EDUCATODOS

A. CURRENT STATE OF IMPLEMENTATION

1. DEVELOPMENT OF EDUCATIONAL MATERIALS

Alternative educational materials for grades 1-6 were developed in 1995-1996 as planned.[1] However, development of materials for grades 7-9 was substantially delayed. IEQII began a pilot of the 7th grade materials at one site on June 30, 2000. During the coming months, this pilot project will expand to about 30 sites (some with multiple classes). It is likely that most of the 7th grade materials will have been piloted by the end of the year.

2. PROJECT MANAGEMENT AND OPERATIONS

ET is administered by the Program Implementation Unit (PIU), a management and program support team of educational specialists and support staff housed in an independent facility on El Picacho. This central unit is responsible for distribution of audio material and textbooks, as well as recruitment, supervision, and training of project departmental coordinators. Working with the coordinators, it is also responsible for training promoters, and learning facilitators., student testing, reporting, and program evaluation..

ET operates primarily in 11 departments of the country, a region with approximately two-thirds of the universe of need (youth and adults needing learning opportunities for basic skills development). In the current year service has been initiated in 4 additional departments in response to requests from municipalities, NGO's, and private sector businesses. Audio materials are delivered via 16 radio stations and via cassette. Fourteen Departmental coordinators recruit and supervise about 180 program promoters who are, in turn, responsible for recruiting about 4,500 learning group facilitators.

B. ACCOMPLISHMENTS IN RELATION TO PLANNED OBJECTIVES

1. OVERALL ACCOMPLISHMENTS

ET has made impressive progress toward meeting its overall service delivery objectives with respect to learners served and has clearly made an important contribution to increasing basic reading and math levels in rural Honduras. Program piloting of materials and phase-in was systematic and the service delivery system continues to expand in an orderly way. The success of any distance learning program rests on the sponsoring agency's ability to build and manage a solid learner support system to recruit students, train and supervise local learning center volunteers, and to work to find better ways to facilitate student learning. The project has successfully built such a system. ET's learning support network is a valuable institutional resource for the future.

For rural areas where working youth and adults have virtually no possibility of attending night school, ET represents an extraordinary opportunity to allow them to realize their dream of finally getting ahead in life—for older adults, learning to read, for youth, the first rung on an upward

ladder of career mobility.[2] ET is seen nationally as an initiative that has done what it set out to do. However deficiencies in the program's internal monitoring and evaluation system make it impossible for the evaluation team to determine whether the specific impact objectives were achieved. We are also concerned about the quality of instruction and learning opportunities delivered by ET, due to the limitations in the design of the educational materials (text and audio). These materials do not conform to generally-accepted principles of instructional methodology for adult learning programs and, in terms of curriculum content, are not well-suited to achieve the Honduran goal of workforce preparation in the national strategy of poverty reduction. The design limitations of these materials have served to decrease the cost-effectiveness of an alternative educational delivery system that is otherwise sound.

The record regarding women's participation in ET is excellent. In general, slightly more women than men have participated in the program, and more grade levels have been passed by women.

It is well established that formal education of women in developing countries provides many additional benefits, such as increased years of schooling for their children, better nutritional and health practices, etc. Two studies have provided data on such issues specifically for women participating in ET classes.[3] Findings suggested several positive differences for women participating in ET. Although both men and women reported more participation in civic activities and voting in elections after attending ET classes, the difference was more marked for women**. Children of women attending ET classes were more likely to remain in school**, and positive differences were reported regarding several important health practices. These findings are important, and we recommend that units in the curriculum dealing with knowledge of AIDS, family planning, and general health care should be amplified, in order to strengthen even further the impact of ET studies in these important areas.

Women in ET compared with those in a control group reported reading and writing more outside of class; they were also more likely to discuss their course materials with family and community members. A particularly interesting finding is that ET mothers spent more time reading their children's homework. Therefore, one might conclude that the positive benefits accruing to women from participation in ET are similar to those generally reported for formal schooling of women in the developing world.

2. ACHIEVEMENT OF DEFINED OBJECTIVES

ET has made excellent progress toward achieving its enrollment objective of 250,000 students. As of June 30, 2000, it had served 223,897 students. We project that by project end, it will have achieved about 98% of the initially projected cumulative enrollment[4]. At that point, the project will have achieved about 64% of its objectives in terms of grade-level graduates. However, because the project MIS does not track individual students it is not possible to determine the unduplicated number of students served (since it is likely that many students have re-enrolled for several semesters).

ET has also substantially exceeded its objective of working collaboratively with at least 24 NGO's and 12 municipalities—with 29 formal agreements and about 30 informal ones. In particular, ET has apparently had notable success in developing collaborative agreements with business co-sponsors to offer workplace literacy programs.

Planning documents and progress review, at points, imply that the project was meant to provide alternative basic education for out-of-school Hondurans throughout the country. Currently ET's "sphere of influence" is in the 11 western departments, but it has also responded to requests for

learning groups in 5 additional departments (Atlantida, Comayagua, El Paraiso, Yoro, and Olancho). The northeastern Departments are served primarily by the SE's Adult and Continuing Education's PRALEBAH Project. We consider this regional focus for both programs to be a wise implementation strategy and believe this "gentleman's agreement" may have had a positive impact on implementation of both programs because it allows a better focus on quality implementation.

It is likely that the program had a positive cost-benefit ratio since instructional costs per student were very low and it is reasonable to expect that even modest increases in earnings would accrue over a period of 10-20 years since the service population is so young.[5] However, we cannot reliably determine whether ET has succeeded in achieving the specified 150% increase over 1994 levels in the aggregate ABEDS "standardized" scores because of deficiencies in the design and implementation of the testing system. Nor is it possible to accurately determine students' earnings increases as a result of basic skills.

ET has done an impressive job of recruiting volunteer facilitators to convene learning groups in communities throughout the service area. However, it is not possible to determine whether the specific objective of securing 15,000 volunteers over the life of the project has been achieved because the project's MIS does not provide an unduplicated count of volunteers over the life of the project. More important than the total volunteers recruited, is the extent to which the project has minimized volunteer turnover as a way to preserve its investments in recruitment and training. We consider the program to have achieved the implicit objective of leveraging about 7,500 volunteer-years of effort.[6]

Although ET was promoted as a flexible customer-oriented program, the instructional design permits few opportunities for adaptation of course content to respond to the individual learning needs of a study group, in part because text and audio materials are highly programmed and integrated, in part because of the design of the overall instructional "package". However, it would be possible to make local adaptations to the program by adding new facilitator-guided learning activities for learning groups. Nor is ET a true "open entry-open exit" system. Students can, as was originally envisioned, be placed into the system at any grade level. But they generally cannot progress at their own pace since learning is synchronized to a set schedule of 100 radio broadcasts over the course of a standard semester.[7] However, where material is available on cassette there is more flexibility.

With respect to its primary, over-arching goal, i.e. contributing to the development of the basic skills needed for a productive Honduran workforce, the ET accomplishments are mixed. More than 160,000 ET students probably made gains in reading and arithmetic competencies.[8] However the overall instructional design and course materials do not provide a adequate basis for basic sustained basic skills growth. Contemporary frameworks for adult learning, including those articulated in a wide range of Honduran educational policy documents, consistently emphasize the importance of sustained lifelong learning. This requires developing flexible "foundation skills" in analytic thinking, practical problem-solving, mathematical reasoning, use of information resources, teamwork, leadership, and understanding systems.[9] These "higher order" basic skills are considered critical in preparing learners to respond to the demands of a workplace in a business competing in a global economy, for participating meaningfully in a democratic society, and for effectively carrying out a self-directed plan of lifelong learning.[10] Redesigned ET instructional methods and materials would contribute much more to the development of these competencies.

ET's circumscribed delineation of the role of volunteer facilitators has not yet allowed it to become a "student centered" program as was originally envisioned. It will be necessary for the ET

project to reconceptualize the instructional methodology, curriculum framework, and the strategies used by facilitators to assure the development of the basic skills needed for:

- moving well-prepared students (many of them still teenagers) into the vocational education system or allowing access to secondary and university-level education
- sustaining learning and skills development throughout a lifetime of technological change and escalating workplace demand
- realizing their potential for contributing to local community development, institutional strengthening and participating fully and effectively in a democratic society.

The design of the ET instructional materials reflects a consensus that the ET Level 1-6 adult learning materials should be consistent with the corresponding elementary school system framework as articulated in its official *Rendimientos Basicos* framework. We believe this decision should be rethought.

C. FINDINGS REGARDING KEY PROJECT COMPONENTS

1. CURRICULUM AND MATERIALS.

The ET package consists of two coordinated sets of materials—the audio material and the student workbooks for grade levels 1-6. The format of the distance learning package provides a standardized way to build learning group activities around the radio broadcast (or cassette playback). The instructional package design represents an enhancement on an instructional model consisting solely of radio broadcasts but does little to fulfill the promise of "interactive radio instruction".

The ET materials package and instructional design fail to provide a sound basis for building out-of-school youth and adult learners' competencies in communication, mathematical reasoning, social and civic relationships, and understanding of natural systems. The strongest themes in terms of adult learning needs are those relating to personal health, public health, and environmental protection. Perhaps the most serious shortcoming is that the materials are not adult-oriented in terms of tone, style, or content. The overall tone of the material is bland and patronizing, sharply out of touch with the harsh realities and day-to-day challenges faced by learners living and working in poverty.

The linkage of course content and learning objectives to the official Honduran *Rendimientos Basicos* framework for primary education is not necessarily a problem (because linkage does not mean simply replication) but, in the context of ET it becomes one because the *Rendimientos Basicos* curriculum framework has not been interpreted in terms of adult learning needs..[11]

ET's lack of support for active learning is a problem for both practical and educational reasons. Without an instructional design which encourages student interaction and collaborative learning and activities which engage them in trying out and extending their skills, adult learners will not spend much time on task beyond the 45 minutes a day of "class time". To make real gains and master newly-introduced concepts and ideas they must be engaged in skills-building in every facet of their lives. Also ET's lack of strategies to engage learners in sustained skills-building does not provide its students with the skills needed for them to become effective, self-directed learners.. Another reason why active learning is critical and ET' emphasis on passive behavior so problematic is that the 21st century workplace is one which places a premium on what might be

called "generative" literacy—proactively setting out to find information for solving the problems one faces and communicating solutions to co-workers.

The ET instructional design and materials should provide out-of-school youth and adults with opportunities to engage in challenging, and enjoyable learning[12]. Despite the cost of redesigning ET instructional design and curriculum materials, we believe this task is an essential one because otherwise the goal of bringing an illiterate and semi-literate population of youth and adult learners into the world of a 21st century global economy will not be met.

2. DELIVERY SYSTEM-AUDIO MATERIALS

ET uses two delivery systems for distributing audio material—broadcast radio and delivery of cassettes by ET drivers to departmental coordinators, who then make them available to promoters, and then to facilitators. About 95% of learning centers rely on radio broadcasts and 5% on cassettes.[13] There are advantages and disadvantages to each of these delivery systems.

Broadcast radio is cost-effective.[14] ET did very well in this aspect of operations, securing steep discounts from commercial and NGO-owned stations airing the programs (an average of 30% in the agreements we reviewed). These agreements also included donated promotional time. This time was used innovatively to recruit students and encourage them through the course of the semester. Radio is particularly important as a way to deliver daily lessons to remote areas. ET wisely involved departmental coordinators in identifying the best stations to reach learners in their service área--taking into account station popularity, signal coverage, and signal quality. At the sites we observed, reception was good, and the students and facilitators we talked to reported no problems except for infrequent outages when a lightning strike to a transmitter temporarily puts a station off the air. Broadcast schedules are also tailored to come up with the best time slots for each area. The disadvantage of relying on broadcast radio is that it is not possible for groups to proceed at their own pace and it is not usually possible to deliver all grade levels to all areas (although in areas which receive two broadcast signals, it is possible to deliver five or six grade levels during the 2-hour slots from 4PM to 6PM).

Distribution of lessons on cassette has the great advantage of making it possible for groups using cassettes to schedule classes at the time that best suits their participants whether or not that conforms to the broadcast schedule. This was a critical need for the workplace-based program we observed in San Pedro Sula and was, also, an important consideration in La Lima where the municipal corporation agreed to provide funding for cassettes and players in order to make the program accessible at a later time than the regular ET broadcasts—7PM—since workers in the urban areas work later than in the rural areas. Facilitators in cassette-based programs also were able to stop the tape if things were moving too fast for participants (e.g. while students finished writing a sentence which was dictated to them as part of the lesson). The disadvantage of cassettes is that they are sometimes not delivered, they are lost, a few may break, or local funding for cassettes or players runs out or is not available. However, since ET maintains an extensive learning support network and must deliver texts to departmental coordinators, the marginal cost of increased distribution of cassettes would be minimal. ET strategy for delivering audio materials to learning groups is a sound one and we believe the current mixed-mode distribution system should be continued.

3. PROJECT MANAGEMENT AND OPERATIONS

a) Staffing. ET's basic management structure is well-designed and implemented. In particular, the scaling of the overall service delivery system is appropriate. The supervisory ratio of 1:15 persons at each level of decentralization is one which generally allows the time and networking needed to develop solid working relationships at each level. The fiscal management contractor has lead responsibility for contracting with outside vendors and agencies. This seems a wise delineation of responsibilities, allowing PIU staff to focus more on issues of supervision, training, and reporting.

AT THE PIU LEVEL, we saw evidence of collaborative teamwork and good communication among central management staff. The planning devoted to training at all levels of the project is impressive; moreover, there are ongoing efforts to "customize" training to respond to the learning needs of individual staff. We were also impressed with the results of semi-annual project-wide self-assessments which elicited a wide range of productive suggestions. Project management also follows sound principles requiring from each coordinator a monthly workplan specifying objectives, resources needed, and persons assigned to any collaborative initiatives. At the end-of-month meetings coordinators report accomplishments in relation to those planned, problems encountered, and corrective action taken. The project is also beginning to stress peer networking among departmental coordinators. Overall, the project is working very systematically and intelligently toward developing a functional, semi-decentralized system.

AT THE DEPARTMENTAL LEVEL, we saw good working relationships between ET coordinators and external collaborators such as local "mainline" Departmental Directors and staff, private sector employers, and municipal representatives. We also saw good working relationships with promoters. Our reservation regarding project management at this level is simply that we did not get a sense that the coordinators have yet achieved the management skills to systematically engage in ongoing problem-solving, and to budget their time carefully among different competing demands

AT THE MUNICIPALITY LEVEL, we saw promoters working effectively with both facilitators and with collaborating organizations[15]. We were impressed by the energy, dedication, and ease with which promoters moved in the community and observed that most seemed well qualified educationally and personally for their roles

AT THE SITE LEVEL, we saw facilitators who were, indeed, respected in their communities and assiduous in fulfilling their important roles. Not surprisingly, it is at this level where we saw the greatest level of variability in terms of individual competency. We saw extraordinarily good facilitation, for example, in the worksite program in San Pedro Sula (since the co-facilitators were university-trained staff from the company's human resources department) and much less impressive facilitation in a remote hamlet in the San Juan area of Intibucá. Training will need to continue to enhance the facilitators' ability to help learners.

b) Other Aspects of Operations. Transportation for field supervision staff to go to rural areas is an endemic problem—not just in ET but throughout the Honduran education system. ET has been wise in providing motorcycles to its promoters and our sense was that these were being deployed fairly well at the local departmental level. However, the combination of 6-months delays in payments to promoters and lack of budget for transportation for those who do not have access to a motorcycle is a disastrous one since promoters responsible for supervising 15-20 sites are not likely to achieve this objective under these conditions. Standardized reimbursements to

promoters for transportation are used successfully in the PRALEBAH program and might be useful in the ET context.

Reliance on PMA food deliveries as an incentive to facilitators is not the ideal way to support them. We heard that the food (which is delivered twice per year) is sometimes spoiled—with maggots in the flour or rotting beans. Some of the food items (notably, sardines) are not popular, however nutritionally worthwhile they may be. The twice a year delivery of heavy food packages to remote areas is a real logistical burden. Modest cash payments instead of food would be a much sounder operational way to support volunteer facilitators.

We are aware that some departments have and use an MIS system which, at least, provides contact information on facilitators, a listing of sites, enrollment on each site, and student names. But this MIS, a tool which is potentially useful as a means for building more systematic regional and local service delivery, is not being used routinely by all departmental coordinators and should be enhanced to be still more useful. A serious MIS shortcoming is that ET does not have a systematic way of tracking the value of cash and in-kind donations provided by collaborating organizations. It would be desirable for ET to track these at the local level—both as part of its commitments under the USAID agreement and in preparation for increasing project self-sufficiency. Systematic fund-raising initiatives typically benefit greatly from empirical data on the level of past donor contributions, favorite projects, particular concerns, etc. Such systems should be in place at the departmental level.

Finally, placement procedures for ET students pose operational problems as well as instructional ones. Our understanding is that persons interested in enrolling in a course are asked the last school grade they attended. They are then asked to secure a certificate that they completed/were approved at that grade level. If necessary, ET staff helps them get this certification. This is a waste of time and distraction for both program applicants and staff. Self-report of grade level attained would be adequate and would help both students and staff to focus on higher priority issues.

c) General Assessment of EDUCATODOS Management and Operations. ET is generally well-managed. Decentralization seems to be working well for ET but there remains a good deal to be done to strengthen service quality management, and to make operations more efficient. Project management's heavy investment in high-quality "train the trainer" staff development is a wise and promising area of emphasis. The next step will need to be to give closer attention to the quality of implementation by departmental coordinators. We believe the skills and potential of facilitators and promoters are still under-utilized and could make a greater contribution to overall program effectiveness. The facilitators we talked to expressed eagerness to receive further training and a willingness to work longer after radio broadcasts to tutor, encourage, and coach learners.

Field staff (coordinators, promoters, and facilitators) play a key role in raising project matching funds. They currently do well in this area—facilitators by assuring that "customers" are happy, promoters by responding to needs for service, and coordinators by making final agreements. However, because this is such an important function, it will need to be managed more systematically in the future.

We were impressed by the project management efforts to improve overall project functioning by sponsoring program-wide self-assessment retreats and in initiating a process of strategic planning. The project's self-assessment addressed a number of bottlenecks in a productive and proactive way and we believe the overall emphasis on more flexibility and accountability is a promising one.

We believe the project's strategic planning will have to look further into the future, work further toward articulating strategies, and engage in a more systematic and quantitative analysis of strengths, weaknesses, opportunities, and threats, but what has been done so far provides a solid foundation for future efforts.

4. FINANCIAL MANAGEMENT

ET financial management appears to be sound. We have reviewed the budgets and records of expenditures of USAID funds for 1996-2000. Expenditures appear reasonable—although consistently lower than budgeted. There are, however, difficulties in fully assessing the extent to which financial management contributed positively to overall project cost-effectiveness. One problem is that budget line item categories are too broad to yield meaningful insight into the justification for key operational decisions or guidance in making them[16]. Another problem is that there is not a composite format linking together all funding sources and all expenditures—USAID funds, Secretaría de Educación funds, and locally-donated in-kind from municipal government, private business, and NGO's[17]. While USAID projections regarding sustainability established budget targets for 3rd party support from NGO's, private sector firms and donations from municipal government, these cash and in-kind contributions are not tracked.[18] Even though it is difficult to project in-kind and cash donations for this sort of project, it would be wise to establish budget revenue targets and book actual in-kind and cash donations as revenue and expenditures.

We inquired into the causes of underspending and were told that there are some problems, in that USAID funding is seldom approved before April or May, although the Secretaría de Educación 's fiscal year is a calendar one. However, the delay in receiving USAID authorization for current spending seems not to be a significant problem, because funds from the previous year can be carried over to support the first months of operations in the new calendar year. We suspect this may, however, exert some downward pressure on spending during at least the first quarter of each year as project managers tend to be nervous about this sort of situation.

The more serious problems are those which stem from the Honduran government's cash flow problems. We were told that there are seldom delays in budget authorization and appropriation but that funds are simply not available in a timely fashion from the Department of Finance.

5. LEARNING SUPPORT SYSTEMS

All distance learning systems make heavy demands on the learning support sub-system of the overall educational service delivery system, whatever technology is used. ET is no exception. In particular, promoters' and facilitators' work is crucial to learning success. In many ways, the use of broadcast technology such as radio is simply a way to structure group and individual learning activities which are then catalyzed and moved along by facilitators and promoters. ET learning support systems are adequate but that they should be improved. Project management has been proactive in making heavy investments of staff time and effort in providing training oriented to further improve the network of staff and volunteers who are charged with service delivery.

a) Student Placement. Placement procedures should generally be considered as part of learning support because the idea is to put the learner in the learning environment where he or she will do best. ET placement procedures rely on educational attainment (last grade attended) for placement. This is a problem because educational attainment is known to correlate very poorly with actual competencies and knowledge in the out-of-school population of youth and adults. Thus, since no placement test is given, there is the likelihood that a student will be placed above

or below the "correct" level.[19] However, we were pleased to see there has been training on informal assessment of student progress.

We observed that completely illiterate beginners at the 1st grade level had particular difficulty in keeping up with the pace of lessons. Consideration should be given to the provision of a special preparatory level for students who have never before been to school. Since these students have a higher drop out rate, more attention to their learning needs could contribute to their initial feelings of success, possibly encouraging them to stick with their difficult task.

b) Learning Group Facilitation. We do <u>not</u> agree with the ET stated premise that "facilitators should not act like teachers". We <u>do</u> agree that the learning environment should not be teacher-centered but, instead, a cooperative learning situation, with high levels of student interaction and active participation by all in the group. Our observations of facilitators was that some did extremely well and others much less well in carrying out their roles in support of learners. A key task for them is simply to help the group through the activities of any given lesson. Our observation was that several groups had learners at very different functional levels. This is a challenging situation for even experienced teachers so we believe it will be essential to provide more training to facilitators on how to observe and track different students' ability to function in different areas (e.g. math, writing, reading) and how to provide individualized followup tutorial assistance.

We observed situations in which facilitation took place with a team of two co-facilitators and were told that this model is fairly often used. This is an excellent solution to the problem of assisting facilitators in their role of supporting students—since it provides peer support, as well as making a substitute available if a facilitator must miss a class, etc

In general, learning facilitation can be strengthened by providing further guidance to facilitators to help them understand what the specific learning activities in a lesson, or a cluster of lessons, are "about", that is, what skills the activities are designed to strengthen and where the learning program is headed next. Typically, in integrated distance learning program packages, one means of providing this guidance is in a facilitator's guide organized to provide insight into the overall structure of the curriculum. Such a resource package might also provide ideas about what to do if a transmitter were off the air, how to develop out-of-class projects and assignments for students, and how to encourage peer support for self-directed learning.

c) Learning Tools - Blackboards, Writing Tables, Reading Materials. Throughout each lesson, some students are left with unfinished copying or mathematics tasks. Facilitators should be provided with blackboards so that mathematics problems or other tasks announced over the radio would be remembered, and could therefore be done when the lesson is over. (Obviously, blackboards would have many other practical uses, providing extra teaching opportunities as well as opportunities for participants to read and write.)

It is impossible to build reading ability without reading materials. Such materials are crucial for several reasons—to encourage students to spend more time reading, to give new readers a chance to see diverse text formats in different kinds of print materials (newspapers, magazines, fiction, poetry, manuals, reference books), and to encourage self-directed choices of what to read and when. Such efforts to promote sustained reading are a critical element in workforce preparation.

It is just as difficult to build writing skills without encouragement and respect for writing. Assignments to students to write short personally-produced texts and share them with fellow

learners are needed. Ideally the ET curriculum should be changed to include such writing assignments, but even before the curriculum is changed, such assignments could be added by facilitators. Student writing might then even be published in a newsletter circulated throughout the ET system, thereby recognizing the value of skillful self-expression.

d) General Assessment of Learning Support Systems. The current learner support system provides a necessary foundation for student learning. There are two important constraints on this system's ability to fulfill its function—inadequate appreciation of facilitators as resources and inadequate investment in ancillary materials to support learning. Investments in these areas need not be costly and can be assured to improve cost-benefit ratios. Further development of ET learner support systems are necessary to make the model one of genuine "interactive radio instruction". The over-arching objective should be to promote active learning and informal, ongoing, self-directed learning among students.

6. SYSTEMS FOR PROGRAMMATIC ACCOUNTABILITY

In this section, we assess ET systems for accountability, including certification of student competencies, reporting, and estimates of project impact. We consider the current systems for accountability acceptable with respect to reporting on project activities but not so with respect to estimating educational impact. Given USAID's emphasis on outcomes, not simply inputs, we consider the lack of adequate systems for accountability a serious problem.

a) Tracking of Activities. ET has an MIS which is designed to track the following aspects of ongoing service delivery activities: aggregate student enrollment by site, department, and nationally by gender, current roster of facilitators and sites, current roster of promoters and area assignments, and attendance sheets for individual sites. These systems provide a sound basis for reporting regarding enrollment, level of effort, and number of sites. However, we have not seen any viable system for generating system-wide attendance data although, in principle, such data would be available if existing attendance sheets were tabulated by hand.[20]

Sound management of educational programs requires ongoing attention to the impact of the program on different sub-groups of students. Such information is a crucial program management tool because it provides a basis for service quality management initiatives to improve educational equity. The current MIS is not designed to generate reports of basic student characteristics by site, department, and nationally. It should, because this could provide invaluable information for accurately assessing program impact—since benefits are likely to be different for different sub-groups of students. In order to fully understand the nature of project impacts, it would be necessary to engage in at least two types of research: a) analysis of the experience and learning gains of a random sample including sub-groups of learners, and b) longitudinal tracking of a sample of students over several years (to examine and better understand outcomes). Neither is feasible without a student MIS which contains individual records for uniquely identified students. Although this sort of system was envisioned in the original BEST project paper, it was not developed.

b) Assessment of EDUCATODOS' Educational and Economic Impacts. The most serious shortcoming of the ET system of accountability is that, although the MIS can aggregate reports of student enrollment and students certified as successfully completing a grade level, the system of testing and student certification does not generate valid data for making these reports meaningful performance indicators or for estimating the impact of services provided—either in terms of skills development or likely economic impact.

Because the project relies on only one prime indicator of project performance, it is particularly critical for this to be a valid indicator because overall project management is driven by this indicator. In the case of ET, the use of this performance indicator may have generated complacency. Also, because of the focus on just this one indicator, ET has not taken into account other dimensions of positive program impacts. Although measuring other dimensions of impact are technically challenging, this sort of research provides additional valuable guidance for fine-tuning program operations[21]

c) Technical Deficiencies of the EDUCATODOS Testing and Certification System. The lack of depth in the curriculum (i.e. questions seeking only factual responses drawn directly from text or preceding instructional material) is mirrored in the items used in testing – they are exclusively multiple-choice items with 3 distracters and 1 correct response. Students are not stimulated to generate solutions; they are evaluated solely on their ability to identify a correct solution from options generated by the test developers who, in turn, appear to have simply pulled items from the course materials. There are no 'higher order skills' being assessed[22]. Also, despite the assertions that the ET testing system consists of criterion-referenced tests, the system has not followed valid procedures for developing and using criterion-referenced tests. Some of the observed technical flaws that should be addressed are:

d) Non-definition of achievement domains. Technical documentation on test development in PEEP / BEST is thin, but it appears that testing is based upon the *Rendimientos Básicos* ,which do not constitute technically valid definitions of achievement domains.[23] There are a number of possible options for addressing this problem. The ET evaluation methodology proposes to evaluate the higher order skills in the *Rendimientos Básicos,* but, at the same time, assumes that they are such simple skills that they do not merit elaborate development techniques. Following accepted standards in the definition and delimitation of the domains to be measured, and proper item specification, development and selection techniques are necessary conditions for valid testing, not unnecessary 'elaborateness'. Lacking the technical work to define and delimit the domains to be tested, and valid procedures of item specification, development and selection – valid inferences regarding learner achievement in these domains are not possible.

e) Lack of valid samples of items to assess domains. ET has opted to include only one item related to each 'rendimiento básico' in their tests. This is problematical. In modern test theory, each item used to assess knowledge or skill in a domain is understood to be systematically tested itself and chosen from an infinity of items that could, in principle be used to measure the domain.[24] Items in a test are samples of the various behaviors that the test developer has chosen as indicators of mastery of a particular domain[25]. Having only one item per domain does not provide students with an opportunity to demonstrate what they know or do not know[26]. Assessing a soundly defined achievement domain requires from 3 to 5 items. As it stands, none of the "rendimientos básicos"– even if they were properly operationally defined achievement domains – can be said to have been measured validly in ET tests. It is maintained that sampling of behaviors is not necessary because of the simplicity of the areas assessed, and that if a student can select the appropriate answer from four options <u>once,</u> they have provided sufficient evidence that they have mastered that content or skill. There is no substantiation in educational measurement literature for such a claim[27].

f) Non-Conformance to Professional Standards. ET testing departs from recognized professional standards[28] in a number of important ways:

- ET does not collect or report evidence of test validity. This is evidence regarding the degree to which inferences made from these tests can be supported. There is a tendency to confuse validity with reduction of test difficulty .This diminished quality of its measurement efforts.

- ET similarly does not attend to the accumulation and assessment of data regarding reliability, a necessary but not sufficient condition for test validity.

- ET does not report data regarding the standard errors of its measures; information concerning which helps determine which inferences can be validly made from its data. It is essential to have these data.[29] From a practical program management perspective, theyare necessary in order to compare the performance of different operating units or different sub-groups of program participants.

g) Flaws in the Evaluation Research Design for Interpreting EDUCATODOS Outcomes as an Impact of Program Participation. Comparison of pre- and post-test scores is a standard strategy for assessing program impact or learning. The difference between scores is considered to represent the "value added" to the knowledge base and/or skills inventory of program participants. However, in order to draw such conclusions, it is necessary to validly measure not just outcomes but also pre-program knowledge and/or competencies. Because ET students are not always given a pre-test when they enroll in the program but are, instead, deemed to have the competencies associated with the grade level they last attended, no valid estimates of "value added" could be made even if the post-program testing system were sound.[30] Because the tests used to determine the educational outcomes for each level are, strictly speaking, invalid, it is, for example, difficult to determine the "value added" for a participant who has completed the ET 2nd grade course and then moved on to complete the 3rd grade course. It is also important to consider the full range of program benefits, including non-economic ones. ET research on these kinds of benefits has moved in the right direction but further attention should be given to analyzing such data in terms of formative evaluation implications and disseminating such findings to guide practical efforts by coordinators and promoters to improve instructional quality.[31]

h) Consequences of the Flawed System of Accountability. The consequence of the weaknesses in the ET system of accountability is that the project has not been generating the kind of information it needs to assure educational service quality. Testing systems such as those used by ET for reporting program performance to funders such as USAID are most cost-effective when they can be used both to make reliable decisions about program changes and when they generate the best possible evaluation results to guide efforts to strengthen the program.[32]

7. COLLABORATIVE LINKAGES AND PARTNERSHIPS

ET has done an excellent job in establishing collaborative linkages and partnerships. The project has exceeded its objective of establishing partnering agreements by at least 20% and more than 11,000 enrollees have benefited from these collaborative working arrangements. Cash and in-kind contributions include the following sorts of support: bonuses and incentive payments to facilitators, financial support for radio transmission of lessons, broadcasters' in-kind donations of air time, cassettes, educational materials, transportation support and per diem for training of facilitators, student notebooks, motorcycle maintenance, purchase of radios and cassette players, and collaborative assistance in setting up learning centers. Our understanding is that these agreements are quite stable and that most of those which have been established are still in place—although there are some instances in which a collaborating organization (e.g. a municipality) has difficulty in keeping its commitments.

We were particularly impressed by the extent of support from municipalities and business. Almost half of the agreements (44%) are with municipalities and 10% are with businesses. The number of formal agreements somewhat understates the extent of support because there are more than 30 additional donors of cash or in-kind identified.

The collaborative partnerships developed by ET are likely to have made significant progress toward the initial objectives established in the USAID project planning documents regarding 3rd party support..

8. USAID ROLE

In addition to being the primary funder of the ET project, USAID has played an important role in the development of the project. In terms of project management, an important accomplishment of USAID has been to arrange for support to be provided to ET by using Fernandez, Fortin, Bogran and Associates. This has stabilized project management and allowed the PIU to focus on operations rather than fiscal issues. USAID has also been proactively involved in efforts to overcome the chronic problems with payments to promoters (due to these funds being part of the counterpart contribution).

From a technical perspective, USAID involvement has played an important role in focusing ET's attention on educational outcomes. Constant attention to educational achievements (expressed as numbers of students successfully completing at least one grade level—"graduates") was well-placed as were efforts to empirically examine the reasons why participants dropped out of the program.

However, USAID's technical assistance in program evaluation and assessment of student progress has not been adequate and is a significant factor in the project's inability to demonstrate the educational outcomes and economic benefits of program participation. Moreover, the focus on a single indicator of program success (i.e. certification of grade level completion and maximization of proportion of completers) has distracted project staff from what should have been the top priority, "diagnostic" program evaluation efforts oriented toward generating practical strategies to improve service quality and service delivery.

USAID's attention to radio distribution of audio material is well-justified and this component of the project seems to be functioning smoothly and cost-effectively. However, it would have been valuable for a similar degree of attention to have been given to development of high-quality instructional materials despite the urgency of getting ET into the field. This is a matter of current concern because the Grade 7-9 materials are being developed on a very rapid timeline and it is possible that they will not fully benefit from current insights into how best to provide accelerated learning opportunities for educationally disadvantaged populations[33]

D. PROJECT ISSUES TO BE ADDRESSED

In the following section, we summarize priority issues which need to be addressed in subsequent strategic planning regarding the directions in which ET should move. We propose to address these issues in more concrete details in the project strategic planning document.

1. TRACKING AND MANAGING STUDENT PROGRESS AND ACHIEVEMENT

ET does not currently have an MIS based on individual student records as had been envisioned in the original BEST planning documents. It will be necessary for ET to develop a student tracking system based on individual student records. This is required in order to generate solid data on student achievement and to empirically examine the critical issue as to how far students progress through the system, i.e. proportions completing only one grade, two grades, etc.

2. MAINTAINING AND IMPROVING INSTRUCTIONAL QUALITY

ET has made important progress in developing systems to maintain and improve instructional quality by its well-designed "train the trainer" efforts targeted to departmental coordinators. This effort now needs to be extended to developing the skills of facilitators. Even though facilitators are not always trained teachers (although, in fact, some are), they can, as non-specialists, play a greater and more important role in facilitating student achievement than they do currently.

In addition to current efforts to improve facilitators' mastery of basic education content (e.g. mathematics) it would be desirable to provide training regarding at least the following: a) techniques to stimulate interaction among participants, b) strategies, exercises and activities to extend learning beyond the "classroom", c) techniques for informally assessing students' competencies and how to extend these techniques to tracking student progress and providing tutorial assistance as needed, and d) ways to use cooperative learning techniques including peer tutoring to improve student performance. A very **useful resource** for initiating efforts to assure uniform instructional quality and to generally enhance facilitators' ability to move students ahead as rapidly as possible **would be instructors' guides to accompany the workbooks and textbooks for each grade level.**

3. UPGRADING AND UPDATING CURRICULUM MATERIALS

ET must re-examine the conceptual basis of its curriculum and the radio and print materials based on that curriculum. It should then begin to revise materials in an orderly, systematic fashion in response to the needs of educational stakeholders—learners themselves, Honduran employers, and civil society. We recommend beginning with the materials for grade levels 4-6—as it is at this point in the basic skills curriculum where the current lack of stimulating, adult material is most noticeable and where the economic payback for a first-rate curriculum would be greatest. Ultimately, ET should adopt a process for constantly assessing curriculum and materials in light of the mix of students who enroll, and skills demands they face, and findings from formative evaluation research; this process should then provide the basis for ongoing revisions and refinements to the curriculum and instructional materials based on it.

An important first step in upgrading and updating ET materials is for the project to review the substantial literature on basic skills development in relation to workplace skills demands. There is a good deal of evidence that working to develop such skills is also a critical step in preparing youth and adults to participate meaningfully in the civic life of their communities, manage the challenges of family life in a social environment which is increasingly stressful (particularly when rural families migrate to urban areas). Perhaps most critical in this inventory of "foundation" skills is preparing students to become self-directed learners—using multiple sources of information and information resources to advance their own skills development[34].

ET materials will need to better support active learning and authentic task completion. The content and guidance in materials must help facilitators and the learners they work with be not simply consumers of information and followers of orders but also proactive information managers

in securing the information they need, evaluating its relevance and accuracy, organizing and storing information, and using that information to communicate to others. Active learning must also be understood to include self-expression and assertion of one's own identity—in different genres of communication, including oral exposition, writing letters and notes to friends and family, in poetry, and in structured communication with co-workers and supervisors.

ET students deserve a first-class basic skills curriculum. **Investments in developing such a curriculum, an appropriate instructional design, and materials better designed to prepare youth and adults in the program for not simply surviving but prevailing in a challenging economic and social environment are particularly worthwhile because there is a solid infrastructure for service delivery**—radio, cassettes, and the project's extensive and sound network of coordinators, promoters, and facilitators.

4. INTEGRATION OF GRADES 1-6 AND GRADES 7-9 CURRICULUM

The current ET Grades 1-6 curriculum is likely to leave students who have completed the 6th grade level unprepared for middle-school level work in grades 7-9. In the short-run, it would be wise to consider development of a transitional/remedial module to prepare ET 6th grade graduates for subsequent education or training—in ET grades 7-9, in vocational training, or in regular school (ciclo común). In subsequent revision of the ET Grades 1-6 curriculum and post-pilot refinements to IEQII's Grades 7-9 materials it would be useful to seek, if not to integrate, at least to harmonize, curriculum and materials.

5. RESOURCES TO ENHANCE STUDENT LEARNING

Investments in basic equipment to allow facilitators to support students' learning would be judicious. The cost of such support is not high and the probable impact on instructional quality is high. These materials include: blackboards, writing tables, and supplemental reading materials.

The availability of reading materials is particularly important because if books, magazines, newspapers, instruction manuals, fiction, and poetry books are accessible and students are encouraged to try them out, it is possible to engage students in spending more time on task building their reading skills. At the same time, the process of reading on their own will provide students an important experience base in self-directed learning, finding out what they like and what they don't, getting help with difficult passages, working collaboratively to understand what an article or book is about. The availability of different genres of reading material is essential because these texts will provide students the models for understanding "voice" in verbal and written communication and building their own skill in writing.

A variety of materials should be available at each grade level and promoters should be provided satchels of such reading materials to make grade-appropriate materials available to facilitators for each of their learning groups. Reading assignments can easily be added into the instructional design even before curriculum and text materials are updated. An additional effort might consist of rewarding students who complete a grade level with a choice of two or three grade-appropriate books; this would make a powerful symbolic statement about the value of literacy and get books into homes where there is likely to be no reading materials—for adults or children.[35]

6. THE MEASUREMENT OF EDUCATIONAL OPPORTUNITIES AND OUTCOMES, AND VALID ACHIEVEMENT BENCHMARKING

ET testing practices must insure that the inferences that are made based on student testing are defensible in relationship to accepted theory and empirical evidence. This is essential in order to

use assessments to identify faults and strengths in instructional programs *related to the educational experiences of learners* in order to identify potential corrective measures. A necessary condition for this is consideration of the *instructional* and the *curricular* validity of the tests. ET (and all testing under BEST) must face the issue of whether tests measure the objectives of the curriculum, and whether instructional programs provide learners with instruction in the skills and knowledge being assessed.[36] Many issues of curriculum validity[37] that are problematic in tests designed and administered under ET and all BEST projects, would be solved if customary procedures were followed – as the alignment of measures to the curriculum is part of the procedure of test development[38].

Evaluation in ET must also recognize the imperative of characterizing *instruction* in order to explain *achievement*. At present, ET evaluation does not measure the array of instructional experiences that explain the knowledge and skills of students whose abilities they measure. A new evaluation design for ET should include measures of Opportunity-to-Learn (OTL)[39] and educational opportunities to provide the vital link between goals and outcomes that would turn mere testing into educational evaluation. Including measures of educational opportunities in student assessments provides indicators on the educational process as it unfolds in the various program sites, thus providing program managers with vital tools for the evaluation and formulation of effective educational programs and in the case of system evaluation – effective educational reform policies. Incorporation of techniques for measuring educational opportunities, including OTL is vital to turning educational assessment in BEST programs, into authentic educational evaluation. [40].

Improving ET evaluation systems requires addressing two features: 1) testing for program advancement of ET participants (pass-fail decisions); and 2) testing to compare the achievement of ET students against the achievement of their peers in other programs.

Pass-fail tests that are both simple to administer and score and yet still meet minimum standards can be developed. They would be longer, as they would need to contain at least three items for each domain, but they can be composed so that students have adequate opportunity to demonstrate what they know and so that promoters can correct them. The ET evaluation team must follow standard procedures for criterion referenced testing – including domain definition and validation by judges; formulation of item development specifications with the corresponding validation by judges; and item development and selection according to standard criterion-referenced measurement techniques. If cost and personnel issues makes it impossible for any one other than the promoter (never the facilitator) of each group to correct the tests, each promoter can be given an answer key, after they have collected the assessments from each site.

Benchmarking the achievement of ET students against the achievement of students in other programs is a more challenging task. The best way to accomplish this simply and validly is to administer identical tests under identical conditions to random samples of students from each program that is to be compared. Tests for this purpose must be validated across all of the programs, not only among ET participants. Every student must receive the test at the same time, and the test must be administered and scored under the same conditions. This means for example, that ET students must not have their tests scored by ET staff, whereas the students in other programs have their tests scored by parties unassociated with their programs. The best procedure to guarantee professional evaluation standards, is to commission an independent body -- such as the UMCE -- to conduct the entire benchmarking study from test development to writing of the final report. The additional financial outlay will be more than compensated for by freeing ET staff from this task and by the production of data and reports that could be used in complete

confidence in the formative evaluation of ET. Such a strategy would contribute superior resources for the development of timely and sound program enhancements.

7. FUTURE MANAGEMENT AND IMPLEMENTATION MECHANISMS

The current management and implementation structure appears to be working well for ET. Different options deserve to be considered in connection with efforts to assure the project's sustainability. We address these in the strategic planning document.

8. SYSTEMS TO ASSURE ACCOUNTABILITY AND MAXIMIZE IMPACT

In its general outlines, ET is well-prepared to develop accountability systems. However, the challenges it faces in this endeavor are technically formidable. Essentially, the need is for ET to develop the following sub-systems (which are detailed separately): a) a valid and reliable system for assessing and certifying student achievement, b) an MIS which supports individual student records, c) management procedures to conduct low-cost applied research on student achievement as the basis for initiating corrective action, and d) reporting systems to capture geographic and individual variations in performance.

Reliance on empirical data on student performance and staff productivity are important tools for initiating corrective action in a variety of forms including: technical assistance and training, supervisors' guidance to staff and/or volunteers, adaptation of instructional techniques, revision of curriculum, problem-solving related to logistics, and so on. ET has a good system for initiating corrective action; the project's weakness is in the "diagnostic" subsystems for evaluating student performance and deciding what action to take.

E. LINKAGES, PARTNERSHIPS, AND SUSTAINABILITY

ET has a good initial track record of developing partnerships. We believe this experience provides a foundation for a concentrated effort to build more and better partnerships as a key strand in efforts to assure the sustainability of ET alternative education delivery system. The project developed, during the first quarter of 2000, a draft document providing guidance on setting up new learning centers—a useful tool for moving forward in responding to new demands for service.

A key issue to address is that the most successful partnerships are those that involve not only financial collaboration but, also, joint consultation on collaborative efforts. An important avenue to explore will be to consult carefully with partnering organizations--including employers and municipal governments--about respective objectives, priorities and so on.. We strongly urge ET and USAID to work toward a curriculum development process which is responsive to these stakeholders. Such responsiveness will be extremely beneficial both in terms of increasing educational quality and relevance but also as a means of securing higher levels of financial and political support.

ET has worked well in consultation with its private sector partners but should now take the next step and develop workplace literacy programs which can be "customized" to provide both basic skills foundations and, at the same time, directly address the pressing needs of employers (e.g. for employees to read safety instructions on dangerous machines accurately). In this context, it is important not only to strengthen the Grades 4-6 curriculum but, also, to complete the Grades 7-9 curriculum. In proceeding to complete the Grades 7-9 curriculum it will be necessary to provide ongoing technical assistance and oversight to assure that instructional design and curriculum content conform to stakeholder expectations.

There are also opportunities for productive collaboration with other alternative education programs. ET' sharing of textbooks with adult education night classes and with PRALEBAH is an example of cooperative efforts. Future efforts might include collaboration with primary schools and other programs in getting books and other reading material into rural communities, sharing scarce transportation, exploring more ways to work with PROHECO's community schools, and general collaboration to promote learning and literacy.

While ET has used its air time with radio broadcasters very skillfully to promote student achievement with spots exhorting students to enroll in classes, to keep on working and not drop out, to encourage others to enroll, etc. It has not yet used its access to the airwaves as a means for enhancing its own sustainability. Such an effort would be quite worthwhile and is in no sense inappropriate. NGO's throughout the world use broadcast media to solicit support for their activities; ET can do the same.[41]

Sustainability of distance learning delivery systems also requires careful attention to technology development. Currently, ET's identity is defined by the technology it uses to deliver the audio component of instruction—broadcast radio. Just as curriculum and instructional design require an ongoing process of monitoring and update, technology use requires ongoing consideration of newly-emerging technology. Because of the design versatility and addressability of Internet-based multi-media educational systems, such program designs form the "gold standard" of distance learning. However, even within the context of advanced countries, multimedia materials development is costly, suggesting that radio may continue to be the best distribution technology for Honduras for years to come—but lower costs for transponder space, for microwave networks, mean a variety of emerging technologies deserve to be tracked.

IV VOCATIONAL TRAINING WITH BASIC EDUCATION

A. OVERVIEW

CADERH consists of a central office, referred to in this document as CADERH, and a network of 25 independently operated and financed training centers having an enrolment of 3,000 low-income youth and young adults, referred to here as the CADERH network. There are five centers located in rural areas with an enrollment of 540 students. There are nearly 600 female students in the system, most of them in traditional occupations such as garment making and secretarial studies. However, one girl this year was certified in electrical installation. CADERH provides critical services to the centers in the network which enable them to provide far better quality training programs than would be possible without CADERH's assistance.

From its beginning, the implementation of the vocational training component of the BEST Project experienced delays, fostered poor end products, and created conditions not conducive to realizing the project purpose and anticipated results. This was due primarily to CADERH's poor management. How and why this occurred is discussed later in this section. Unable to endure the continued inadequate administration of the project, the Mission advised CADERH in October 1998 that it must fulfill the following obligations if the project was to continue: (1) hire a new Executive Director; (2) improve its accounting system; (3) correct outstanding recommendations from recent audits; and (4) complete the construction of four training centers initiated in 1996. In early 1999, before CADERH met these requirements, the Mission provided CADERH with significant assistance to complete its 1999 Workplan and Budget. By May 1999, the Mission requirements had, for the most part, been met. Project management returned to Tegucigalpa from San Pedro Sula and the 1999 Workplan was approved. The Workplan provided for constructing

and equipping four more training centers, for providing equipment and training materials to three existing centers, and for training 40 vocational education instructors and school directors. CADERH is currently completing these tasks prior to the new project completion date of August 31, 2000.

The difficulties that characterized project implementation have left their mark on the technical capabilities of CADERH and on how the Mission and CADERH currently view each other. With frequent disruptions in the flow of project resources due to management and accounting difficulties as well as the return of the project to Tegucigalpa, CADERH's technical expertise was reduced considerably. There is a new group of young technical staff providing field services, but they are still at the learning stage. The Mission has major concerns about CADERH ever becoming a dynamic leader of private sector training at the same time that it provides technical services to centers that train low-income, out-of-school youth. Moreover, the Mission seriously doubts that CADERH will ever sustain itself financially. CADERH views USAID/Honduras as continually adding to the number of training centers without considering CADERH's financial and technical capacity to provide quality services to the CADERH network. CADERH feels marginalized from decisions related to the magnitude of its own responsibilities and the anticipated resources that it will have to fulfill these responsibilities.

Table 1 below provides a summary of accomplishments in relation to planned objectives.

Table 1
CADERH Accomplishments in Relation to Planned Objectives

Results	Anticipated	Achieved	% Complete
No. of new centers	15	8	53
No. of upgraded centers	12	8	67
No. of students	12,600	3,774	30
No. of female students	3,780	924	24
No. of students certified	12,600	1,500	12
No. of centers offering ICB	27	25	93
No. of students employed	10,800	1,125	10
No. of new training modules	5	9	180
No. of modules distributed	50,000	90,000	180
% of income from production	50%	22%	
Retention rates in existing centers	90%	93%	
Retention rates in new centers	85%	68%	
Maximum cost per student hour	$.50	$.37	
Centers using ET	27	0	
Centers with business training	27	0	
Centers with production funds	27	16	59

Difficulties in attaining the anticipated results are discussed in the following sections.

B. FINDINGS REGARDING KEY PROJECT COMPONENTS

1. CONSTRUCTION AND EQUIPPING OF CENTERS

The construction process was a study in poor management. USAID/Honduras provided the floor plans for the buildings and required that adobe be used as the primary building material. As construction began, management problems became evident. Since CADERH could not pay workers on a timely basis due to faulty accounting and slow payment procedures, they would leave the work sites. The adobe production was not synchronized with construction demands -- adobe blocks that were not sufficiently dried out were in fact used so that construction workers were kept busy. Plastic sheets needed to protect the newly applied adobe were not purchased when needed. There was only one CADERH engineer providing oversight, which was not sufficient and that person had little experience in adobe construction techniques. As a result, some of the buildings constructed during this period have serious construction flaws.

The second set of four centers is a product of the 1999 Workplan. Because the Workplan was only approved in May 1999, construction could not start until June when the best season for initiating construction was over. Since there was a requirement that 70% of the adobe materials be made prior to actual construction, many of the earlier construction problems were avoided. CADERH had two engineers supervising construction (although there are questions about their competence) and internal management had improved considerably, but getting funds to the worksites was still very slow. Construction of these centers occurred during the post-Mitch building boom when experienced workers and construction materials were in short supply and more costly than provided for in the budget. Again, a significant construction related problem was noted in the one training center visited from this group of new centers.

Equipment purchases for the first centers ran into problems as well. Orders were placed on the basis of the needs for some centers which were not built due to last minute changes in the selection of what communities would be served. Equipment arrived late due to poor management. Finally, some equipment arrived at centers incomplete because of inadequate inspection upon arrival in Honduras. One major mistake was providing the same dollar amount for equipment purchases for each center irrespective of the trades being taught, since some trades require more expensive equipment than others. Solicitations for equipment purchases under the 1999 Workplan were handled by a committee, and all worked well during the solicitation and bid selection process. Difficulties began when the equipment arrived, since no one on the committee was available to review what was shipped. As a result, a number of wrong items were accepted, some items ordered did not arrive, and some equipment was missing parts upon arrival. **It is clear that CADERH did not have the administrative capacity to manage the construction and equipping of the training centers without outside assistance.**

2. PROVISION OF RELEVANT TRAINING AND THE DEVELOPMENT AND USE OF THE BASIC TRAINING MODULES

Relevant training depends primarily on the actions of the CADERH network, which is made up of independent entities. **The centers, unfortunately, do not have an effective mechanism such as participation on the CADERH Board or through an Advisory Committee to have a say regarding CADERH policy or operations**. CADERH does, however, provide significant value added to the quality of their training, basically through the provision of competency based training modules. The centers visited all believe that the modules enhance their instructional capabilities and are relevant to the trades offered, the students served, and the level of job performance in their communities. There were some comments that the latest revisions made

under BEST were not as neatly and professionally done as were earlier upgrades. In addition, one school director pointed out that occasional discrepancies appeared within or between modules in a given trade which caused students to consult instructors for clarification.

The number of students enrolled in the CADERH network during the project was far lower than anticipated. Fewer centers were constructed than programmed and they were completed much later than anticipated, which affected enrollment. While some centers were reintegrated into the program, they only came back recently. The "Centro Modelo" was projected to have a substantial enrollment, but instead fell into near disuse throughout much of the project. Finally, after Hurricane Mitch, many students were kept home to assist families recover from their losses. With enrollment down, all other student related measures suffered accordingly. **The training modules provided by CADERH contribute significantly to the quality of instruction throughout the CADERH network; failing to attain enrollment targets was related to poor management and Hurricane Mitch.**

3. PROVISION OF TECHNICAL ASSISTANCE AND STAFF TRAINING TO THE CENTERS

A second source of value added by CADERH is through technical assistance and staff training. Because of a relatively high turnover of instructors due to opportunities for better paid jobs, CADERH fills a critical role by providing training in the use of competency based (ICB) methods to new instructors. This is still a relatively new concept in Honduras and, since many instructors come from private industry, they are not experienced teachers nor are they familiar with competency based instruction. Instructor training should be provided as well for improving technical skills but funding has not been available to do so. Staff training is also provided to school directors. Some directors noted that staff training and technical services have not been consistently made available. Because of problems CADERH has in securing funds, the services are provided when funds are there to do so. CADERH is currently revising the way technical assistance is made available to the CADERH network. This is described in Appendix E. Observations of one CADERH Technical Educational Advisor working with a variety of training centers indicated that significant technical assistance is being provided by CADERH. For example, a problem of how to respond to a large request for training by a garment assembly plant was successfully addressed by the CADERH Advisor, working with the school director and his staff. **Staff training and technical assistance are important services provided by CADERH to the training centers.**

4. ASSISTANCE ON TRADE CERTIFICATION OF THE SKILL LEVELS OF STUDENTS

A third source of value added is through the certification of the proficiency levels of training center graduates. Certification consists of scoring at least 90% on a written test about theoretical knowledge related to the trade and scoring 100% on a demonstration of the ability to perform the tasks required by the trade. Two problems were noted: (1) certification is very costly, and (2) only one set of written exams is used for each trade so it is possible to remember or report on the questions for use in subsequent applications. **Centers rely on CADERH to administer the certification tests.**

5. INCREASING BASIC EDUCATION LEVELS THROUGH ACCESS TO ET AND PROVIDING TRAINING IN SMALL BUSINESS DEVELOPMENT

The BEST Project called on CADERH to introduce ET programs throughout the CADERH network. This did not happen although it was reported but not confirmed that one training center

was using ET. Since all students entering CADERH programs must have completed the sixth grade, CADERH is concerned that ET does not yet provide education beyond that level. Several of the centers visited expressed interest in having access to ET when educational programs are available at the 7 - 9th grade levels and three CADERH centers have been designated as sites for field testing the program. While completing the sixth grade is a prerequisite for entry into CADERH programs, it is obvious that not all sixth grade graduates have the basic education requirements to implement the ICB based modules. Several schools visited have remedial programs in Spanish and math to cover these deficits.

Courses for small business development and management were not developed under the BEST Project, although this was a requirement. Several of the training centers visited were assisting graduates to begin their own businesses, although a number suggested that small businesses have more success when individuals are more mature. Training centers want courses for small business development and plan to offer them along with production programs which teach students how to deliver goods and services that meet market demand. **CADERH did not implement the ET or the small business development programs called for in the BEST Project although training centers expressed interest in having access to both programs.**

6. DATA ON STUDENT SUCCESS IN TRAINING AND IN THE LABOR MARKET AND MANAGEMENT SYSTEMS TO MEASURE EFFICIENCY/ENSURE ACCOUNTABILITY

CADERH's data on student success in training is very weak. Efforts are being made to bring uniformity to the data by reviewing the data collection forms with school directors. Quarterly reports are made on the number of students at the beginning and the end of the quarter by sex and by area of study. The rate of retention is calculated by comparing the two numbers. Since training is on an open-entry/open-exit basis, it is possible to have more students at the end of the quarter than at the beginning which calls into question the reported retention rates. Even more alarming is that retention measures apply only to the quarter that is reported - not to the duration of the training program. A program may be one or two years in duration. A true measure of success is the number of students who are certified in their trade compared to the number who entered the program. Since certifications are done by CADERH, they are precisely measured and, if correctly compared to the proper cohort of school entrants, can provide an excellent measure of success. CADERH says that this is the measure they are using. The number of instructional hours is also reported. Data on training costs and sources of funding are reported in detail. While provided quarterly, they are separated by month and are broken down into many components, including the amount of income resulting from production programs and a detailed breakdown of costs. Estimates of cost per-hour-of-training should be quite accurate.

Placement data are not well collected. CADERH's estimates are based on infrequent field studies which determine a representative percentage of placements of graduates. The data are valid when first collected. These ratios, however, are then applied to the number of graduates in subsequent years to estimate the number of students placed. Were this information precise, it is questionable as to how useful it would be. Students typically leave a CADERH program at 16 to 17 years of age -- some even younger. The labor law does not permit young people to enter the labor force until they are 18, although it is reported that 47% of 15 - 17 year olds are economically active. The initial jobs of CADERH graduates are those of general helpers or low paid, low level workers in their trade. The real success of CADERH graduates will be how their discipline and training allow them to advance in the first several years after their entry into the labor force. At the end of five years, one would hope to find them beginning to attain the maturity and workforce experience that allow their training to pay off. The only way to measure this is through sample longitudinal

studies. **While CADERH is trying to improve the uniformity of data collection, the data gathered do not permit accurate measures of the efficiency of current programs nor the success of graduates after entering the labor force.**

CADERH has a major weakness in its ability to track its costs and income by program area. In addition to its training related services managed by the Education Development Division, CADERH has a number of programs which should generate income or at least be self-financing. These include a video production service, an English language program, a placement service, a division providing services to firms related to human resources and training, and the "Centro Modelo" in San Pedro Sula. In response to a recent request by the Board of Directors, CADERH was unable to provide timely data on the financial status of each of these entities. It is likely that one or more of these units is losing money but the Board has been unable to determine which these might be. **CADERH must improve its financial management capability to adequately track the contributions or losses of each of its separate activities.**

C. POLICY ISSUES TO BE ADDRESSED

1. ADEQUACY OF PROJECT DESIGN TO ADDRESS THE SKILL TRAINING NEEDS OF LOW INCOME, OUT-OF-SCHOOL YOUTH AND THE NEEDS OF THE LABOR MARKET

The project built on the success of an earlier Mission financed activity with CADERH and was appropriately designed to provide needed training services to the target population. While the activities included in the CA are in line with the anticipated results, one important factor contributing to project success was misjudged by USAID/Honduras in designing the project -- CADERH's lack of administrative capacity to carry out project implementation. CADERH benefited from significant amounts of USAID/Honduras' assistance through program grants prior to the BEST Project. The first program, lasting from 1983 until 1986, got CADERH started as a private organization to stimulate competency based training in the private sector and to certify workers. This was done with considerable Mission involvement -- almost to the point of CADERH being the product of USAID's interest in developing an appropriate organization to provide skills training to the private sector. In 1986, CADERH received a new grant enabling it to build 15 training centers serving low-income people to be operated by NGOs and municipalities, to provide private sector in-plant training, and to greatly expand the range of training materials and certification services. In both cases, close Mission supervision and plentiful technical services were provided. An evaluation in 1992 upon project completion indicated that a sound instructional system was established, including 15 privately maintained training centers. It also pointed out that CADERH was likely to have difficulty attaining financial sustainability.

After the second project ended, CADERH turned its attention to income generation to keep itself alive without Mission support. As a result, between 1992 and late 1995 when BEST Project resources began to provide support to CADERH, there was a significant reduction in CADERH's ability to keep modules up-to-date, to provide certification services, to organize staff training for the affiliated centers, and to maintain the technical advisory groups which oversaw the relevancy of the training modules. The number of training centers in the CADERH network dropped to eight because of the few services provided them. CADERN did, however, become nearly self-sustaining. In 1995, the Mission received a proposal from CADERH, for the program included in Component II of the BEST Project. Because of the successful final evaluation of the earlier project and because of CADERH's near financial self-sufficiency, a Cooperative Agreement (CA) was signed. The Mission determined that very little oversight was required for implementation of

the CA and only relatively limited technical assistance was needed. This proved to be a serious misjudgment. CADERH direction changed at the beginning of the project. Project management was shifted to San Pedro Sula removing it from easy oversight by the Mission and the CADERH Board and Executive Director. CADERH, in an effort to expedite implementation, hired an ex-USAID employee to manage the project who had limited experience with training and was eventually fired because of questionable management of project resources. A mid-term evaluation that should have detected these problems was never done. **The bad management that characterized the project from its initiation until its compete overhaul and return to Tegucigalpa in early 1999 is partially explained by this initial misjudgment about the level of Mission supervision and technical assistance required by the project**.

In spite of cautions in the final evaluation of the Mission's earlier project with CADERH about the difficulties related to sustainability, the BEST Project made little provision for this important item. It is true that CADERH had attained a precarious level of self-financing at the time the project was developed, but it had been at the expense of offering adequate support services to the training centers. **The project design should have provided assistance to CADERH for attaining financial self-sufficiency.**

2. CADERH INCOME SOURCES AND THE PROVISION OF QUALITY PRIVATE SECTOR ORIENTED TRAINING SERVICES

Because CADERH's ability to attain long-term financial sustainability was identified as a problem before the BEST Project was designed, the project provided for an endowment fund which will generate from $55,000 for the year 2000 up to $97,000 in the year 2017. This will provide modest support for providing assistance to the training centers. A recently signed agreement with INFOP (Instituto Nacional de Formacion Profesional) will also provide CADERH with another $55,000 of support for the centers. These two sources of income, however, fall short of what CADERH needs to provide quality training services over the long-run. A USAID funded program with DevTech will cover an upgrading and distribution of training modules and staff training services for training centers until December 31, 2001. A detailed discussion of possible additional sources of income for CADERH to consider is included in Appendix E. **Additional assistance provided to CADERH must consider how the organization can attain financial sustainability in the short-run.**

3. IDENTIFICATION OF CRITICAL TRAINING

The CADERH network provides skills training in entry level occupations related to the needs of their local communities. The output of each center is small and much of the training relates to forming discipline and good work habits which are universal labor force requirements. Therefore, the identification of training needs is not a critical factor in guiding their operations. Were the Mission to finance more training centers in addition to those to be constructed by DevTech, it should obtain an overview of the vocational training efforts of all Honduran institutions and compare these to projected labor market requirements so that training resources contribute both to national development requirements as well as the needs of low income, out-of-school youth. INFOP is completing such a survey and the results should be available by January 2001.

D. LINKAGES, PARTNERSHIPS AND SUSTAINABILITY

1. PLANS OF THE Secretaría de Educación AND INFOP TO EXPAND THEIR ACTIVITIES IN THE AREA OF VOCATIONAL EDUCATION

The current vocational training programs of the SE and INFOP are discussed in **Appendix F**. There are no plans to expand the role of the Ministry in the area of vocational education. The major concern is to improve the installations that exist. Ministry representatives believe that it would be advantageous to coordinate the activities of the various entities in Honduras which provide training. This coordination, in their judgement, should be done informally without any one institution being predominate and without legislation mandating that institutions operate under the guidance of the Ministry. It was suggested that the Secretariat for Technical Cooperation (SETCO) or a representative group of international donors like MERECE could initiate discussions between SE, INFOP, CADERH and the universities about how to support each others' activities in meeting Honduran labor market requirements.

INFOP is outside the formal education sector although its funds come from a 1% tax on private sector payrolls. INFOP strongly supports an initiative that emerged as part of the Education Reform process although it was not included in the final document. SINAFOP (Sistema Nacional de Formacion Profesional) would be created, which includes INFOP, SE, UNAH and UPN, to coordinate and set the standards for all programs which prepare people to enter the labor market. The tone of the document describing its functions was very bureaucratic and inflexible which is the opposite of what people working in the SE programs suggested. No mention is made of the role of private training centers within SINAFOP. **Coordination of private and public sector activities in the area of vocational training is needed but the very formal coordination mechanism represented by SINAFOP should be very carefully studied and vetted prior to enactment.**

2. PLANS OF OTHER INTERNATIONAL DONORS TO ASSIST IN THE DEVELOPMENT OF VOCATIONAL TRAINING PROGRAMS

There are three international programs providing assistance to SE vocational training institutions. The PCOVH (Producion en Colegios Vocacionales en Honduras) Project financed by the Central American Development Bank is in its final phase. Assistance was provided to 20 SE Technical Institutes in the form of equipment, staff training and training materials. The Government of Mexico has provided assistance for the development of training in two trade areas: construction and garment making. The European Union is providing assistance to 15 other Technical Institutes through the AFOPH Project (Apoyo a la Formacion Professional en Honduras). Their four year program has one more year before completion. The program is a pilot project to demonstrate how all Technical Institutes might function better. They have trained 360 teachers in almost 400 courses with over 34,000 hours of class instruction. Their goal is to enable teachers and school directors to offer better programs through improvements that they themselves develop and implement. In six of the 15 pilot institutes, they will introduce the concept of production centers. In these cases, students simultaneously learn and engage in income generating activities. INFOP will receive $5,000,000 from Spain to buy new equipment for all its centers, IDB financing for workshops in low income urban neighborhoods, additional equipment from Japan, and other assistance to develop small business development programs. **Significant assistance is being provided vocational training programs; the immediate need is for informal coordination of all Honduran labor force related training.**

3.SUSTAINABILITY OF VOCATIONAL PROGRAMS, THE ENDOWMENT FUND, AND USAID'S RELATIONSHIP WITH CADERH

Responsibility for providing training services under BEST rests, for the most part, with the training centers. They will continue to provide training services with or without continued USAID support. They have community resources in place to utilize, maintain and generally

benefit from the assistance they receive from the Mission. CADERH, however, significantly adds to the quality and efficiency of the outputs of the centers. However, CADERH has been heavily dependent on USAID support. The major issue, therefore, is whether CADERH can become financially viable without USAID assistance. The BEST created endowment fund, as discussed earlier, will only partially cover CADERH's costs for providing needed services to the centers. It would be a great loss if CADERH were no longer able to provide this support to the CADERH network.

We recommend, therefore, that an Exit Strategy, lasting until December 31, 2001, be developed to provide assistance for CADERH to become financially self-sustaining while the DevTech Program with CADERH is being implemented. This Strategy would provide some complementary operating funds to the assistance provided by DevTech to bridge the period until CADERH can raise sufficient funding. The major thrust of the assistance package focuses on: (1) reorganization of the Board of Directors to enable it to become a real leader of private sector efforts in the area of skills training and a source of funding; (2) rationalization of CADERH to eliminate unnecessary functions and organizational components which lose money; (3) exploration of potential sources of funding that are common for similar private sector organizations in other countries, (4) determination if the "Centro Modelo" can become a source of income (with USAID concurrence); and (5) exploration of the INFOP tax base as a source of revenue for CADERH. The Exit Strategy should begin as soon as possible and should last no longer than the DevTech Program. See Appendix E for a detailed presentation of the Exit Strategy.

If during this period, it becomes apparent that CADERH cannot bring about the basic conditions to fulfill its commitments under the proposed Strategy, the resources in the program should be immediately directed to explore two other possible sources of services for the training centers. The first is an association of the training centers to address their own needs, although financial self-sufficiency for such an organization will be a problem. The other possibility is an affiliation between the training centers and INFOP which has similar relationships with other private sector training facilities. It is through this program of "Centros Colaboradores", that INFOP provides the funding for the current CADERH-INFOP Agreement, and where such a relationship could be established. INFOP is not an organization warmly endorsed by the private sector, although its image has improved somewhat under its current leadership. It is heavily oriented to traditional vocational training methods and top-down management practices although competency based instruction is being introduced for short courses.

V. POLICY REFORM AND PROJECT PROMOTION (PILOT PROJECTS)

A. OVERVIEW

The policy reform and project promotion component of BEST (Component III) was designed to promote debate on educational change by supporting educational research and other policy-related activities and disseminating the results.. The funds ($300,000) were included in the cooperative agreement with CADERH, but were subsequently brought back into the Mission when concerns arose regarding CADERH's management.. Until after Mitch, the main use made of Component III was for technical assistance run out of the Mission.

1. CURRENT STATE OF IMPLEMENTATION

After the hurricane, Component III funds were re-programmed to support Mission efforts to support a major new educational reform effort developed by the GOH education authorities, with assistance from USAID and other donors.

At the same time, USAID initiated a number of pilot projects, designed to test several basic education models, which had the potential to make valuable inputs to the reform program, as well as to make small, but direct contributions to the post-Mitch emergency recovery effort in education. These included EE, TB, and AM. While EE was subsequently terminated, out of concern that the SE was not sufficiently interested in it to warrant its continuation, its basic elements were continued in a new SE project, Salvemos Primer Grado, without funding from USAID. The others are still in operation.

2. ACCOMPLISHMENTS: EDUCATIONAL REFORM

Although Component III activities did not begin until late 1998, after Mitch, a great deal has been achieved in the approximately year and a half since the hurricane. The accomplishments fall under two headings: Educational Reform and Pilot Projects. Accomplishments of the pilot projects are included in the next section, Findings Regarding Key Project Components.

In the immediate aftermath of Mitch, USAID made a critical contribution, together with the Minister of Education, senior members of the Ministry, key Honduran educational leaders, and the other donors, in setting in motion a comprehensive educational reform effort for Honduras. The Mission helped bring the key players together, out of which a consensus developed to use the Mitch disaster, and the outpouring of sympathy and assistance which followed, as a springboard for change.

Subsequently, a series of joint activities were planned and executed by GOH education leaders and a group of lead donors agencies, including USAID. The goals for this effort included: 1) The building of a national coalition in support of the reform, through a series of consultative and participatory measures, including development and dissemination of a major national reform proposal; 2) the progressive accumulation of ideas, suggestions, and other substantive inputs into the content of the proposal and the subsequent reform; 3) the creation of appropriate coordination mechanisms among the donors and between the donors and the Honduran education authorities; and 4) laying the groundwork, once the proposal had been prepared, for institutionalizing and implementing the reform.

The first activity was a series of five seminars held around Honduras. A main purpose of the seminars was to open up the reform debate to a wide spectrum of institutions and individuals from the public and private sectors, political parties, educational institutions, non-governmental organizations, churches, communities, parent groups, labor unions, media, and educational experts together to debate reform issues and to seek to obtain their support. The seminars were also designed to be substantive events, thus assisting in developing a deeper understanding of the principal deficiencies of Honduran education and the key problems and needs that would need to be addressed.

The seminars generally met their objectives. The various events were well attended, and judging from the participant lists, the target groups were largely reached. Discussions were reportedly, on the whole, lively, and much useful information was obtained. Total attendance at the five events

was on the order of 1200. Informal contacts by the Team with seminar participants suggest that the reactions were generally positive.

A second activity was the undertaking by FONAC of an extensive series of community and local-level discussions throughout Honduras, designed to give a wide range of ordinary Hondurans of all kinds the opportunity to offer their opinions on local educational needs and, hopefully, gain their support for the reform.

Third, a process was begun, led by FONAC, to prepare a comprehensive educational reform proposal, drawing on the recommendations emanating from the seminars, the national consultation, and individual proposals submitted by a variety of Honduran public and private institutions involved in education. The FONAC proposal, which consisted mostly of general principles and guidelines, was presented June 21-22 at a special Assembly in Tegucigalpa.

B. FINDINGS REGARDING KEY PROJECT COMPONENTS

1. SUPPORT FOR EDUCATIONAL REFORM

It is clear that USAID has played a key role since the Mitch disaster in promoting, sustaining, and participating in the development of a new and promising educational reform effort in Honduras. In particular, the Mission's efforts immediately after the hurricane to help gain consensus for the reform, design an action plan, conduct a national consultation, and develop a comprehensive proposal, were timely and of excellent quality.

Immediately after the presentation of the FONAC proposal, the SE , USAID and other donors began meeting to discuss ways to quickly institutionalize and operationalize the reform implementation mechanisms and develop a short list of concrete, high impact programs to be initiated in the next few months.

After Mitch, key members of the donor community in Honduras, including USAID, developed a productive set of joint working relationships among themselves and with the GOH education leadership. In time, these informal relationships took on structure., culminating in early 2000 with the establishment of MERECE. MERECE, while unofficial, became the principal vehicle for communication between the donors and the Honduran authorities on educational reform policy matters. **USAID has played a major, and perhaps critical, role in the process of developing and institutionalizing this valuable mechanism.**

Subsequently, an unofficial Honduran counterpart group, LA CUMBRE took shape, consisting of the Minister of Education and the heads of the three leading Honduran educational institutions – the National Autonomous University of Honduras (UNAH), the National Pedagogical University (UPN), and the National Institute for Professional Training (INFOP). **The formation of La Cumbre was a further, critical step and,again, the record shows that USAID played a key role in making it happen.**

MERECE, with a current membership of over twenty organizations, meets at least monthly. Joint meetings with LA CUMBRE are arranged as needed. MERECE has formed four working groups covering the areas of Coordination of External Assistance; Teacher Training, Curriculum Development, and Management, which already have produced a number of useful substantive inputs to the process. The leadership of MERECE rotates every six months. John Helwig of USAID is the current Coordinator.

USAID Honduras should be commended for its work to date in the educational reform area, especially the coordination activities. We recommend that work continue along the lines already traced, with emphasis on targeted and measured support for the reform implementation mechanisms and the development of an integrated package of programs to assist in executing key reform components. Our views on the specific program activities that we think the Agency should consider funding will be detailed in our strategy paper.

2. PILOT PROJECTS

TELE BÁSICA, a program using educational television and texts to provide all key subjects at grades 7, 8 and 9, initiated its pilot activities in 1999. In that year the grade 7 curriculum was piloted in 32 sites in 12 departments. This year it is being piloted in 35 sites, in the same 12 departments. The total initial enrollment for grade 7 in 1999 was 897. This year, the total initial enrollment in both seventh and eighth grades is 2,798.

Team members visited one TB site, interviewed TB staff members, and reviewed and evaluated levels 1 and 2 of the TB texts. (See Appendix D for details.) The TV lesson we saw was excellent, and we found that the texts ranged from an acceptable to a high level of quality. **However, we noted the need for further teacher training and ongoing supervision in order to achieve quality implementation of this program.**

The series is delivered to classrooms on videotapes, which are copied at the ET office in Tegucigalpa. It is unreasonable to expect that a single video cassette recorder could meet the needs for cassettes in this program, taping daily broadcasts for 36 sites, and, in fact, we observed classroom difficulties caused by failure of equipment. **Obviously, provision must be made for adequate equipment and for its replacement on a regular basis.**

It is unclear whether TB should be reserved for use in the Basic Education program where it is currently being piloted, or whether it would also be useful in alternative delivery systems for grades 7-9. The TB program is in the process of being evaluated by IEQ-II. That evaluation should yield a great deal of interesting and useful information to assist in further decisions about the TB pilot. However, given the pending evaluation, as well as the plethora of grade 7-9 curricular frameworks currently available or under consideration, we feel it would be premature to make a definite recommendation regarding TB's future use at this time. Therefore, **we recommend that TB continue as an interim program in Basic Education until evaluation results are received and final decisions are made in the SE regarding a standard grade 7-9 curriculum for Honduras.**

ESCUELAS CON ÉXITO was piloted during the 1998 school year, after which USAID funding was discontinued. The SE has adopted the program, with some revisions, calling it Salvemos Primer Grado (Let's Save First Grade). Under the direction of a central unit in the MOE, the program is being implemented by all departments in the entire country. Orientation and training has been provided to educational personnel in each department. The program was adopted at the beginning of the school year, and has no operating budget within the SE this year, although it will be proposing a budget for school year 2001. Implementation at this time varies widely from department to department.

The EE pilot in 1998 was undertaken in the first and second grades of 39 schools in the departments of Francisco del Morazán and Intibucá. Its objective was to reduce rates of repetition

in grades 1 and 2, by improving teaching and student learning. See **Appendix D** for discussion of the problem of repetition.

The EE project proposed three main interventions:

First, it put an emphasis on training teachers in active, participative teaching methodology. "Maestros Distinguidos" (master teachers) were chosen to visit classrooms of participating teachers to provide coaching and support. Each master teacher was responsible for a group of 23 classrooms.

Second, staff worked with a group of teachers to "calendarize the curriculum". The idea behind "calendarization" was to remedy the problem that many teachers never completed the first and second grade curriculum with their students, and had not identified which portions of the curriculum were of highest priority. The working group selected those portions of the curriculum deemed to be the most important, and actually recommended the days and weeks when those items should be taught.

Third, teachers were asked to give periodic informal tests to check student learning on these key topics, and to keep the results on a master chart. Using these data, they were expected to provide extra assistance to children who had not mastered the indicated skills, and they were also encouraged to communicate regularly with parents, to show them the data on their child's learning, and to enlist their support.

The project design focused on several key factors known to be contributors to students' failure to learn. The focus on active, participative methodology is an important one, since it encourages students to become involved in and to feel responsible for their own learning. This kind of teaching also engages students' interest, so that learning is not perceived as a passive task of memorizing and copying. The approach taken of identifying local skilled teachers is an excellent one. Their participation in the project would tend to further strengthen their abilities, thus strengthening local capacity to solve instructional problems. Furthermore, this design would tend to foster local support networks of teachers working together to discuss student learning and to develop solutions to problems particular to their own environment.

The "calendarization" seems likely to reduce the opportunity for teacher initiative. Especially in reading and language arts, there is no proof that individual skills must be taught in a certain sequence. A greater, underlying problem is that this model was developed from an outdated curriculum which needs revision. A review of the *Rendimientos Básicos* on which this system is based reveals no mention of reading comprehension at all in the first grade. The evaluation activities suggested require only factual answers, and they repeatedly emphasize that responses must be "exact". The grid used for "calendarization" in Spanish, in fact, lists a specific word to be learned in each time period, rather than mentioning more fundamental competencies.

The evaluation[42] of the pilot reported that first grade repetition rates were reduced from 22% in 1997 to 10% in 1998, and that the second grade rate of repetition was reduced from 19% in 1997 to 8% in 1998. Unfortunately, team members noted flaws in the research design of the study which make it difficult to evaluate the success of the pilot. (See **Appendix D** for discussion of the pilot evaluation.)

Nevertheless, even given these problems, the proposed system has several strengths, and it addresses a key problem noted not only in Honduran schools, but throughout Latin America: the

failure of teachers to find out what their students are learning, and their consequent failure to design and select from a variety of instructional strategies to meet students' needs. The model for ongoing formative evaluation in classrooms proposed by EE is one that requires teachers to use informal assessments of learning on a regular basis and to work again with those students who need special help. An additional strength of the model is the emphasis on communication with parents to enlist their support.

Therefore, we conclude that this pilot presented a valuable package of essential and well-focused interventions designed to improve student learning in the first and second grades. **The model could be greatly strengthened if it were based on a revised, up to date curriculum that includes higher level thinking skills, and if the "calendarization" model were made somewhat more flexible.**

The fact that the Ministry has officially incorporated this program into its first grades countrywide bodes well for its sustainability in the longer run. The Ministry has requested financial assistance for the implementation of Salvemos Primer Grado. This will be an issue for further discussion in our forthcoming strategy document. **However, it is likely that we will be recommending that improving the Salvemos Primer Grado be among the options to be considered for possible funding by USAID in the next five years.**

APRENDAMOS MATEMÁTICA is a supplemental mathematics program intended for the first three grades using IRI. The program is delivered by means of a one-half hour radio broadcast or cassette. Its pilot activities began in the spring of 1999, when the first grade program was introduced in 10 departments, delivering the program to a total first grade enrollment in those departments of 202,000 children. In 1999 the project reports having trained 6,000 first grade teachers, as well as the departmental directors and specialists in the relevant departments. The first grade program has now been introduced nationwide, and piloting of the second grade program is taking place in the same 10 departments.

Team members visited AM classes in several schools, in the departments of Cortés and Santa Bárbara as well as in the greater Tegucigalpa area. (See **Appendix D** for details of our observations.)

The lessons are fast paced, with frequent changes of task and are interspersed with physical activities and songs. The children almost uniformly were listening and responding with considerable enthusiasm. Teachers varied in their level of participation, some actually leaving the room during the broadcast, while others participated actively and used a variety of strategies to assist children having difficulty. We observed that in schools where the director was actively involved and enthusiastic about AM, the teachers tended to follow suit. **We recommend continued training and ongoing supervision of teachers to ensure maximum impact of the AP program**.

The program is not intended to stand alone, but should be a supplement to the regular math instruction. To maximize program effectiveness it would be desirable that the teacher provide follow-up activities in areas in which the children seem to need more reinforcement. However, in classrooms we saw, the lessons ended abruptly and children never continued with any related math activity. It would be helpful to include in the ongoing teacher training some additional strategies to use to deepen and extend some of the concepts introduced in the 20 minute radio broadcast.

We noted logistical difficulties regarding timing of the radio broadcasts and availability of sufficient radios and/or tape recorders. In particular, in some locations the programs for 1st and 2nd grade are broadcast at the same time, but some schools only have one radio. AP staff suggested that a viable solution for providing radios might be to request that local parent organizations, rather than individual teachers, buy them. The radios could then be shared with other groups needing them in the local area, and ownership and responsibility for the radios would be clearly defined. Another problem, which will require more creative solutions at the local level, is that many teachers in rural areas have two or three grades in the same classroom. This situation, difficult already, will become even more complicated next year when broadcasts will be provided for first, second and third grades.

A summative evaluation of AM conducted in 1999 indicated that math scores of children were higher in classes participating in the program than in control groups. However, the evaluation was based upon the *Rendimientos Básicos* developed under the PEEP Project, which presents 2 important problems:

- The AM program was evaluated against criteria (the *Rendimientos Básicos*) that played no role in its program design. (It is based on a curriculum that has been used in a number of Central American countries, most recently in El Salvador).
- PEEP's *Rendimientos Básicos* contain no 'ejes transversales' – the one element of Honduran curriculum that was actually inserted into AM's program. Thus, the impact of their inclusion is largely unknown since they were not included in the evaluation design.

The above factors would suggest that the tests might not have indicated the full extent of the children's learning under the AM program. Unfortunately, the data treatment and presentation did not follow proper procedures, particularly in regard to reporting appropriate statistical significance tests. Therefore, it is impossible to determine whether the contrasts reported are significantly different from differences that can be expected by chance alone.

Regarding sustainability, it seems likely that the project can gradually work its way towards self-sufficiency, as it gradually receives more support from NGO's and local businesses. It has the advantage of operating within the school system, so that ongoing supervision and support is already expected from the Ministry and its decentralized education units.

In spite of the technical and implementation problems mentioned, **AM is a program that is assisting children in their learning of mathematical concepts and is a valuable addition to the primary grades mathematics curriculum.** It can be made better by the inclusion of the improvements we have suggested. A redesigned evaluation focusing on issues related to teachers' classroom use of this resource might provide still more guidance about ways to further enhance the program.

C. PROJECT ISSUES TO BE ADDRESSED

The objectives of BEST Component III, at the outset, were not well defined or articulated. But, inasmuch as the Component *de facto* was not used for intended program activities until after the Mitch disaster, the team has not gone more deeply into the reasons for the apparent deficiencies in the original design. In the aftermath of the hurricane, the objectives were redefined and became, in effect, support of the reform process and funding of pilot projects to lay the groundwork for reform. **In our view, the new focus of the actions that ensued were on target, and the results so far, have been positive.**

1. SUPPORT OF EDUCATIONAL REFORM

The joint effort to develop a national educational reform plan via a broad and open national consultative process responded, in part, to the desire to avoid the fate of several earlier reform plans, that are today gathering dust on various shelves. USAID and others felt that if enough sectors of society, particularly the political parties and the pre-candidates for the 2001 elections, could be engaged and converted into active participants and supporters of the reform, it would increase the chances that the incoming government, whether Liberal or Nationalist, would continue its implementation.

While it is impossible to predict what will happen when the new government takes over, there are some well-founded reasons to be cautiously optimistic that the basic elements of the reform will continue. In other words, it is a reasonable expectation that the incoming Administration, while it surely will want to put its own stamp on the reform program, will do so based largely on the plans developed over the last year and a half, including continuation of ongoing projects, rather than discarding everything and starting over.

One reason, and arguably the most important, is that through their involvement in the preparatory period, the major political parties and presidential candidates have publicly declared their support and have committed themselves, should they come to power, to continue the reform. Similarly, the major actors and institutions in the education sector, the private sector, key elements of civil society, and even the teacher unions, though probably with greater reservations, are committed to supporting and many of them are likely, should the reform come under attack, to help defend it

There also is increasing evidence that the seriousness of Honduras' situation in the emerging global economy has hit home. This is felt most strongly, perhaps, in the private sector, but globalization forces affect almost every major institution in the country. There is wide and growing consensus, as well, that the key to unlocking the Gordian knot in Honduran development, which is abysmally low productivity, is human resource development, especially education, health, and nutrition.

Another factor in the equation is the fact that Honduras badly needs additional debt relief to help reduce its fiscal deficit and has recently been approved for $900 milllion in debt relief under the Highly Indebted Poor Country (HIPC) Program. Honduras has prepared a Interim Poverty Reduction Strategy that puts forth a number of initiatives and specifically cites the proposed education reform as among the steps Honduras will take to meet IMF/lender requirements.

Finally, given Honduras' high level of dependence on international aid and investment, the bilateral and multilateral donor community in Honduras, acting in concert through MERECE, is in an unusually strong position to help assure continuity in the reform process.

Good groundwork has been laid, via the preparatory actions taken over the last eighteen months, for a sound institutional structure to oversee the reform. At the time of writing (July, 2000), efforts to create the necessary mechanisms are underway. Discussion of what would be the most appropriate legal structure for the reform is also taking place.

The Team believes that a top immediate priority is to help the SE get a short list of feasible, high-impact, and visible educational improvement activities quickly underway to demonstrate that the long-awaited reform is not just words but deeds. What specifically should be done and by whom will need to be worked out between the SE and the donors through MERECE. One possibility that should be seriously considered is technical assistance to the new

unit that the SE is setting up to coordinate implementation of the reform in the areas falling under the Ministry's jurisdiction.

The proposal to subsequently organize a further, highly visible conference or other event to publicize the fact that reforms are actually happening strikes us as appropriate, assuming, of course, that there are real achievements to talk about.

2. PILOT PROJECTS

We believe that the pilot projects, including AM, which was funded with ESF funds, have been generally helpful in helping prepare the ground for reform.

At present, USAID Honduras is actively engaged in reassessing its education strategy to develop a set of programs to support the proposed education reforms in ways appropriate to AID's policies, capacities, and resources and the roles and interests of other donors. The results to date of the pilot projects are inputs to that process.

3. MANAGEMENT STRUCTURE AND IMPLEMENTATION METHODS

There are two points to be made about the adequacy of the current USAID management structure. From our perspective, it is leanly staffed for its many current responsibilities. The post-Mitch emergency reconstruction program will gradually wind down, of course, but, the demands of supporting the new educational reform are already creating new and different needs for Mission staff support, and these needs will only become more compelling over coming months. The Team urges the Mission and AID/W to carefully analyze future reform-related requirements to assure that staff numbers and skills keep pace with program changes. The Team believes that, in general, USAID should define its role as overseeing, coordinating, and continuously evaluating the new educational reform programs, as well as assuring that projects receive the technical, financial, and other resources they need in a timely fashion.

Every project should be designed to provide within it at least a critical minimum of USAID funded technical support. The ways this will be done will vary. A technical assistance contract or task order under an IQC probably is the preferred vehicle for major projects, but the relatively high cost of these mechanisms necessarily will limit their use. In most cases, a programmed series of visits by consultants working with local counterparts will be sufficient. We believe that the scope of work of a consultant making regular visits can be structured to cover more than one activity and include staff training in his/her area of responsibility, as well as ongoing technical assistance. While evaluation should be continuous and formative, the Team believes that formal evaluations of all activities should occur at two to two and a half year intervals.

VI. CONCLUSION

In evaluating the several components of the generally successful BEST Project, we have noted a consistent tendency to emphasize both quantity and cost saving at the expense of quality. In fact, project objectives have often been stated in ways that would encourage program staff to push large numbers of students through the program as quickly as possible rather than to focus on the quality of their learning experience. Although it should clearly be a high priority both for USAID and for the Government of Honduras to deliver services in the most cost efficient manner, we believe it should be an even higher priority to develop and deliver programs that demonstrate a commitment to high quality education. High quality education requires excellent curriculum and

materials, excellent teaching, thoughtful and consistent supervision, careful evaluation, and well-organized management and logistics. USAID has a commendable record of assistance to Honduran education. We believe that the improvements we have suggested in the BEST project components will assist USAID in its continuing efforts to help Hondurans achieve success in their impressive educational reform effort.

Notes

[1] However, the evaluation team finds no reference to findings from piloting of these materials, suggesting that piloting, if actually accomplished, was somewhat informal.

[2] We also observed children attending classes with their parents, a valuable way for them to learn but, more importantly, so come to appreciate and value a culture of learning.

[3] Van Steenwyk, Ned, USAID report, *Las Mujeres en el Programa Educatodos, 1998;* HIID, *Girls' and Women's Education Activity, Component III, Appendix I, Draft Review of Honduras Baseline Data, 1998.*

[4] There are some inconsistencies in project documents as to whether the service objective was intended to specify enrollments or "graduates", i.e. students who have successfully completed one grade level.

[5] The initial project proposal focused on immediate economic returns; we believe a more appropriate outcome measure is cumulative economic and non-economic returns, discounted over an appropriate payback period.

[6] The project design does not specify volunteer term/level of effort. We assume that the intended objective was to specify one volunteer-facilitator per 100 lesson semester-long course, i.e. 15,000 volunteer-semesters of effort. Thus, the 7,500 volunteer-years is 100% of the planned objective .

[7] Interested students who want to join a class before the semester is too far advanced are allowed to join based on their apparent skill level and motivation and, in some cases, facilitators may help them catch up by covering the lessons they missed in the textbook.

[8] Even if it the EDUCATODOS testing system had reliably measured post-program competencies, it is not possible to estimate the "value-added" contribution of program participation because only some of the enrollees were actually given a pre-test. The research literature on adult learning is clear that competencies acquired through experience and self-study often bring adults to functional levels higher than those they had when they left school. Nonetheless, since many program non-completers may have achieved gains before leaving the program, we estimate that about 70% of enrollees made substantive gains, although the completion rate is lower.

[9] These policy commitments can be found in a variety of documents including the FONAC proposals, the curriculum framework document developed by the MERECE group, and others. Se also Jorge Sanguinetti's keynote address to the 1999 ET-sponsored conference.

[10] These frameworks are the SCANS framework (Secretary's Commission for Achieving the Necessary Skills) developed by the U.S. Department of Education and the U.S. Department of Labor and the Equipped for the Future framework developed by the National Institute for Literacy. While these were developed in a United States sociocultural framework they are, nonetheless appropriate for Honduras in that the "high performance" competencies identified in these frameworks are universal features of the 21st century global economy and of increasingly stressful 21st century family and community life.

[11] There are deficiencies in the *Rendimientos Basicos* framework itself which we discuss later in this report but in this section we focus specifically on the EDUCATODOS materials.

[12] Project staff have attempted to overcome some of these limitations with training designed to support sound instructional methodologies but it is not clear how much can be done within the current instructional design.

[13] The project has distributed 2,267 sets of cassettes with 50 lessons in each cassette.

[14] We estimate radio distribution of ET programming at about 0.10 Lempiras/per instructional hour or slightly over $10 Lempiras per 100 hr. Course. Assuming that about 2/3 of students successfully complete a grade, the distribution cost is about $15 lempira or about $1 per student grade-level successfully completed.

[15] We were particularly impressed, for example, by the initiative of a promotor in Santa Barbara who had set up an ET program in the local prison. We were present at a meeting in which he very skillfully resolved some incipient problems—in a very collegial discussion with two inmate-facilitators and a prison administrator. We also saw a similarly skillful negotiating meeting in which the promotor secured the local school director's permission to use the school as a site for the upcoming ET pilot site classes for grade 7.

[16] Thus, the project does not have access, for example, to financial data on the cost per textbook in order to determine whether the decision to acquire presses to print texts in-house was justified or not. Similarly, the overall project budget does not provide detailed breakouts for key cost centers such as: purchased radio station time, purchase of cassette recorders and tapes. We are confident that the underlying records are available. Our concern is not fiscal accountability but, rather, the availability of such information for making informed management decisions.

[17] Ideally, the project manager should have access to monthly reports listing obligations from each fund source, cash received, and expenditures made against each fund source.

[18] In reviewing the cost data on radio broadcasting distribution we noted there was excellent documentation of costs and a adequate basis for estimating total in-kind donations in the form of discounts from market rates but that the calculations needed to systematically assess cost-effectiveness (e.g. cost/hour/station, cost/hour/impression, value of donated promotional time).

[19] We understand that the ET program design assumes that pre-program placement tests are given to all students. This was not reflected in the accounts we heard from field personnel about their actual operational procedures.

[20] We do not believe such a system should be developed, although well-designed research on random samples of sites might provide valuable insights into actual patterns of attendance and dropout. The Van Steenwyck report on "Los Desertores de EDUCATODOS" provides this sort of information, although we suggest additional tabulations for diagnostic purposes.

[21] In Appendix H we detail both our assessment of current efforts to estimate economic benefits and our suggestions for improvements.

[22] These items do not take advantage of scaffolding or other techniques to use multiple-choice items for assessment of problem solving or other higher order skills.

[23] Domain is the area of knowledge and/or skill to be measured. In criterion-referenced testing this includes an operational definition of the "piece" of curriculum to be measured and the associated item development specifications.

[24] Among the many potential test items, some work better in reliably and validly assessing a student's skills than others. The idea is to explore the performance of a number of potential test items empirically. There are many techniques in criterion-referenced testing for defining domains and for developing and choosing items that validly and reliably sample behaviors that serve as indicators of mastery of these domains – in appendix B are cited a number of works that put forward well tried methods to accomplish this. The Unidad de Medicion de la Calidad (UMCE) uses a set of appropriate techniques derived from the work of Popham, Haladyna and Esquivel. Currently, no such methods are being used in ET.

[25] In fact, the definition of a test in criterion-references measurement is the n number of items necessary to validly and reliably measure a domain. Never is one item deemed a valid sample to substantiate inferences regarding what criteria students have attained.

[26] There is little conceptual difference between attempting to infer how much students know about adding 2-digit numbers based on their performance on one item than in inferring how well Honduran students learn about "operations with whole numbers" from the number of items that one student answers correctly.

[27] ET evaluation staff also cite concerns with costs – stating that current program constraints make following full development procedures for criterion-referenced tests unfeasible. If this is so, it can only be regarded as an important flaw in the project design.

[28] These are Standards for Educational Measurement established by the joint commission of the American Psychological Association, the American Educational Research Association and the National Council of Measurement in Education (APA/AERA/NCME)

[29] In fact, currently the Office of Management and Budget (OMB) of the US Federal Government does not permit publication of evaluation reports under the imprimatur of any federal agency without this critical datum, it is deemed so essential in the assessment of claims made on the basis of evaluations.

[30] If pre-program skills levels were validly assessed, not only would such assessment be useful for placement/diagnostic purposes, but it would be possible to more reliably generate estimates of the value of program services—since some students have surely entered at lower skill levels than their grade level schooling implies and others have entered with higher skill levels.

[31] The relevant research publications we have reviewed include Van Steenwyck's work on program dropouts and women's experience, as well as Mary Ellen Duke's very interesting field research on the program experience of girls and women.

[32] ET may indeed have been doing a good job of decreasing illiteracy in rural areas of Honduras, or perhaps in both rural and urban areas. But whether this is the case is now unclear. Whether the strategies used by some departmental coordinators or some promoters worked better than others is also an unknown. Whether some types of students served by the project did better than others would have been valuable input for efforts to fine-tune instructional design to improve equity. These opportunities have been lost.

[33] USAID can potentially play an important role in leveraging attention to quality instruction as a means to improve overall project cost-effectiveness and it is likely that it must assume such a role because, without such a focus, investments in basic education will not be able to make a substantive contribution to Honduras overall economic development and poverty reduction.

[34] It is not necessary to replicate these frameworks but it is necessary to consider them in developing a uniquely Honduran set of curriculum objectives for knowledge, information management skills, and development of the competencies needed to be a successful lifelong learner.

[35] Ideally graduating students might be given a choice among several kinds of books—to make the point that literacy includes thinking about what one wants to read and choosing the books which one likes.

[36] The answer to this problem represents a critical element in determining the policy relevance of assessments and thus lies at the very core of the use of assessments in educational policy and educational program evaluation.

[37] For convenience we use the terms curriculum validity and instructional validity as they provide distinctions useful to this exposition. However, they are more properly regarded as complementary facets of construct validity.

[38] A number of standard works are mentioned in Appendix B that will be helpful in determining appropriate technical options

[39] The International Association for the Evaluation of Educational Achievement (IEA) introduced the notion of Opportunity-To-Learn (OTL) in the 1960s as a means of ensuring the technical validity of their assessments. Initially, what was done is that teachers were requested to look at a copy of the items on the assessments, and report whether or not they had provided their students the instruction necessary to solve these items correctly. The simplicity of these early measures belies the enormous conceptual importance of OTL which has consistently proven to be an important explanatory variable when exploring leaning determinants. More recent work – cited in Appendix B – advances the original ideas of OTL under a new theory of the measurement of educational opportunities.

[40] To validate a test is to provide evidence that theory and empirical data support the inferences that the test designer proposes for the test. If a test is intended to be used so that scores can be interpreted as indicators of the level of mastery students have achieved over the content and skills that make up the goals of their schooling, professional standards as codified by the joint commission of APA/AERA/NCME require that test developers validate them for this purpose. Professional standards in this regard are presented in *Standards for Psychological and Educational Measurement* (1999 edition) – and the very best work concerning appropriate validation procedures is presented in a number of important works, cited in Appendix B.

[41] Ideally, "authentic" radio spots featuring successful students talking briefly about their experience would be a useful addition to the current campaign based on "professional" literacy promotion messages. Social marketing research shows that high-impact messages are those in which listeners can hear themselves and people they care about. We believe such a campaign would also affect potential financial donors and collaborating organizations.

[42] van Steenwyck, Ned, *Escuelas con Exitos: Los Resultados*, September, 1999