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UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D.C. 20523

HONDURAS

PROJECT PAPER

PRIMARY EDUCATION EFFICIENCY

AID/LAC/P-307

Loan Number: 522-V-054
Project Number: 522-0273

UNCLASSIFIED

AGENCY FOR INTERNATIONAL DEVELOPMENT
PROJECT DATA SHEET

1. TRANSACTION CODE: **A** (A = Add, C = Change, D = Delete) Amendment Number: _____ DOCUMENT CODE: **3**

COUNTRY/ENTITY: **HONDURAS**

3. PROJECT NUMBER: **522-0273**

4. BUREAU/OFFICE: **USAID/Honduras** **05** 5. PROJECT TITLE (maximum 40 characters): **Primary Education Efficiency**

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM DD YY **0 16 | 3 10 | 9 | 4**

7. ESTIMATED DATE OF OBLIGATION (Under "B" below, enter 1, 2, 3, or 4)
A. Initial FY **8 | 6** B. Quarter **4** C. Final FY **8 | 9**

8. COSTS (\$000 OR EQUIVALENT \$1 = L 2.00)

A. FUNDING SOURCE	FIRST FY			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total						
(Grant)	(1500)	(1500)	(3000)	(6547)	(15453)	(22000)
(Loan)	(150)	(450)	(600)	(475)	(5025)	(5500)
Other						
U.S.						
Host Country		2500	2500		12000	12000
Other Donor(s)						
TOTALS	1650	4450	6100	7022	32478	39500

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) EHR	624	636	634			3000	600	22000	5500
(2)									
(3)									
(4)									
TOTALS						3000	600	22000	5500

10. SECONDARY TECHNICAL CODES (maximum 8 codes of 3 positions each)
620 | 640 | 670 | 660

11. SECONDARY PURPOSE CODE
684

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code	BRW	BUW	R/ED	DEL	EQTY	PVON	TNG
B. Amount	(40,000,000)	(40,000,000)	5,000,000	5,000,000	(40,000,000)	5,500,000	11,000,000

13. PROJECT PURPOSE (maximum 480 characters)

To improve the efficiency, cost effectiveness and quality of primary education in Honduras.

14. SCHEDULED EVALUATIONS
Initial MM YY **0 7 | 8 | 9** | MM YY **0 | 7 | 9 | 2** Final MM YY **0 | 4 | 9 | 5**

15. SOURCE/ORIGIN OF GOODS AND SERVICES
 000 941 Local Other (Specify) _____

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment.)

17. APPROVED BY: **USAID/Honduras Mission Director**

Date Signed: MM DD YY _____

18. DATE DOCUMENT RECEIVED IN AID/W. OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY **0 9 | 1 1 | 3 1**

Project Authorization

Name of Country: Honduras
Name of the Project: Primary Education Efficiency
Number of the Project: 522-0273
Number of the Loan: 522-V-054

1. Pursuant to Section 105 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Primary Education Efficiency Project for Honduras involving planned obligations not to exceed Five Million Five Hundred Thousand United States Dollars (\$5,500,000) in loan funds, ("loan") and Twenty Two Million United States Dollars in grant funds ("Grant") over an eight-year period from the date of authorization, subject to the availability of funds in accordance with A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the Project ("Project").

2. The Project consists of technical, commodity and training assistance to the Government of Honduras, Ministry of Education (MOE) to improve the efficiency, cost effectiveness and quality of primary education in Honduras. The Project includes as components textbooks and teacher guides, teacher training, educational research, management information system, learning objectives and evaluation, school construction and educational media.

3. The Project Agreement, which may be negotiated and executed by the officer to whom such authority is delegated in accordance with A.I.D. Regulations and Delegations of Authority, shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate.

a. Interest Rate and Terms of Payment (Loan)

The Cooperating Country shall repay the loan to A.I.D. in U.S. Dollars within forty (40) years from the date of the first disbursement of the loan, including a grace period of not to exceed ten (10) years. The Cooperating Country shall pay to A.I.D. in U.S. Dollars interest from the date of first disbursement of the loan at the rate of (i) two percent (2%) per annum during the first ten (10) years; and (ii) three percent (3%) per annum thereafter, on the outstanding disbursed balance of the loan and on any due and unpaid interest accrued thereon.

b. Source and Origin of Goods and Services (Loan)

Commodities financed by A.I.D. under the Loan shall have their source and origin in the Cooperating Country or countries included in A.I.D. Geographic Code 941, except as A.I.D. may otherwise agree in writing. Except for ocean shipping, the suppliers of commodities or services shall have the Cooperating Country or countries included in A.I.D. Geographic Code 941 as their place of

nationality, except as A.I.D. may otherwise agree in writing. Ocean shipping financed by A.I.D. under the Loan shall, except as A.I.D. may otherwise agree in writing, be financed only on flag vessels of The United States.

c. Source and Origin of Goods and Services (Grant)

Commodities financed by A.I.D. under the Grant shall have their source and origin in the United States or in the Cooperating Country, except as A.I.D. may otherwise agree in writing. Except for ocean shipping, the suppliers of commodities or services shall have the Cooperating Country and the United States (A.I.D. Geographic Code 000) as their place of nationality, except as A.I.D. may otherwise agree in writing. Ocean shipping financed by A.I.D. under the Grant shall, except as A.I.D. may otherwise agree in writing, be financed only on flag vessels of the United States.

d. Conditions Precedent to Disbursement

(1) First Disbursement

Prior to any disbursement of the assistance, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Borrower/Grantee will, except as the Parties may otherwise agree to in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(i) An opinion of the Attorney General of the Republic or of counsel acceptable to A.I.D. that this Agreement has been duly authorized and/or ratified by, and executed on behalf of; the Borrower/Grantee and that it constitutes a valid and legally binding obligation of the Borrower/Grantee in accordance with all of its terms;

(ii) A statement of the name(s) of the person(s) holding or acting in the office of Borrower/Grantee specified in section 9.3, and a specimen signature of each person specified in such statement.

(2) Additional Disbursement

Prior to any disbursement of Grant funds, or to the issuance of any commitment documents under the Project Agreement for the Grant except for requirements under the textbook component, the Borrower/Grantee shall, except as the Parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D, a plan outlining Project targets to be reached for each MOE administered component by the end of the first year of implementation based on a Management by Objectives Conference attended by all key participants from the MOE and A.I.D.

Prior to any disbursement of the Loan funds or the issuance of any commitment documents under the Loan, the Borrower/Grantee shall, except as the Parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D.:

- (i) an in-service teacher training plan;
- (ii) a plan to integrate the capability of the construction, renovation and maintenance units into the existing MOE administrative structure;
- (iii) a signed agreement of cooperation between the MOE and the Honduran Private Sector Organization, AVANCE.

(4) Subsequent Disbursements: Prior to any disbursements after the first year of the Project, the Borrower/Grantee shall, except as the Parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D., evidence that the MOE has conducted a yearly Management by Objectives Conference to review the previous year's performance and develop the output targets for the following year's implementation plan.

e. Special Covenants

The Parties agree to establish an evaluation program as an integral part of the Project except as the Parties otherwise agree in writing, the program will include, during the implementation of the Project and at one or more points thereafter:

- (1) a baseline study of the conditions of Honduran primary education existing at the time of Project initiation;
- (2) evaluation of progress toward attainment of the objectives of the Project;
- (3) identification and evaluation of problem areas or constraints which may inhibit such attainment;
- (4) assesment of how such information may be used to overcome such problems in this or other Projects;
- (5) evaluation, to the degree feasible, of the overall development impact of the Project.

The Borrower/Grantee covenants that, unless otherwise agreed to in writing by the Parties that it will:

- (a) jointly decide with A.I.D. representatives to terminate Project components that consistently fail to reach planned targets;
- (b) retain a core staff of textbook authors, editors and curriculum specialist at the conclusion of A.I.D. financial support for the positions;

(c) utilize MOE budgetary resources to maintain a well-staffed and Functioning Management Information Unit; and

(d) retain a core staff of learning objectives and evaluation specialists at the conclusion of A.I.D. financial support for the position.


Anthony J. Cauterucci
Mission Director


Date

PROJECT PAPER

Primary Education Efficiency
522-0273

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I. Summary and Recommendations

A. Summary

The "Primary Education Efficiency" Project is designed to improve the efficiency and cost-effectiveness of the Honduran primary education system by upgrading the quality of instruction that is given in primary schools. The Project will also help expand the coverage of primary school services and will support administrative and policy reform in the Ministry of Education.

Primary school education in Honduras is costly and inefficient. Students characteristically fall into a pattern of academic failure, absenteeism, grade repetition, and dropping out of school. Of the students who enter primary school, only 30% finish. The rest fall by the wayside, perpetuating the high illiteracy rate and the poorly-prepared workforce. This inefficient school system represents a heavy and needless economic burden on the national budget. It is estimated that \$17 million is wasted each year as a direct result of unnecessarily high dropout and repetition rates.

The inefficiency of primary schooling has multiple causes, including poorly trained and motivated teachers; lack of a working relationship between the school and the local community; a confining and unstimulating school environment; irrelevant and uninteresting lesson material; lack of textbooks and instructional materials; and the lack of private sector interest and participation. While there are also other factors outside the school that can cause students to drop out, there is ample evidence that upgrading the quality of instruction in the schools will substantially improve the efficiency of the Honduran primary education system.

The "Primary Education Efficiency" project will have seven components, six in the Ministry of Education and one in the Honduran private sector, designed to make primary schools work more efficiently. First, a new series of Honduran primary school textbooks and teacher guides will be written, printed, and distributed. Second, a national in-service teacher training program will provide training to teachers and supervisors in community relations, the utilization of the new instructional services, and organization of school maintenance activities. Third, the project will finance an administrative and policy analysis program, providing a mechanism and funding resources for analyses and dialogue concerning administrative and policy reforms that could further improve primary education. Fourth, the project will reinforce and expand the computerized MOE Management Information System to improve the timeliness, accuracy, and access of critical statistical information for decision-makers. Fifth, a testing and evaluation program will provide uniform academic standards and evaluation instruments, providing a systematic yardstick for evaluating the performance of the national school system and encouraging teachers to teach the essential core material needed to pass more students on to the next grade.

Sixth, the project will provide resources, from the local currency special account, to support the continued expansion of the coverage of the primary education system. This component will provide funding through the counterpart budget for new school construction, renovation of old schools, and a school maintenance program over a three-year period.

Finally, an educational media component with AVANCE, a Honduran FVO, will support a number of important new media-based educational services to support and improve primary school teaching. These new services will be designed to evolve as the AVANCE and the schoolteachers gain experience with them, since they represent innovations in the context of Honduran public education. The new services will include an "interactive radio" program series in math and language skills for classroom use, series of feature articles and color posters for teachers and classrooms in the national newspaper El Agricultor, and experiments with low-cost print media and other new instructional technologies.

The project is planned to last eight years, with an AID contribution of \$27.5 million. Consistent with overall Jackson Plan objectives, the project is designed to begin to produce measurable impact in as short a time as possible. However, it is also designed to produce significant, permanent, long-term improvement in the functioning of education in Honduras and in the productivity and quality-of-life of the Honduran population. The textbooks will become available to the country's 294,000 first graders (where the repetition, failure, and dropout problems are most acute) during the second year of the project. The full package of textbooks, teacher guides and teacher training services will be available to all 997,000 primary school students and 40,000 teachers in grades 1 to 6 by 1991. All the teachers, school principals, and school superintendents will have received both intensive workshop training and continuing education services to upgrade their teaching techniques and approach to community relations. Radio and testing activities will have been utilized by over half the students and teachers by this time. Substantial improvements in academic achievement, retention rates, and unit costs will be measurable as the initial class of first graders completes its first school year using the new instructional services. Improvements in the overall efficiency of the primary system will become evident as students progress through six grades. It is estimated that students completing sixth grade will increase from 28% now to 45% by 1994. This total improvement in the efficiency of primary education during the project will result in savings of \$8,500,000 per year to the system. Approximately 15,000 less children will drop out and 17,000 less will have to repeat each year, compared with present levels. Learning, as measured by academic achievement test scores, will increase significantly each year. Improved efficiency and reduced unit costs will enable the Ministry of Education to finance instructional materials, increased field supervision, and expansion of the infrastructure and human resources of the primary school system more economically than otherwise would be the case.

In the long run, the payoff of this project is increased productivity and improved quality of life for the Honduran population. Experience world-wide has demonstrated conclusively that upgrading primary education results in greater agricultural productivity, increased family income, and improved health and nutritional status. Vocational, secondary, and higher education programs will be more successful because entering students will have an adequate foundation of literacy and numeracy skills, and democratic institutions will have a better chance of becoming stable and mature since the next generation of Honduran citizens will have the basic knowledge and skills needed for informed participation in democratic processes.

B. Recommendation

The proposed project fully supports GOH, Jackson Plan, and USAID education strategies. This new approach to addressing the problems of quality and efficiency in primary education not only will provide improvements to the Honduran educational system and the Honduran economy, but will also serve as a model for future educational efforts in other A.I.D. countries. Based on the conceptual and technical analyses, the Mission believes this effort is sound. Accordingly, the Mission recommends that the PP be approved.

C. PP Development Team

1. The USAID/Honduras PP development team consisted of:

Edward Landau (Chair)	Office of Development Finance
Richard Martin	Office of Human Resources Development
Marco Tulio Mejia	Office of Education and Human Resources
Mary Ott	USAID/Guatemala
Henry Reynolds	Office of Education and Human Resources
Randall Peterson	Office of Economic Policy Analysis

2. The Ministry of Education project design team included:

Lic. Luis Barahona Donaire	Vice Minister for Technical Affairs
Cristobal Rodriguez	Coordinator & MIS Director
Prof. Ricardo Ruben Valdez	Chief, Pedagogy Section
Lic. Lesly Castejon	Coordinator, Curriculum Development

3. The PP was reviewed by the Mission Project Review Committee consisting of:

Carl H. Leonard	Deputy Mission Director
Phil Amos	Mission Controller
Eugene Szepesey	Office of Development Programs
William Kaschak	Office of Development Finance
Kenneth L. Martin	Office of Human Resource Development
Jerome R. Lapittus	Office of Economic Policy Analysis

3. The PP was approved by:

Anthony J. Cauterucci	Mission Director
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II. Background

A. Honduran Economic and Social Status

Honduras, while remaining the poorest country in Central America with 1985 per capita gross domestic product estimated at \$769, has evidenced some improvement in economic performance with a 3.0% increase in real GDP in 1985 following 2.8% increase in 1984. Real GDP growth for 1986 is projected to be between 3.5% and 4.0%. The modest 3.0% increase in real GDP for 1985 falls short of the 3.0% annual increase in population and 3.5% to 3.8% annual

expansion of the Honduran labor force. During the 1985 to 1990 period, an additional 300,000 workers are projected to enter the Honduran labor force. The outlook for continued economic growth in 1986-7 is quite bright due to recent favorable trends in world prices for coffee, one of Honduras' principal exports, and petroleum. However, unless Honduras takes steps now to substantially enhance export competitiveness, midterm prospects to the Honduran economy will deteriorate with the retrenchment of coffee sales. This improvement follows a growth rate performance which stagnated and declined during the 1980 to 1983 period, resulting in a 14% decline in real per capita income. Even with the 1984 and 1985 improvements, very serious economic problems remain. In 1984, unemployment was estimated to be 25%, large fiscal and balance of payments deficits remained, and debt service payments represented an estimated 27% of export earnings.

Contributing to the slow economic growth is the fact that the human resource base is weak and infrastructure (e.g. transportation and communications) and public services (e.g., primary education) are inadequate to support rapid development. Rapid population growth is jeopardizing the development potential and future of the country. Private sector organizations are weak, with deficient mid-management skills and a lack of an established entrepreneurial mentality. Factors that have traditionally inhibited the strengthening of the human resource base are low quality of primary education, the lack of vocational and technical training, and restricted availability of health and family planning services.

Despite its poverty, Honduras has been extending and expanding basic economic and social opportunities for its people. Since 1960, the literacy rate has increased from 45% to 60%; life expectancy has risen from 46 to 60 years; infant mortality has fallen from 150 to 71 per thousand; immunization coverage has risen to close to 75% of those under the age of one; and primary school enrollment has increased from 37% to 85%. In addition, Honduras has had an agrarian reform law since 1962 which gave rise to formalized peasant organizations, thereby providing channels of communication between these organizations and the GOH. In addition, there are prospects for further economic and social progress based upon investments already made in infrastructure and in the productive and social sectors.

One such sector is education. Education services have expanded as the population of the country grows. However, the Honduran education sector suffers from several major problems, which include the poor quality of primary education, institutional and administrative weakness, a high illiteracy rate, lack of community and private sector participation and interest, and persistent shortages of trained professionals. The need to improve primary education is revealed by the fact that only 28% of the children entering primary school are able to complete the sixth grade, although an estimated 85% of Honduran primary school children have access to school. Because of high dropout and repetition rates, the system must deliver, and pay for, eleven student years of schooling to produce a single sixth grade graduate. The unnecessary recurrent and human costs of such an inefficient system are enormous. With respect to adult education and literacy, 40% of the Honduran population has never attended school and is completely illiterate. Only 27% of the population over age 10 has completed the fourth grade, and only 17% has

completed the sixth grade. Levels of literacy and educational attainment are even lower in rural areas. In higher education, the country has only one major university, and the quality of instruction offered by most departments at the university is very low.

B. Importance of Primary Education In Development.

Evidence from many sources, including a recent series of staff papers prepared for the World Bank World Development Report 1980 and a series of A.I.D. impact studies, strongly supports investment in basic education as an essential component of all long-term development strategies. Recent research has revealed the following:

- Primary education has social and private rates of return higher than most alternative investments, in the range of 20 to 26 percent. These rate of return calculations have been confirmed by scores of studies in both developed and developing countries over the past twenty years.
- The effectiveness of rural development programs appears to be directly related to the spread of basic education in rural areas. For example, a review of 20 independent studies on the relationship between education and agricultural productivity concluded that the productivity of farmers with at least four years of primary education was, on average, about 7 percent higher than that of farmers with no formal education even after controlling for factors such as the size of land ownership. The difference was even greater, about 13 percent, when other productivity factors such as credit, insecticides and improved seeds were present.
- The literature on the relation of education and health consistently identifies adult literacy as one of the most significant factors explaining differences among countries in infant and child mortality and in longevity. In most cases, literacy appears to be a more significant factor than income levels or the distribution of income. Most health-related behaviors (e.g. the use of health services, food allocation, water usage and sanitation, use of oral rehydration therapy, etc.) appear to be effected positively by the education levels of the household, particularly of mothers.
- The research evidence on the relation of education and fertility shows that improvements in basic education levels are essential to long-term declines in fertility. The factor most consistently associated with long-term declines in fertility is the education of girls.
- A comparison among 86 developing countries concluded that adult literacy rates are more strongly correlated with per capita income levels than any other indicator. Low adult literacy rates were considered to be largely the result of low-efficiency investments in primary schooling.

III. Program Factors

A. Conformity with Recipient Country Policy-Strategy

The Government of Honduras, historically, has been concerned with

primary education. In the past, this concern has been manifested in efforts to expand access to primary education by building schools. While maintaining emphasis on quantitative measures, the Ministry of Education, with support from A.I.D., has embarked on qualitative activities such as instituting teacher training courses, implementing a community-based school maintenance program and designing a management information system. However, the persistently high drop out, repetition and absenteeism rates have convinced the GOH that additional effort must be made to strengthen the quality of instruction, reducing repetition and dropout rates and reduce the waste of resources that currently characterizes the system.

The Government of Honduras recognizes these deficiencies and has stated its objective of improving efficiency through innovative strategies and activities. The Ministry of Education in its five year plan, "Policies and Strategies for National Education Development (1982-1986)," identifies objectives and policies consistent with the quality-of-instruction approach that characterizes the Primary Education Efficiency Project. This policy has been reinforced by the recently-released GOH National Development Strategy (1986-1990), which includes programs to enhance teachers' capabilities; research and experimentation to seek out new and better teaching and learning methodologies; increasing and improving physical installations; equipment and furniture; didactic material; and bringing together the family, the community and the state in the education process. The new President and Minister of Education have clearly stated their interest in actively involving the private sector in educational activities. Speaking more specifically to primary education, the MOE plans to: (1) give preferential treatment to actions geared to reducing the dropout rate, increasing the number of students passing and improving the quality of education; (2) provide textbooks, adapted to the national reality, to all primary age students; (3) revise, adapt and orient the curriculum to productive activities; (4) continue the program of school maintenance; and (5) make necessary administrative reforms to improve MOE performance. These stated objectives indicate a willingness on the part of the Government to move rapidly to more efficient, quality interventions. Furthermore, they clearly represent a set of shared priorities with AID policy in the education sector.

B. Relationship to A.I.D. Strategy

1. A.I.D. Policy

A.I.D. education policy for primary education stresses efficiency and distribution (access), and ties directly with improving the productivity potential of human resources.

According to A.I.D. Policy Paper on Basic Education and Technical Training dated December, 1982, "Unless considerable progress can be made in improving the efficiency of primary schooling...the goals of enabling most people to obtain at least a basic education and of meeting market demands will remain unattainable for many LDCs." It further states that, "Increasing the output from current education investments should receive highest priority in A.I.D.'s program strategies directed at improvements in the basic education system..." Since investment in education by LDCs (including Honduras) and

attempts to expand access are wasted as a result of academic failure, grade repetition and drop out, A.I.D. should give first priority to improving retention, promotion and other efficiency measures. Some of the areas that directly influence on efficiency and cost-effectiveness include the appropriateness and effectiveness of educational approaches and the availability of instructional materials and qualified, well-trained teachers. Other key impact areas include the relevance of the curriculum to the personal background and motivation of learners, the quality and capacity of schoolrooms, the perception on the part of parents of the worthiness and benefits of school, administrative practices within the school system including community participation, and the use of cost effective technologies such as radio and other media.

2. Central American Initiative

The Central American Initiative, as elaborated by the National Bipartisan Commission on Central America recommendations, stresses spreading the benefits of economic growth broadly and enhancing economic growth. The Commission identifies education as a prime facilitator for both goals. The Commission recommendations mirror those expressed in the A.I.D. policy guidelines. The Commission's observations and recommended targets include: (1) universal access to primary education; (2) upgrading the quality and content of education to make it relevant to the practical needs of students, i.e., better trained and motivated teachers, more adequate physical facilities, adequate number of textbooks, teachers' guides and basic educational materials; (3) educational reform; (4) institution building oriented toward increasing quality and broadening the availability of formal educational programs; (5) improving vocational/technical training; (6) emphasizing adult education and literacy; and (7) priority to nutritional programs. The NBCCA objectives are broad, but they are consistent with the objectives and approach of the Primary Education Efficiency Project.

3. Mission Strategy/Action Plan

The Mission strategy in the education sector is designed to respond directly to the recommendations of the Central American Initiative, as well as incorporate the more specific interventions expressed in the A.I.D. policy guidelines. In this regard, the Mission has elaborated an educational sector objective to increase the proportion of primary school students completing the sixth grade from 28 percent in 1984 to 45 percent in 1996, while reducing costs from \$963 per graduate to \$675 per graduate. The largest components of our program will emphasize efficiency of the primary education system and qualitative improvements in instruction. The major benchmarks outlined in the FY88 Action Plan to be met in 1996 include increasing academic achievement from 45% of minimal learning objectives being learned to 85% learned, increasing promotion rates from 54% in the first grade to 79% with relative increases in the other grades, reducing first grade repetition from 27% to 11% and dropout rates from 19% to 12%, and reducing the student years to graduate from 11 to 7.9. The Mission hopes to maintain the net primary enrollment ratio in the range of 86% to 90%.

In the policy realm, the objective of the project will be to reinforce and consolidate GOH commitments to the improvement of instructional quality and the internal efficiency of the system. The project will create a permanent mechanism for long-range studies of policy and administrative alternatives in public education. It will attempt to transfer two promising technologies -- standardized testing and educational radio -- that have not previously been used in Honduras. It will significantly enhance the institutional capability of three important departments of the Ministry of Education. It will provide for an innovative partnership between the public education system and the Honduran private sector. The components of this project are designed to directly and significantly contribute to the achievement of the objectives in the Mission Action Plan in the education sector.

4. Impact

The key objective of the Mission is to design efforts that have short-term impacts, while maintaining the integrity of long-term change and gains. Education projects normally take several years before significant outputs are achieved and positive results measured.

A program to improve instructional quality will produce both short and long term benefits. To maximize short-term benefits, the Mission will implement the project by school years. Textbooks and teacher training will be initiated full-scale for the first grade during the second year of the project, while outputs will be provided for the other grades sequentially over the succeeding years. With this approach, the first grade, which contains the most students and where the problems of inefficiency are worst, will show improvement early in the project.

This process will continue over the eight year life of project. The relatively long-term project life is required to sustain the advances gained. It is believed that, by sustaining the new system, the new instructional techniques and technology will be internalized by providers and recipients of education and will be carried on for the benefit of the Honduran educational system for years to come.

C. Relationship to Other Donor Programs

A number of international donors have provided assistance to the MOE over the years in the area of primary education. However, few efforts remain active. CARE continues to target nutritional deficiencies through channelling milk and other basic foodstuffs to pre-primary and primary schools. Over one-third of all primary school children in Honduras are receiving food supplements through this program. Through the years, the World Bank has financed construction of 1,400 schoolrooms, teacher training and technical assistance to in-service teacher training programs. UNICEF and the Swiss

Government have provided materials, tools and equipment to frontier schools. The OAS has researched gains in student achievement and has provided in-service training for teachers in low-income urban areas, and didactic materials.

In the future, the World Bank hopes to conduct an educational mapping project, but does not plan to initiate other activities for at least three years. IDB representatives have said that they would like to support A.I.D. efforts in textbook printing and in-service teacher training. They also plan to invest in secondary education and adult literacy. The Mission will coordinate efforts with the IDB, particularly regarding a second printing of textbooks and additional teacher training requirements when their plans are elaborated more specifically.

IV. PROJECT DESCRIPTION

A. THE PROBLEM

1. Primary Education in Honduras

The primary education system in Honduras functions inefficiently. Absenteeism, failure, repetition, and dropout rates are extremely high, especially in the lower grades and in rural schools. While official statistics show that the physical coverage of the system provides access to schools for 86% of school age children, little effective learning takes place in the schools. Of a total national primary school enrollment of 703,608 in 1983, 98,505 children dropped out of school and 112,577 failed and had to repeat the year. The system operates at its worst at the first grade level, where only half of entering first graders pass on to the second grade. 1983 promotion, repetition, and dropout rates are summarized in Table 1.

TABLE 1

1983 PRIMARY EDUCATION EFFICIENCY INDICATORS

(Source: Ministry of Education)

	<u>G R A D E</u>					
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
Repetition	29%	18%	15%	10%	7%	3%
Dropout	22%	15%	16%	14%	9%	---
Total that don't pass	51%	33%	31%	24%	16%	3%

Because of the high dropout rates, only a minority of students finish primary school. Of 100 children who enter primary school nationally, 28 finish the sixth grade. Of 100 who enter primary school in rural areas, only 19 finish.

Because of high repetition and dropout rates, the recurrent costs of producing educated children are far higher than necessary. The total budget for primary education was 116 million Lempiras in 1983. Of this, it is estimated that as much as 17 million Lempiras per year are wasted by the primary school system because of the unnecessarily high dropout rate. Another 19 million Lempiras per year are wasted because of excessively high grade repetition, for a total of 34 million Lempiras wasted per year.

Instruction in the primary schools is characterized by poorly-motivated and indifferent teachers and lack of books and materials. Teachers spend little time teaching, often arriving late and spending large amounts of time outside the classroom. They often do not fully understand the curriculum or the subject matter themselves, nor do they try to present material in practical, relevant, interesting, or entertaining ways. Only 23% of classrooms have textbooks of any kind, so students must learn from whatever the teacher is able to write on the blackboard. Classrooms are usually crowded, with one teacher having to teach fifty to eighty students, sometimes with all six grades in one classroom. The teacher receives little support, encouragement, or supervision either from the local community or from the Ministry of Education.

As a consequence, the learning experience for children is often irrelevant, tedious, and frustrating. The teacher plods through his lesson plan mechanically. The classroom is dreary and confining. In this unproductive environment, students drift away from school. Attendance drops off as the school year progresses. Many students attend only sporadically. Even students who do attend may comprehend and learn little of what is presented. Eventually, parents conclude that little of value is taking place in school, and become indifferent concerning their children's attendance. Students who do not attend and students who do not learn what is taught receive failing grades. Repeated academic failure and grade repetition reinforces the sense of futility and discouragement on the part of parents and students. Eventually, the pattern of academic failure and grade repetition leads the student to drop out for good.

The weakness of primary school instruction and the resulting low levels of academic achievement were revealed in the course of a field experiment with standardized academic achievement testing that was undertaken during the design of this Project. Eight hundred second and fourth graders were tested in four subjects at the end of the 1985 school year. Test items were based on minimum learning objectives derived from the official curriculum. While the tests were experimental in nature and the sample was not necessarily representative of the entire primary school population, the preliminary results were striking. The results summarized in Table 2 represent average test scores, expressed as the percentage of items answered correctly. Since items were based on "minimum competencies" -- concepts that are considered essential and which must be mastered if a student is to pass

the subject -- these end-of-year scores should, if instruction were adequate, approach 100% for each test. Table 2 shows that instruction in the primary schools is falling far short of providing even the minimum knowledge needed by students to pass their courses and progress through the system.

TABLE 2
ACADEMIC ACHIEVEMENT
(PERCENT OF MINIMUM LEARNING OBJECTIVES MASTERED)

<u>GRADE TWO</u>	<u>URBAN</u>	<u>RURAL</u>
Math	32%	39%
Spanish	70%	53%
Social Studies	62%	57%
Natural Science	75%	48%

<u>GRADE FOUR</u>		
Math	43%	39%
Spanish	46%	44%
Social Studies	51%	44%
Natural Science	60%	51%

The lack of an effective working relationship between the school and the community is another constraint to efficient primary education. The extremely centralized administrative structure of public education in Honduras does not provide mechanisms or incentives for there to be functional linkages between the school staff and the community. Teachers are not expected or motivated to be responsive to the special circumstances or interests of the communities in which they teach. Communities do not have influence or control over resources that could make the school accountable to them or responsive to their concerns. There is no tradition of parental interest, participation, or activism in support of education. If teachers are not conscientious, parents feel there is little they can do besides withdrawing their children from school.

Another important constraint to effective and efficient primary education has been the lack of interest on the part of the private sector. Honduran businesses, to be productive and competitive, need employees with adequate language, writing and math skills. Since only a small minority of Honduran young people graduate from primary school, even rudimentary literacy and numeracy skills are lacking in the majority of young people entering the work force. Productivity suffers as new employees take longer to learn basic job requirements or fail to grow in their work. The inability to find qualified or trainable employees has been a persistent problem for the Honduran private sector and has inhibited local and international investment. However, the private sector, while aware of the constraints imposed by deficient human resources, has not had opportunities to become actively involved in improving the educational system of the country. The highly

centralized and paternalistic education system of Honduras has, in effect, excluded the business sector and local communities, which urgently need educated and trainable people, from supporting the improvement of education. This project will offer that opportunity.

It must be recognized that there are factors external to the school that can cause absenteeism, academic failure, grade repetition, and dropping out. The need to make use of children's services on the farm, malnutrition, the hidden costs of education such as school supplies and clothing, and frequent migration from place to place are other causes. However, it is clear that deficient instruction is a serious problem which directly causes massive academic failure, repetition, and dropping out of school. Of the different factors producing inefficiency and waste in the primary schools, instructional quality is the one that can be directly addressed through development assistance.

B. Goal and Purpose

The Project Goal is to improve the productivity and quality of life of the Honduran people. Indicators of goal achievement will include GNP growth, real income increases in the rural areas, improved productivity, and better health and population practices. The Project Purpose is to improve the efficiency, cost-effectiveness, and quality of primary education in Honduras. Indicators of purpose achievement will include growth in student achievement scores; reduced desertion, repetition and absenteeism rates; and a drop in the unit costs to produce a sixth grade graduate. The purpose and goal are linked by a series of assumptions. These include: (1) continued political stability and democracy in Honduras; (2) continued allocation of significant GOH resources for education; (3) the ability of the private sector to absorb greater numbers of educated people; and (4) support from families to maintain children in school for longer periods.

C. Project Components, Outputs and Indicators

1. Overall Project Orientation

The project represents a balanced approach to the improvement of primary education in Honduras. The effort incorporates activities which will result in positive short-term effects with long-term benefits. The components of the project are: (1) textbooks and teacher guides, (2) in-service teacher training, (3) education research, (4) improvement of the computerized Management Information System, (5) development of learning objectives and an evaluation program, (6) school construction, maintenance, and renovation, and (7) a private sector educational media activity. The rationale for the overall project design is presented in this section. In the following section, specific project activities are described in detail. The design of the project is premised on six basic premises.

One, improving the efficiency and cost-effectiveness of primary school education should take precedence over the quantitative expansion of the primary school system. While expansion of physical infrastructure is necessary and politically popular, it is difficult

at present to justify the continued rapid expansion of a service that is both excessively expensive to run and ineffective in its results. Reduction in costly dropout and repetition rates can cut the unit costs associated with educating primary school children, significantly reducing the expense of maintaining and expanding the primary school system in the future.

Two, internal and external efficiency of the Honduran primary school network can be improved to acceptable levels by modernizing and upgrading the existing school system. Radical reform of primary education, such as developing a new curriculum or reorganizing the administrative and supervisory structure of the system, is neither necessary nor feasible.

Three, the teacher and the community (especially the parents) are the two essential elements in an efficient primary school system. The role of the central Ministry of Education is to supply support services to make it possible for the teacher to be responsive to the needs of the community. An essential function of the teacher should be to interact with the local community, adapting educational services to its needs and harnessing the resources and support that it can offer. Similarly, a functional relationship between the public education system and the private business sector can, if permitted to happen, be mutually beneficial.

Four, improving primary education will require a serious, long-term commitment, both on the part of A.I.D. and the Government of Honduras. The problems of primary education are complex and deeply rooted, perpetrated by political and economic conditions, exacerbated by rapid population growth, and reinforced by pervasive cultural values and practices. The proposed project, though long and large by A.I.D. education project standards, does not represent a full solution. Active commitment of the Government of Honduras and the collaboration of other international donors over at least a 20 year period will be needed to create a primary education system that approaches the academic and cost/effectiveness standards required for a modernizing economy and a secure political democracy.

Five, primary education in Honduras should receive higher priority and greater resources than it presently does. In spite of economic austerity measures, the Government of Honduras will be required to maintain current funding levels and, in some areas, support the expanded and improved primary education services that will be financed by this project.

Six, project components were selected which do not require inordinate amounts of time to develop and implement, and which promise to produce substantial and measurable improvements in primary education within a year of their implementation in schools.

2. Project Design

The Project will use a decentralized approach to implementation within the Ministry of Education. The responsible MOE office will manage each component with the corresponding directorate having administrative control and decision-making authority. A committee made of directorate chiefs will convene periodically to assure coordination of activities.

The project will integrate this decentralized administrative design with a Management By Objectives (MBO) implementation and obligation approach. Well-defined and tightly-monitored yearly targets will form the basis from which determinations will be made on funding obligations, possible reprogramming of activities, and possible component-specific or project deobligation. The Project will use this tool to enhance the institutional capability of the MOE.

COMPONENT I: TEXTBOOKS

1. Rationale and Background

According to education research literature, access to textbooks is the factor that is most consistently found to be positively related to academic achievement in primary education. Furthermore, the research literature consistently shows that the more deprived the school environment, the greater the positive impact of textbooks.

In recent years, the Honduran Ministry of Education has not been able to meet the demand for primary school textbooks. A survey of Honduran primary schools performed in 1985 showed that only 23% of rural school classrooms have any textbooks at all. The Honduran National Series -- the "ODECA-ROCAP Books" -- has been in use since 1965 in Honduran primary schools. This series is generally regarded as in need of replacement, since many of the books are viewed by teachers as pedagogically-obsolete, difficult-to-use, unattractive, and lacking in Honduran content and images.

2. Activities and Outputs

This component has two primary objectives. The first is to write, print and distribute, a new national series of textbooks, teacher guides, and complementary instructional materials. The second is to improve the capacity of the Ministry of Education to write and revise textbooks, manage textbook logistics, and deal collaboratively with the Honduran private sector. It is planned that new textbooks will be in the hands of all children in the first through third grades by 1989, and that all primary school students in the country will have textbooks by 1991.

The Textbook component of the Project will have three activities: (a) writing of textbooks and teacher guides, (b) strengthening the MOE textbook unit, and (c) printing and distributing textbooks to all Honduran primary school students.

a. Writing of Textbooks and Teacher Guides

To write and field test the new books, the Ministry of Education will organize writing committees for each of the four major subject areas (math, language arts, social science and natural science). Each committee will be made up of five members -- one content area specialist, two teachers with practical teaching experience and up-to-date knowledge of teaching methods, one teacher with textbook writing experience, and one curriculum expert. Also, an overall advisory committee will be organized to guide textbook development with an evaluation specialist, a specialist in the design and writing of school textbooks, an education psychologist, a primary education specialist, and a logistics and distribution specialist.

The committee members will be selected competitively according to their professional qualifications, and will be contracted full-time through 1991. All members of each committee will agree to forswear all rights to royalties under this project. The books will be the property of the Ministry of Education. No individuals in the Ministry will be allowed to claim royalty rights.

Prior to drafting the textbooks drafting, the committees will each have a month of intensive training covering technical aspects related to the design and production of school texts. Following this training period, two months will be spent in developing a master plan for the contents of the textbook series covering all six grades. To develop the master plan, it will be necessary to first define the basic learning objectives in each subject area. The definition of the comprehensive set of learning objectives will be accomplished under Component V. of the Project, "Learning Objectives and Evaluation," with the participation of all members of the four textbook writing teams.

Since each writing committee will draft a complete series of textbooks and teacher guides in its subject area for grades one through six, it will be important to try to maintain the integrity of the committees during the four years of textbook drafting.

The committees will draft the textbooks by chapters. After consensus is reached within a writing committee concerning each chapter, the chapters will be sent in draft to approximately 30 classrooms, 10 urban and 20 rural, in 2 different parts of the country, for field testing. The chapters will be used by teachers in the test schools during the early part of the week. The data collectors and evaluators will observe the use of these chapters and will survey teachers regarding how they can be improved. In this formative evaluation loop, the feedback generated from the observations and surveys will dictate the revisions required for the chapter. Revisions and modifications will be incorporated by the writing committees later in the same week, while the formative evaluation feedback information is still fresh.

Upon completing each new textbook and accompanying teachers guide, an MOE textbook review committee, chaired by the Minister of Education, will have one month to suggest any changes it wishes made to the texts. After that review, the books will be prepared for printing.

A related activity which will be accomplished jointly by Component I (Textbooks) and Component VII (Educational Media) is the preparation, publication, and distribution of supplementary teaching materials. This will primarily involve preparation of materials -- colored posters, special exercises, and articles for young readers -- in the national newspaper El Agricultor for use in the primary school classroom. The learning materials will, for the most part, be thought up by the textbook writing teams and implemented by the Component VII newspaper team. Other learning materials may be proposed and implemented on an experimental basis to complement the textbooks. Materials such as maps and creative materials may be proposed by the textbook development groups for experimentation and possible large-scale implementation in the second phase of the project.

b. Strengthening MOE Textbook Unit's Capability

The primary function of this activity is to provide a massive infusion of new textbooks to all primary public school students in Honduras. This will be accomplished in such a way that the Ministry of Education will enhance its capability to produce and distribute textbooks in the future. The project will contribute to the permanent capability of the Ministry's Department of Learning Resources to write modern textbooks; to effectively field test and revise books; to negotiate printing and distribution contracts with the Honduran private sector; to manage the logistics of printing, packaging, routing, shipping, storage, delivery and inventory; and to assist in training teachers to use the new textbooks, teacher guides, and other teaching materials.

Specifically, the Project will strengthen the MOE Department of Learning Resources in four ways:

- (1) A management information system will be developed, consisting of an inexpensive microcomputer system with appropriate software for tracking the ordering, production, shipment, and receipt of textbooks throughout the country. The system will also serve as an accounting system for the Department's budget. Permanent staff will be trained in the use of the management information system.
- (2) The Department of Learning Resources will gain experience in private sector procurement of printing and shipping services. The Department will also gain experience in massive scale book production and distribution, which may help it find new ways to achieve economies of scale in future procurements.
- (3) The staff and physical resources of the Department of Learning Resources will be upgraded and expanded. Improvement in the office environment of the Department, some minor renovation of its warehouse, and addition of several key staff functions will significantly strengthen and modernize the unit without overwhelming its budget.
- (4) The Department's ability to supervise field activities and delivery of books and materials in the future will be improved by the provision of several utility vehicles.

c. Printing and Distribution of Primary School Textbooks and Teacher Guides

The project-financed textbook printing will be done in Honduras. Using private sector contractors in addition to GOH printing facilities is consistent with Mission policy and will make it possible to produce all the required books in a short time. The justification for local cost financing for procurement of textbooks only in Honduras is attached in Annex J.

Successful accomplishment of the textbook production activity will require development or improvement of five different MOE supporting services: (1) a storage and staging point, (2) a capability to sort and assemble the 24 different titles into the right-sized packages for all of the schools in the country, (3) a computerized data processing system to maintain inventory records and coordinate distribution of books, (4) a distribution system, and (5) a public information system.

The storage and staging point for the project will be a large warehouse in Tegucigalpa owned by the Ministry of Education. This warehouse will require only minor upgrading to fully meet the needs of the project. It is sufficiently large, secure, and dry for to sort and store the project-financed textbooks and it is conveniently located.

The MOE Department of Learning Resources will create the capability to sort and assemble book packages for schools at the project warehouse. The project will finance the hiring and training of a team of 8 assemblers and packers. Books will be delivered from the printer to the warehouse, inventoried, re-packed into boxes for shipment to schools, labeled, and loaded onto trucks for delivery.

Project-financed technical assistance will help develop a computerized inventory system. To a large extent, the inventory system will function as a component of the MOE's Management Information System supplied by AID's Rural Primary Education project (522-0167). Two microcomputers, one in the warehouse and one in the Department of Learning Resources, will be supplied and installed. The project will develop or adapt commercially-available software for an inventory system modeled after the one developed and used successfully under the previous AID textbook project, which ended in 1974. The technical experts will design the new hardware and software, to be fully compatible with the MOE's Management Information System, with which it will be interconnected. Staff of the Departamento de Recursos de Aprendizaje will be trained in the operation of the system.

The MOE Department of Learning Resources will manage the distribution system for textbooks and teacher guides. Books will be processed and dispatched to schools continuously throughout the project.

At the project warehouse, workers will package and label the books for individual schools, supply the information to the inventory data base, and deliver the packages. The private sector will provide

transportation services for the nationwide distribution of textbooks, either through a contract with established trucking companies or independent truckers. Truckers will make deliveries, in most cases, directly from the warehouse in Tegucigalpa to the offices of the district supervisors near the schools. There are 181 district supervisors throughout the country, and their offices are easily accessible to the primary schools which they supervise. The district supervisors will receive shipments and then will contact the primary school directors within their jurisdictions. It will be the responsibility of the school directors to mobilize teachers and local community resources to assure the transfer of books from the district supervisor to the schools. In urban areas, deliveries will be made directly to schools when convenient in order to eliminate the need for a final pickup from the district supervisor.

A public information program will be a part of the textbook production and delivery program. It will (1) insure that local communities know when and where their books are available for pickup, (2) make teachers aware of the textbook program, radio and the teacher orientation activities, and (3) make parents and the general public more aware of the importance of reading and of the need to motivate their children to attend school regularly and to make good use of the textbooks. Project funding will be available for radio announcements and a poster campaign announcing the textbook distribution and promoting the importance of reading. The public information campaign will be implemented under Component VII, Educational Media, by AVANCE.

The detailed schedule for textbook development, printing, and distribution will be adjusted on a yearly basis as the project progresses. Sufficient books and teacher guides for all teachers and students projected to be in the primary school system in 1991 will be produced. All students will have four books -- math, language, natural science, and social science -- in all six grades in 1991. A total of 24 new textbook titles (four subjects for six grades) will be written. Likewise, each teacher will receive a set of four teacher guides, one for each of the four subject areas. Teachers who are responsible for teaching more than one grade will receive a four-book set for each grade they teach. A total of 24 new teacher guides will be written. Teacher guides will include model standardized tests, developed under Component V of the Project, "Learning Objectives and Evaluation." Four model tests for administration at different points during the school year will be included in each teacher guide -- a total of 96 different model tests. Each model test will include instructions for the teacher and national performance norms for the test so that teachers can compare individual students or their whole class to national standards, if they desire. Use of the model exams will be at the discretion of the teacher. Projected quantities of textbooks and teacher guides are shown in the following table:

TABLE 3

Textbook and Teacher Guide Production Based on

Projected 1991 Enrollment

<u>GRADE</u>	<u>STUDENTS</u>	<u>TEACHERS</u>	<u>TEXTBOOKS</u>	<u>TEACHER GUIDES</u>	<u>TOTAL BOOKS</u>
1	294,000	8,205	1,176,000	32,820	1,208,820
2	214,000	7,346	856,000	29,384	885,384
3	167,000	7,261	668,000	29,004	697,044
4	131,000	6,362	524,000	25,448	549,448
5	100,000	5,376	400,000	21,504	421,504
6	<u>91,000</u>	<u>4,742</u>	<u>364,000</u>	<u>18,968</u>	<u>382,968</u>
TOTALS	997,000	39,292	3,988,000	157,168	4,145,168

3. Inputs

a. Local Staff Salaries and Administrative Costs

As mentioned above, the project will organize and finance four teams to draft the textbooks and teacher guides. A component coordinator will be appointed to assure that relations with other units in the MOE are maintained and keep the pace of implementation on schedule. The committees will be supported by administrative staff, including five secretaries, one clerk and an administrative assistant. These appointments initially will all be Project funded for a period of five years.

b. Commodities

The project will finance provision of four word processors to facilitate drafting and revising books and teacher guides. A supply of paper and writing tools for the book writing teams will be made available. The project will provide two vehicles to enable the field data collectors and evaluators to travel to field test sites twice a week during the four-year book development period.

c. Technical Assistance and Training

Technical assistance will be provided to support development of the style and format of the books. Outside technical assistance will not be required to define content of the books. Two person-months of short-term technical assistance in the production and evaluation of textbooks will be provided per year during the first four years of the project. During the first month of the project there will be an intensive period of training for the members of the writing committees, which will include visits to at least two other Latin American countries to observe the preparation and distribution of textbooks.

d. Printing and Distribution

Contracts will be awarded for printing services to four to six printing organizations, some in the private sector and some belonging to the Government of Honduras. The private sector will carry out distribution activities from the warehouse to the school supervisor's location. Contracts will be negotiated that cover all aspects of printing including purchase of ink and paper. The project will finance improvements in the warehouse to accommodate the influx of books.

COMPONENT II: IN-SERVICE TEACHER TRAINING

1. Background and Rationale

In Honduras, the primary school is the only government service that reaches most small communities and the teacher is usually the most highly educated person in town. Most teachers are poorly prepared to function under the difficult conditions they face in the classroom, with minimal technical support; practically nonexistent teaching materials; crowded, noisy, uncomfortable, and poorly-furnished classrooms; multiple grades in a single class; and little effective supervision. Only 40% of teachers in rural schools are normal school graduates.

Experience under the Rural Primary Education Project (522-0167) has shown on a small scale that intensive, well-designed in-service workshops for in-service teachers can substantially improve their attitudes toward their work, their teaching performance, and their interaction with the community in which the school is located.

2. Activities and Inputs

The Primary Education Efficiency Project will provide all teachers, school directors, and supervisors with the training needed to make good use of the services to be provided by the other components of the project, to improve their teaching techniques in the classroom, and to improve their relationship with parents and the community. Two kinds of in-service teacher training will be provided: (1) intensive, short workshops at the beginning of

each school year over a four year period (principally on the use of the new textbook series), eventually reaching every teacher in the system with one workshop experience, and (2) a permanent, ongoing in-service training program involving local workshops through a network of "multipliers" (regional supervisors, selected school directors, and model teachers) and distance education media such as radio and the national educational newspaper.

The National In-service Teacher Training Center, constructed under the previous Rural Primary Education Project (522-0167), will function as a central support unit for both activities, training core groups of supervisors, school directors and model teachers who will subsequently fan out throughout the country to provide direct, face-to-face training to all primary school teachers. The training program will use a "multiplier" or "extension" model in combination with existing appropriate mass media to reach the large numbers of highly dispersed primary school teachers quickly with as much training as possible, at an affordable cost.

Training activities under the project will accomplish the following objectives:

a. Motivate teachers concerning the importance of effective community relations and to show them techniques for mobilizing resources available locally in the communities where their schools are located. Presently, developing a relationship with the community is not regarded as an essential part of the teacher's responsibilities, and teachers are not trained in any formal way for dealing with parents or community leaders.

b. Develop positive attitudes on the part of teachers toward the innovations that are part of the other components of the Primary Education Efficiency Project. The use of the new textbooks and teacher guides and academic achievement tests will form a major part of the content of project-supported in-service teacher training.

c. Teach the supervisors, school directors, and teachers how to promote and organize school maintenance activities in the community. Teachers will learn how to identify the maintenance needs of their schools, use the MOE Maintenance Manual, identify available local resources, motivate parents and the community to help the school, and develop a permanent procedure to continuously monitor and respond to the maintenance needs of the school.

In-service teacher training will be accomplished using the basic organizational and functional structure of the Ministry of Education. The existing In-service Teacher Training Program will be made a permanent functioning MOE unit, offering training to departmental and regional supervisors, to school directors, and to model teachers.

The first in-service training effort will begin with the training of a team of approximately 33 of the present staff of in-service teacher trainers ("actualizadores"), 10 members of the Pedagogy Section of the MOE, and 5 members of the Supervision Section. This intensive one-month program will be participatory in nature, with the trainees working intensively with MOE staff from other departments, leading Honduran education officials, and specialized contract advisors to plan and prepare themselves for the four year series of in-service teacher training workshops. Coursework will be provided in the problems of inefficiency in the primary school, the goals and components of the Primary Education Efficiency Project, the specific content of each Project activity, and the functioning of the materials, equipment, and services that are provided by the project. A workshop curriculum will be worked out and training materials for the workshops will be developed.

From the original group of 33 in-service teacher trainers, 25 will be selected to train at least 15 supervisors, for a total of 375 supervisors, who, in turn, will each train an average of 20 teachers -- resulting in an average of 7,500 teachers trained simultaneously each year. The workshops will last about three weeks, and will take place immediately before the beginning of classes for four consecutive school years. In terms of grade coverage, the in-service teacher training workshops will follow the same sequence as distribution of the new textbooks and teacher guides. All first grade teachers will be trained during the three weeks prior to the beginning of the 1988 school year. Second and third grade teachers will be trained at the beginning of the 1989 school year, fourth and fifth grade teachers will be trained in 1990, and sixth grade teachers will be trained in 1991.

The initial intensive three week teacher training workshops will be designed to develop a positive attitude on the part of teachers concerning the importance of improving the quality of primary education. An introductory unit will include an analysis of the social, economic and political problems of the country as framework for understanding the particular problems of education. Themes to be covered will include the problems of coverage, dropout, repetition, and instructional quality; identification of solutions to the problems of poor instructional quality with special emphasis on the components of the Primary Education Efficiency Project; the importance of knowing and teaching the fundamental instructional objectives derived from the Honduran curriculum for each of the primary grades; the importance of evaluating improvement in academic achievement by means of a system of standardized tests; the need to have and use up-to-date didactic resources such as modern textbooks with a Honduran focus and interactive radio lessons; the importance of involving parents and community organizations; and the teacher's role in improving education and prompting community development.

Specific content to be covered during the workshops will include the following:

a. Community Participation

The program will motivate and teach the teacher how to communicate better with the community in which he/she works. This part of the program will focus on themes such as the need for an organizational effort

within the schools and among neighboring communities to make the existing structure of the "Núcleo Educativo Integrado" function as it should; techniques for identifying community needs; the design of appropriate education activities to help the community respond to its needs; the importance of promoting local development and self-sufficiency in communities; and ways to adapt the content of the education and teaching methods to the unique needs and circumstances of the local community in which the school is located.

b. Learning Objectives

The essential material that must be covered in each subject area and in each grade will be identified and validated. Teachers will be trained to organize their instructional activities to follow the basic learning objectives and, within this fundamental framework, to adapt content and teaching methods to the needs of the local community in which they work.

c. Evaluation of Academic Achievement

In-service training will develop in teachers a positive attitude toward the use of tests to evaluate the academic achievement of their students. Teachers will be trained to develop their own appropriate tests and pass/fail criteria, to administer the standardized tests included in their teacher guides; and use the test results to help identify academic problem areas and improve the quality of instruction.

d. Textbooks

Teachers will be trained to make effective use of the new series of student textbooks, especially under difficult conditions such as large classes and multigrade classrooms. Training will focus on appropriation use of the books by students; proper care of textbooks; practical ways to make use of the books in multi-grade classrooms; modern techniques of teaching reading and writing using the new books; and evaluation of the textbooks. Training in the use of the new textbooks and teacher guides will last for five workdays -- one for each of the four subjects (math, language, social sciences, natural science) and one additional day for exercises and administrative matters related to distribution of the books to schools and inventory recordkeeping.

e. Scientific and Methodological Training

Especially in the second, third, and fourth years of workshops, training will focus on specific areas of weakness in primary school teaching identified through the diagnostic use of the academic achievement tests. Remedial training will be offered to help improve performance of teachers in meeting achievement targets based on the fundamental learning objectives.

Teachers will develop a positive attitude toward recognizing their own limitations and toward permanent in-service training and professional upgrading. Training financed by the project will focus principally on the core academic areas of mathematics, Spanish, natural science and social science.

f. Supervision

Supervisors and directors of the "Núcleos Educativos Integrados" will receive special training designed to improve supervisory techniques. Training will teach and motivate them to function as multipliers, or change agents, for training teachers in their schools and for assisting them in solving technical and methodological problems.

The second type of teacher training will be designed to give continuity and permanence to in-service teacher training. Continuing in-service training will provide programs and services designed to reinforce, complement, and add to the information provided in the one-time series of intensive national workshops. Activities under this program will take place in two ways: (1) through a network of specially-trained local trainers recruited to give periodic local workshops, and (2) through low-cost mass media available to the Ministry of Education through the activities of Component VI, "Educational Media."

The network of local trainers will be an elite group of competent and effective local teachers, school directors, and school superintendents who will be identified by the MOE "actualizadores" in the course of the national program of intensive three-week workshops. The 300 local trainers will be given special training annually at the National In-service Teacher Training Center, and will then return to their local schools where they will organize periodic one-day workshops for teachers from nearby schools in a variety of subjects. Subjects for local workshops will include such things as techniques for teaching effectively in multigrade classrooms, structure and organization of curriculum material, use of education materials, and ways of involving parents in the activities of the school. Teachers will be instructed in diagnosing construction and maintenance needs of their schools and in promoting the participation of students and parents in help solve problems of the school wherever possible. The program of continuing training will also focus on weak areas in student academic achievement, as revealed by the academic testing program that will be developed under the project. This line of training will cover scientific and methodological topics needed to help the teacher overcome the low achievement of his students.

Continuing education for teachers will be reinforced and supplemented by distance teaching techniques under the Project's "Educational Media" Component. AVANCE's national agricultural newspaper, EL AGRICULTOR, will carry a new weekly feature section for teachers, with advice on teaching techniques, specialized information on academic subject matter, stories about successful parent-teacher activities, practical information on the use of teaching materials, general articles on child psychology and group dynamics in the classroom, administrative guidance, articles with news of education programs and personalities of current interest to Honduran teachers.

AVANCE will also prepare complementary radio programming for transmission on the same radio system which will be provided to communities and teachers for classroom use. The teacher training radio program will be based largely on the content of the articles in the newspaper. It will be

entertaining and lively to listen to, and will contain a substantial amount of motivational material designed to foster an attitude of professionalism, pride, and commitment among teachers.

The National In-service Teacher Training Center will be the center for all these operations. Direct training of supervisors, school directors, and model teachers will take place on the campus of the Center. In addition, the Center will serve as the administration center for field activities, and a production center for printed and visual materials used in the national in-service training program.

During the first year of the project, the operational program of the National In-service Teacher Training Center will be developed, the Center's staff and physical facilities will be completed, and a permanent in-service teacher training plan will be developed in detail. Also during the first year, a series of professional workshops will be organized to identify the set of fundamental learning requirements that must be mastered by all children for each subject and each grade level.

In the second year of the project, field testing will be undertaken, including both on-site training at the National Center and field training for teachers at local sites near their schools. Instructional modules and materials will be developed, the outreach staff for the first cycle of intensive workshops will be recruited and trained at the National Center, and media-based programming for continuing education will be developed, field tested, and produced.

During the third year of the project, both programs -- the program of intensive one-time workshops and the program of continuing education -- will begin on a national scale.

The National In-service Teacher Training Center will be a focal point for much of the activities of this component. It will serve three functions. First, it will be an administrative center for field activities. The component coordinator and permanent staff of actualizadores will be permanently stationed at the National Center. Second, the Center will be the central site for training of the outreach staff -- supervisors, directors, and model teachers -- who will in turn provide training directly to teachers. Third, the Center will serve as a production center for printed and visual materials that will be used in all parts of the national in-service training program. The Center will be fully occupied by Primary Education Efficiency Project activities for about two months a year. During these months, several hundred outreach staff members will be brought to the center for on-site training. The rest of the year, the component's administrative staff and the permanent core staff of actualizadores will occupy office space and work space at the Center. The project budget reflects estimates of the project's share of the total operating budget of the Center. Since the project will not fully utilize the Center, it will be available for other training activities that the Ministry of Education may wish to use it for. It is hoped that the Center will be used for a wide variety of functions in addition to the activities sponsored by the Primary Education Efficiency Project.

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3. Inputs

a. Technical Assistance

Technical assistance will be provided for designing the Permanent Training Plan for national implementation. The Plan will include a detailed in-service teacher training model and the structure and functions of the National In-service Teacher Training Center. Developing the Plan will require a full-time advisor for the first two years of the project. An additional person-year of technical assistance is included in the project budget under the in-service teacher training component to provide for specialized short-term technical in areas such as development of support materials for use on the radio or in EL AGRICULTOR.

b. Training

Most essential training of the in-service teacher trainer staff has already been accomplished under the Rural Primary Education Project (522-0167). Funding is provided for key members of the component staff to make observation visits to other Latin American countries to study the operation of in-service teacher training centers that are similar or relevant to the National In-service Teacher Training Center.

c. Commodities

The Teacher Training Program will require supplies and materials to support national-scale field training of all primary schools teachers, as well as for the operation of the National In-service Teacher Training Center. The Rural Primary Education Project (522-0167) has provided most of the equipment needed for the National Center. The Primary Education Efficiency Project will provide consumable supplies required by the Permanent In-service Teacher Training Plan, particularly supplies for preparing printed materials to support the program. Implementation of this component will require five four-wheel drive vehicles for field training and supervision of training; a suitable printing system for training manuals and pamphlets; equipment for producing audiovisual materials to support training; and supplies and materials required for the functioning of the system.

4. Operating Expenses

Project funds will support operating costs for the MOE permanent In-Service Teacher Training Unit to be located in La Paz and for training activities in the field. Staff salaries, materials, travel expenses, and per diem for trainers and specially-selected "multipliers" will be financed for the duration of the project.

COMPONENT III: Education Research

1. Background and Rationale

This component of the project will provide resources to establish and operate a "think tank", consisting of two senior Honduran educational experts,

in the Ministry of Education to undertake policy studies of changes in primary education in Honduras. The mechanism for policy studies and field feasibility tests will be designed to be flexible, non-political, and directly responsive to the most urgent needs of the Ministry of Education and other organizations interested in improving public education in Honduras. The program of studies will have two general study categories -- analyses of possible improvements in the administrative processes and structures of the Ministry of Education and analyses of potential changes in the delivery of instructional services which could improve the quality, efficiency, or relevance of primary education.

The rationale for this component is explained more fully in Annex F.2, "Technical Analysis."

2. Activities and Outputs

The professional research unit will work directly within the Office of the MOE Vice Minister for Technical Affairs. For field work, the MOE unit will have access to a research office that will be established by the Project technical assistance contractor. The contractor's research office in Tegucigalpa will be run by a qualified Honduran field research coordinator. It will have a flexible research fund available to hire field staff, keypunchers, and local specialized short-term advisors; to purchase supplies; and to pay for field research costs with a minimum of paperwork and delay. Internationally, the contractor will provide short-term advisors from other countries with specialized technical experience relevant to innovations that are under study, organize study and observation tours for senior Honduran educators and officials to view alternative approaches in action, and provide small quantities of commodities from overseas needed for policy studies, such as samples of new educational technologies for field evaluation. The contractor will function largely in a support role, providing resources and implementing studies at the initiative and under the supervision of the two senior Honduran education professionals financed by the Project in the MOE.

The Project Agreement will contain a policy and administrative study agenda which will list subjects which AID and the MOE agree should be included in the initial research and analysis activities under this component. The policy agenda will include themes such as the following:

- a. strategies for involving parents and community members more directly in the school program by, for example, participating in the selection and assignment of teachers or by controlling some discretionary funds for the local school,
- b. recommendations for streamlining the administration of primary education,
- c. ways of improving field supervision in rural areas,
- d. models of appropriate alternative primary education services for out-of-school youths and adults,

- e. the importance or lack of importance of practical life skills instruction in vocational, agricultural, and health-related areas in formal primary education,
- f. the use of double or triple shifts to reduce the cost of expanding primary school coverage,
- g. the use of local paraprofessional teacher aides to improve instruction and reduce costs,
- h. coordination of international donor programs in education,
- i. school finance models involving cost-sharing provisions with the local community, such as matching grants,
- j. incentives for teachers to live in the community where they teach, such as providing teacher housing,
- k. ways of strengthening the school lunch program,
- l. ways of strengthening the nuclear school model of decentralized school administration.
- m. possible use of social marketing techniques and commercialization of educational products and services, such as textbooks, enabling individual families and students to purchase them privately for their own use.

3. Inputs

The Project will provide permanent salary support for two senior education advisors to work on the design and execution of technical and administrative studies. The Project will also provide for clerical support and equipment needed by the professional group of senior advisors and a ~~FLEXIBLE CONTRACT ARRANGEMENT PROVIDING FACILITIES, FIELD RESEARCH GRANT AND~~ funding for field expenses, workshops, specialized technical advisors and observation tours.

The two senior Honduran education professionals will be picked in an open national competition. Selection criteria will include: (1) at least a licenciatura (B.A.) degree in a field directly related to primary education, (2) experience as a classroom teacher in the Honduran public school system, (3) accomplishment of significant education-related research, (4) training in research methods, (5) significant experience in responsible, high-level policymaking or administrative position(s) in the Honduran public education system, (6) evidence of openness and enthusiasm for innovative and unusual solutions for difficult and persistent educational problems, (7) willingness to spend significant periods of time in remote rural areas participating in field research, (8) a friendly, articulate, collegial, persuasive interpersonal manner to facilitate interaction with people at all levels of the educational system, and (9) evidence of strong personal and professional commitment to primary education in Honduras. Selection will be based on a

review of the academic and professional credentials and background of candidates, essays that will be submitted by candidates identifying their priorities for research and reform in primary education, and face-to-face interviews with candidates. Selection will be made by a committee chaired by the Minister of Education, with representation by selected practicing teachers, key MOE administrative units, and the major Honduran institutions of higher learning that have educational programs. AID will have the option of participating on the selection committee with observer status.

COMPONENT IV: Management Information System (MIS)

1. Background and Rationale

The Ministry of Education's Management Information System (MIS) is designed to enable the Ministry to make informed policy decisions by providing accurate and interpretable statistical information in a timely and usable form. The MIS was developed under the Rural Primary Education Project (522-0167), which provided equipment, materials, technical assistance, and staff training. The permanent data collection and processing capability of the MIS has substantially helped to identify, quantify and analyze the problems of primary education in recent years. The system has been used resourcefully by the Ministry of Education for the storage and analysis of education statistics (enrollments, teachers, facilities, dropout and repetition rates, etc.) and for management functions (personnel files, MOE budget, etc.). It has been possible, for example, to begin to define with confidence the parameters of the problems of primary education inefficiency, demonstrating conclusively the need for improvement. However, the ability of the MIS to respond effectively to the needs of the Ministry is presently limited by its equipment and by the lack of appropriate staff training.

The new Primary Education Efficiency Project will create even greater demands on the MIS because of the need to track the progress of the different components and the need to quantify results on a national scale. The impact of the Project on educational quality and efficiency will be measured and analyzed by the different MIS units and the results used to evaluate and refine project interventions.

2. Activities and Outputs

This component will focus on the institutionalization of the MIS in the Ministry of Education, extending access to the system's services to new users, training of technical staff, providing equipment and software, user orientation, and production of analytical studies. New functions will be designed and implemented, including word processing, a national record of student grades, administration of personnel files of teachers, document and correspondence control, and the MIS will be reorganized under the Office of the Vice-Minister for Technical Affairs. It will have a full time director and a trained permanent staff to respond to demand for services from the Ministry and from the Primary Education Efficiency Project. Staff training will take place in intensive short courses that will cover programming, word processing, systems analysis, and data processing. Training will be offered

to the Statistical and Education Research Units of the Ministry of Education in order to build an interdisciplinary group of information users, providers, and analysts. Departmental School Supervisors in approximately 12 departmental capitals will be trained in the use of microcomputers for word processing, data collection and storage, statistical analysis, and personnel records. Key executives of the Ministry of Education (general directors, department chiefs, project coordinators) will be trained in the use of MIS services and facilities. A communication system among the different MOE units will be developed to expand the in-house network of regular users.

Some expansion of the existing computer hardware will be undertaken. A Wang VS-100 computer with a 2MB-4MB CPU, two 640 MB disk drives, 8 new terminals and 4 new printers will be provided. A data base management system (DBMS) will be provided to improve the processing of statistical data. Also, to expand utilization of the MIS beyond the confines of the central MIS facility, 12 Wang microcomputers will be provided for use by departmental supervisors.

3. Inputs

a. Local Staff Salaries and Administrative Costs

The project will finance the contracting of four individuals to carry out MIS support activities for a period of three years, after which the Ministry of Education will absorb these positions by creating permanent slots. These four positions will be in addition to the permanent staff presently employed by the MOE. The four new individuals will receive training to enable them to assume critical technical responsibilities on a permanent basis following the departure of technical assistance staff.

b. Technical Assistance and Training

Technical assistance will be provided to help integrate and consolidate the different functions and activities of the MIS. Short-term technical assistance will be provided for three person-months per year for the first three years of the project. Also, long-term technical assistance services of two analysts for two years will be provided. Technical assistance will include both direct work to improve the MIS and staff training. An initial activity of the new staff and technical assistance advisors will be development of a medium-term and long-term action plan, including a plan for training MIS staff and users. The departments of research and educational statistics will also be provided with 8 person-months of contract technical assistance to improve their analytical services.

c. Commodities

The MIS will be provided with a Wang VS-100 to expand its capacity. Also two 640 MB disk units, 8 terminals, 4 printers, and the Data Base Management System will be provided, along with installation and training in the operation and maintenance of the new equipment. Both the old and the new terminals will be installed in different offices throughout the MOE to

make them easily accessible to users. A maintenance contract for the new equipment will be provided for the first three years of the project. Twelve microcomputers, compatible with the MOE Wang system, will be provided to selected departmental supervisors' offices. A waiver of competitive procurement requirements is contained in Annex K to enable the purchase of WANG computer equipment by all Project components to insure full standardization and compatibility of data processing capabilities within the Ministry of Education.

COMPONENT V: Learning Objectives and Evaluation Component

1. Background and Rationale

The current Honduran educational system lacks key mechanisms to determine what and how students are learning, and it lacks the objectivity in which to make pass/fail decisions. The rationale and background relevant to this component are contained in Annex F.I, "Technical Analysis."

2. Activities and Outputs

The objectives of this component are the following:

- (1) To define clear nationwide minimum academic standards to guide teachers in their work, to orient the new textbook series, and to use for evaluation purposes.
- (2) To develop a set of standardized tests based on the minimum learning objectives. The tests will be used on a representative national sample of primary school students for evaluation of the improvements in academic achievement produced by the Primary Education Efficiency Project and other MOE activities.
- (3) To make all levels of the education establishment aware of the fundamental instructional objectives so that all educational inputs -- teacher training, teacher guides, and textbooks will be consistent and mutually-reinforcing.
- (4) To design easy-to-use sample examinations based on the minimum learning objectives to help teachers make individual pass-fail decisions, if they desire.

Activities under this component of the project will be coordinated with the activities of the other project components. The design of the component will incorporate considerable flexibility, because the area of instructional objectives and evaluation is relatively new in Honduras. Use of standardized tests for helping teachers make pass-fail determinations will evolve slowly as teachers gain experience and come to understand the approach. The rate at which norm-referenced testing will become accepted by teachers for the evaluation of individual students and the most effective strategy for promoting its acceptance is difficult to predict.

What can be predicted with certainty is that if an entirely new system of academic standards and evaluation procedures is imposed arbitrarily or suddenly it will not be readily accepted by teachers.

Activities in the two "strands" described above will be implemented concurrently and by a single staff, although the activities associated with the two strands will be quite different.

Strand I involves development and gradual implementation of a new, voluntary procedure for teachers to evaluate their students. Ideally, a final outcome of this activity will be a modern system of standardized testing with national norms that would help teachers diagnose specific strengths and weaknesses of individual students and to make consistent, well-informed pass-fail determinations. However, because of the heavy logistical, security, and technological requirements of such a system and the likelihood of teacher resistance, the full implementation of such a system is not planned under this project. Instead, the project will gradually introduce the notion of using some standardized test items and instruments, at the discretion of the teacher, to complement whatever other testing he/she is accustomed to doing.

The gradual introduction of standardized testing will take place in the course of two other components of the project. The first is in-service teacher training to be provided under Component II of the project. The in-service teacher training program will include a detailed introduction to the new set of minimum learning objectives. Teachers will be given a practical orientation to testing and measurement, with explanation and discussion of why it is important to be able to evaluate their own students in the light of national norms. The teacher training will project a positive image of the objectives and tests as new resources designed to help the teacher improve his/her instruction and evaluation of students.

The second means by which Strand 1 objectives will be accomplished is through the teacher guides that will be provided along with new textbook under Component I. The guides will contain model tests with easy-to-use answer keys and grading scales based on national norms. The guides will be designed to make it very simple to record students' test scores and to compute their grades. Instructions will be clear and complete, so that even teachers who may have missed the in-service training will be able to make use of the model tests without difficulty.

As the project evolves, evaluation studies will determine the acceptance and utility of these model tests to teachers in the field and will identify problems and difficulties. At the mid-project evaluation, recommendations will be made concerning possible expansion of the role of standardized testing.

The implementation of Strand 2 will be accomplished directly by the testing and evaluation team. Strand 2 involves systematic testing of students in a national sample of primary schools in order to track changes in overall academic achievement levels throughout the life of the project and beyond. Tests will be developed in multiple equivalent forms so that they will not be long or difficult to administer. A stratified national sample will be drawn

to represent the entire school-age population. Tests will be administered near the beginning and end of each school year under the supervision of the project staff. Results will be processed by the MOE Management Information System and reports will be presented to the Ministry of Education and to AID.

Each wave of testing will incorporate a few new test items which will be validated through item analysis and added to the project item bank. In this way the item banks will be constantly updated and enlarged.

3. Inputs

a. Local Staff Salaries

- Component leader
- 8 area leaders (2 leaders for each of the 4 subject matter areas).
- Each pair of leaders will be responsible for the definition of objectives, item development, test assembly and test analyst in their respective subject area, and will coordinate test administration in the field.
- 1 full time secretary (bilingual).
- 4 field test administrators.

b. Training

- 4 three-week training sessions in the areas of developing objectives, test planning, preparation and development, test processing, scoring and analysis and development, and maintenance of a test processing and scoring system.
- A 1 week trip to observe a testing system in operation.

c. Technical Assistance

- 1 full-time consultant for the first 12 months of the project.
- 1 full-time consultant for 6 months of the second year of the project.
- 2 person-months of short-term consultant time per year for five years in specialty areas such as computer file maintenance for the testing system.

d. Equipment:

During Project years 1, 2 and 3, data entry will be handled manually. All processing and reporting will be done on the MOE WANG system. Specialized software will be purchased for constructing an item bank and processing, scoring, and score reporting.

A gradual transition of all processing, scoring and reporting functions will be made to the MOE Management Information System. Additional equipment needed for this purpose will be:

-3-4 high speed printers.

-Software for processing, scoring, and reporting large amounts of test information.

-Software for maintenance of the test item bank.

e. Operating Expenses

Funding will be provided to cover field expenses associated with the national evaluation testing program. Travel and per diem for test administrators who will have to deliver test forms to the schools in the national sample, supervise test administration, and retrieve tests for scoring and analysis, will be covered by project funds.

f. Other Evaluation Expenses

This component will finance a major independent project evaluation that will take place in the fourth and fifth year of the project. The evaluation will present a detailed study of changes in academic achievement within the major curriculum areas, among different grade levels, and among different demographic control groups. The evaluation will also try to establish empirically the relationships between improved academic achievement and other indicators of education efficiency, such as grade repetition and dropout rates. The study will attempt to re-calculate the economic benefits of improved primary school instruction based on empirical evidence gained during the initial years of the project. The evaluation will also assess the successes and problems of the different project components, and make specific recommendations regarding reprogramming of activities and possible new or enlarged activities, setting the stage for the planning of the anticipated second phase of the Project.

COMPONENT VI: School Construction, Renovation, and Maintenance

1. Background and Rationale

The design of the "Primary Education Efficiency" project represents a substantial shift from support for construction activities to support for qualitative improvement of primary education. Rationale and background relevant to this component are contained in Annex F.2, "Technical Analysis."

This component will be funded entirely under the counterpart budget and AID will not be directly involved in the implementation of construction, renovation, or maintenance activities. The Ministry of Education will agree in the Agreement to implement a cost reduction program that will make maximum use of materials and labor supplied by the community in which the school is located. The acceptance of a new policy orientation toward school

construction by the Government of Honduras represents achievement of an important policy dialog objective. With this agreement in principle to pursue a community-based, low-cost approach to construction, AID will agree to request ESF funding according to a formula that will provide an incentive for the MOE to meet or exceed cost reduction objectives.

2. Activities and Outputs

The construction activities financed under this component will use an approach developed by the Ministry of Education referred to as the "Esteban Guardiola" self-help approach. This methodology involves community initiative in identifying needs for school services and mobilization of community resources to get new classrooms built and maintained. The new approach involves more community support than simply a monetary or in-kind contribution to the building of a school. Community members must become organized to undertake continuing long-term support to the school and to the teacher. Promotional activities will involve: (1) motivating parents, community leaders, and local organizations to support the school and the teacher, and (2) raising the consciousness of the adult population of the community concerning the importance of education for their children and making them aware of the contents and processes that go into their children's primary education. Promotion in anticipation of construction should make parents willing to support not just the physical infrastructure of the school, but anxious to help the teacher by encouraging attendance and contributing time, attention, and materials to enrich the educational program of the local school.

The schools produced under the self-help system will maximize use of locally-available materials and labor and will minimize expensive and imported components. Low cost, ease of construction, durability, ease of maintenance, security, light, temperature, air circulation, noise, comfort, attractiveness, and acceptability to teachers and to the community are some of the factors that will be evaluated in developing and testing new, low-cost school designs.

Experience with the self-help approach over the past six years in the Ministry of Education has demonstrated the feasibility of the community-based, low-cost approach to school construction. The cost of classrooms constructed with this approach varies according to the degree of community participation, and the Ministry has found that the approach works best in rural settings. On the average, the cost per classroom using this approach is around 8,000 Lempiras, of which 5,000 Lempiras are provided by the Ministry of Education and 3,000 are contributed by the local community. This compares favorably with the 14,000 Lempira cost of classrooms constructed by construction contractors under the Rural Primary Education Project.

The staff of the "Esteban Guardiola" self-help project in the MOE General Directorate for School Construction will be responsible for the planning, implementation, and evaluation of the school construction, renovation, and maintenance activities under this component. Social promoters and construction engineers will work together as a team at all times to assure the integration of social and technical activities.

Construction, renovation, and maintenance activities will be organized and promoted by the MOE General Directorate of School Construction. The General Directorate of School Construction will be responsible for setting priorities and organizing construction, promotion and evaluation activities for local projects. It will also provide the services and materials that are not available locally in the communities. Prior to the initiation of project-funded construction, maintenance, and renovation activities, the Ministry of Education will submit an acceptable plan for reorganizing the existing units that deal with construction, maintenance, and renovation into a more efficient administrative structure. The plan will retain the capability developed in the maintenance and construction units that have implemented activities under the Rural Primary Education, but will integrate them administratively into the corresponding Ministry of Education units, eliminating the administrative and functional duplication of activities that has existed in the past.

The time for completing the local projects will depend on the size of the construction job and on other local circumstances. Once finished, inspected, and accepted by AID and the MOE, the school will receive furniture and other equipment, after which it will be formally inaugurated and turned over to the community for permanent care and maintenance. If a local project is not completed in the allotted time, the promoter will determine the nature of the problem and help reorganize the local project so that the school can be finished. If a local construction project is not completed within a year, the Ministry may take back the unused supplies and equipment for use in a different community.

AID support to this component will consist entirely of ESF local currency generations, and all funding will be shown in the counterpart budget. The Project Agreement will contain a formula which will be negotiated with the Ministry for allocation of resources among different activities under this component. The sum of \$1.5 million per year for the first three years of the project will be made available under the Project Agreement. AID and the Ministry will agree on overall targets for the use of the resources, dividing them among construction, renovation, and maintenance. There will also be a formula for dividing the resources among rural and urban projects. Based on the success of the first year of construction, renovation, and maintenance activities, the ESF funding level that will be requested for the second year may be adjusted accordingly. In this way, the Ministry will have an incentive to complete schools quickly and to lower construction costs.

The role of AID will be minimal in the implementation of this component. AID will: (1) negotiate the initial formula for allocation of resources among different activities, (2) review and agree to general design specifications and quality control criteria, and (3) inspect schools that are completed under the program to determine their acceptability and eligibility for subsidy under the project.

It will be made clear to the Ministry that AID's intention is to phase out its support for school construction, renovation, and maintenance within three years. During the first three years of the project, therefore, AID and the Ministry of Education will make a concerted effort to interest

other international donor agencies in assuming part of the financial burden of constructing schools. It is hoped that the reluctance of the other donors to invest in infrastructure, based largely on the costliness and inefficiency of the present system, will be alleviated within three years as other components of this projects begin to produce improvements in the efficiency of primary education.

3. Inputs

Table 1 summarizes inputs and outputs for this component. "Minimum" outputs are based on construction, renovation and maintenance costs incurred by the Rural Primary Education Project (522-0167). "Optimal" outputs represent levels that would be attained if a community-based cost-reduction were able to cut costs in half, an objective that can be achieved if the self-help approach is as successful on a large scale as it has been on a small scale in the past. The allocation of resources illustrated in Table 1 may be modified in negotiations with the Ministry of Education, and the final numbers may vary depending on the success of the cost-reduction program. Flexibility in specification of outputs that will be achieved from a fixed budgetary input provides an opportunity and incentive for the Ministry of Education to pursue an innovative and aggressive cost-reduction program to stretch the available money and get as many as these popular local construction, renovation and maintenance projects as it can. It is expected that outputs in all three categories will exceed the "minimum" level from the very first year of the project as the Ministry shifts from centralized (either contractor or MOE) construction to the self-help community-based approach. As experience is gained with this approach, it is anticipated that unit costs will continue to decline. Urban projects will not use the community-based self-help approach, although community participation will be encouraged.

TABLE 4

Construction, Renovation and Maintenance
Output Options

	<u>FUNDING</u> <u>LEVEL</u>	<u>(US\$)</u>			
		<u>MINIMUM OUTPUTS</u>		<u>OPTIMAL OUTPUTS</u>	
		<u>Unit Cost</u>	<u>Classrooms</u>	<u>Unit Cost</u>	<u>Classrooms</u>
A. CONSTRUCTION					
YEAR 1	1,050	7,000	150	3,500	300
YEAR 2	1,050	7,000	150	3,500	300
YEAR 3	1,050	7,000	150	3,500	300
TOTAL	3,150	----	450	----	900
=====					
B. RENNOVATION					
YEAR 1	350	3,500	100	1,750	200
YEAR 2	350	3,500	100	1,750	200
YEAR 3	350	3,500	100	1,750	200
TOTAL	1,050	----	300	----	600

=====						
C. MAINTENANCE						
YEAR 1	100	250	100	125	200	
YEAR 2	100	250	100	125	200	
YEAR 3	100	250	100	125	200	
TOTAL	300	---	300	---	600	
GRAND TOTAL	4,500					

NOTE: Table assumes constant funding level for three years, after which the component ends. Funding levels and outputs could vary up or down in years two and three, depending on performance.

COMPONENT VII: Educational Media

1. Background and Rationale

Improving the traditional components of formal primary school education -- teaching, textbooks, exams, school facilities, etc. -- will result in significant improvement in instructional quality. However, the fact that the Honduran population is dispersed throughout thousands of communities, many of them tiny and very remote, means that the cost of providing really good quality instruction through a traditional school system will always be prohibitively high. Even with the improvements that will be provided by the other components of this project, the educational environment and the quality of instruction available in many Honduran primary schools will continue to be severely limited by the lack of resources. Multigrade classrooms will continue to be the norm in rural areas, with a single, over-extended teacher trying to cover all required subject areas for up to six grades simultaneously. The classroom will continue to be a confining, uninviting place for children to be. Providing lively, entertaining, esthetically-pleasing, pedagogically-modern instruction is simply beyond the capabilities of the average primary school teacher in the cramped, crowded, austere environment of the typical public school classroom in Honduras.

Experience in a number of projects in many countries has conclusively demonstrated the power of modern communication media to teach, to motivate, and to enrich the classroom environment at very low cost. In Honduras, the new rural newspaper, El Agricultor, has produced enthusiastic acceptance and has stimulated greater use of low-cost printed and visual materials by rural schoolteachers. Projects using the new techniques of "interactive radio" in classrooms in other countries, many of them AID-financed, are producing significant gains in learning at very low cost. Correspondence study and radio are proving to be effective, low-cost ways to provide in-service teacher training. The promotional techniques of commercial mass media are being successfully used in several countries to promote greater public awareness and support for educational activities and programs.

Relevant experience with broadcast radio and other mass media for education in developing countries is reviewed in Annex F.2, Technical Analysis.

2. Activities and Outputs

This component will develop and use mass media techniques to provide quick and visible improvement in the quality of primary education in Honduras. There will be three categories of activities. First, there will be an "interactive radio" component which will provide supplementary radio lessons for use in classrooms. Second, there will be a program for use of the national newspaper, El Agricultor, for in-service teacher training and to provide supplementary materials for classroom use. Third, there will be a program of experimentation with other possible media-based services which have potential for improving the effectiveness of primary education in the future. Each of these three activities is described more fully below.

Administratively, this component is independent of the other components of the project. AID and the Ministry of Education have agreed that mass media activities can be undertaken more effectively and creatively in the private sector. The activities under this component, therefore, will be financed under a companion grant under this authorization with AVANCE, an AID-supported private sector organization established specifically to develop and support media-based educational programs in Honduras.

Activity I. Interactive Radio for Classroom Use

Radio programming will be developed and made available to schools and communities throughout the country in two subject areas -- math and language -- for grades one through three. The interactive radio activity will be designed to perform the following functions:

1. Instruction

Radio lessons will present and explain new material and concepts in the curriculum areas of mathematics and language (reading and writing), complementing and reinforcing the presentation of new material by teachers.

2. Drill, practice, and reinforcement

Radio will provide intensive drill and practice, both oral and written, in math and language skills, with instantaneous reinforcement and feedback to students concerning their answers.

3. Enrichment

Radio broadcasts will provide songs, stories, learning activities, games, and physical exercises designed to entertain and stimulate students and enliven the classroom atmosphere.

The radio system will improve primary school instruction in six ways. First, it will support primary school teaching by presenting new material and concepts in the most modern, interesting, understandable, and pedagogically-effective way possible. Second, it will relieve the teacher of part of the burden of classroom instruction, mainly drill and practice,

enabling him/her to devote more attention to individual students with special difficulties, adaptation of the general curriculum materials to the circumstances of the community, and effective planning and coordination instructional activities. Third, because interactive radio lessons are specifically designed to be entertaining and enjoyable for school-age children, students' attendance, motivation, attention, interest and participation will improve in schools where the radio programs are used. Fourth, the quality of teachers' performance will improve as they are exposed to the most effective and modern ways of presenting curriculum themes. Fifth, there will be incidental learning on the part of people in the out-of-school population who will acquire the habit of listening to the programs. Sixth, the impact of the other components of the Primary Education Efficiency project will be sharpened and enhanced by the reinforcement, emphasis and attention that will be focused on them by the radio lessons.

The approach to programming that will be used is a new but proven technique called "interactive radio". Interactive radio is an entertaining and participatory program format based on highly successful production techniques developed over the years in commercial radio and television broadcasting for children. It is designed specifically for use in primary school classrooms with a teacher present. Programs will last for 30 minutes, and will include 10 to 20 short separate segments. Some segments present new material while others provide intensive, fast-paced drill and practice with immediate reinforcement. Songs, stories, and games are interspersed with the instructional segments to reinforce and illustrate the material that is being taught as well as to change the pace and entertain the audience. Physical exercises further enliven the experience and prevent restlessness. The pace of programs is fast, making it almost impossible for students' attention to wander.

Implementation of the interactive radio service will be accomplished by AVANCE in coordination with the Ministry of Education's General Directorate of Primary Education. AVANCE will assemble a production team, produce and transmit programs, develop a promotional strategy, provide all equipment and support materials needed for classroom use, and evaluate the impact and acceptance of the activity. The Ministry of Education will provide, on a five year detail to AVANCE's production team, the services of four radio instructional design specialists (two in math and two in language), an official approval and endorsement of the radio programs for classroom utilization, and encouragement to teachers and to communities to make use of the radio service.

AVANCE will advertise an attractively-packaged kit to the general public and to teachers throughout the country. The kit will include radio reception equipment and an easy-to-use self-instructional teacher guide. An optional additional feature that will be marketed with the radio package where feasible will be a subscription to the weekly newspaper El Agricultor, to provide a steady supply of colored posters to supplement the radio lessons. Communities will be encouraged to get together with the school teachers working in their schools to decide whether they would like to have the instructional radio service to help them in their work in the classroom. If the teacher and the interested community members agree on purchasing the service, they will

organize a local fundraising campaign and buy the kit whenever they are able to get together enough money. The complete kit, with the newspaper option, will be sold at a low, subsidized price by businesses affiliated with AVANCE throughout the country.

This approach to the introduction and implementation of an educational radio service has several important features. First, purchase and use of the interactive radio service is voluntary. This eliminates the danger of resistance to a new technology which might initially appear threatening to teachers if imposed by the Government on a massive scale. The service will be provided only where there is a desire to have it, and demand will be generated spontaneously as more and more teachers are exposed to the service and have positive experiences with it. Second, the proposed implementation strategy provides an opportunity, for the first time, for local communities and parents to get directly involved in supporting primary school instruction in a positive way. Previously, the only opportunity for community participation in primary education was in support of construction and maintenance of the school building. Third, the proposed approach involves the Honduran business sector in a positive relationship with the country's education sector for the first time. In the past, the private sector has often been critical of the country's public education system, but has had little opportunity to apply its energy, managerial experience, and commitment to national development to helping make system work effectively. Fourth, experience in many free world countries has shown that the private business sector has been resourceful, creative, and aggressive in the development of successful mass media services and structures, while government media operations are often characterized by considerably less vitality and creativity. This approach will apply the experience, techniques, and attitudes of the private media to the needs of public education, without the bureaucratization of a government program. In this way, it represents an unusual partnership of the public and private sectors to improve the educational system of the country.

An additional activity will be the operation by AVANCE of a small educational radio station located in Puerto Lempira, Gracias a Dios. This radio station will offer special bilingual radio programming for the Miskito-speaking children living in the eastern part of Honduras. In the Mosquitia, many children do not speak Spanish, while their teachers do not speak Miskito. As a result, academic failure rates are even higher than in the rest of the country. Radio programming will be designed for classroom use to help children master the Spanish language, and to provide supplementary instruction in the core curriculum content in Miskito so that children will have a better chance of learning the essential primary school subjects. The radio station in Puerto Lempira will have two other related uses that will be supported by the project. First, it will serve as a transmission facility for the Spanish language broadcasts for in-school use that are described above, at least on an interim basis. Second, it will support other development projects active in the region with public service announcements, adult education programming, and a literacy training service for listeners of all ages.

Activity II. Newspaper Materials to Support Educational Improvement

The new national newspaper, El Agricultor, has gained wide acceptance among teachers where it is available. Recent evaluation interviews showed that teachers, especially in rural areas, receive little or nothing to improve their own knowledge about the country or to use as supplementary material in the classroom. The national newspaper has provided current affairs information, practical technical information in areas such as health and nutrition, and large colored maps and posters for display on the wall of the classroom on a weekly basis that is used enthusiastically by teachers to whom it is available.

The Primary Education Efficiency project will build on the successful initial experience with the national newspaper by providing newspaper features and services specifically designed to support the improvement of primary school instruction. Two services will be offered through the newspaper. First, the newspaper will publish double-page colored posters designed for classroom use, as it has in the past. However under the project the preparation of posters will be specifically keyed to official curriculum material for systematic use in primary school classrooms. Posters will illustrate important principles in the core subject areas of math, language, social science, and natural science. Second, a specific series of technical articles for teachers will be financed to complement of in-service teacher training component of the project. Articles will focus both on reinforcing teachers' knowledge of essential subject matter, on the basic learning requirements that will form the basis of the new textbook series, and on effective teaching and evaluation techniques.

Newspaper subscriptions will be sold to teachers at half the usual subscription price, with the difference being made up by the project. Distribution will be made by AVANCE to the offices of the Departmental Supervisors where the newspapers will be picked up by the Regional Supervisors, who will in turn distribute them to individual schools and teachers. As with the educational radio component, communities will be encouraged to raise funds to provide newspaper subscriptions for the teachers in their local schools in order to improve the education their children receive.

Activity III. Experimental Educational Media Program

In collaboration with the Ministry of Education, AVANCE will undertake a series of pilot projects designed to assess the possibilities for making more and better use of mass media and distance education techniques to further lower costs and improve educational services. Field tests and evaluations will be carried out of such possible services as the use of videotape to improve teacher training, the Venezuelan sonoestudio portable record player as an instructional medium, and new approaches for producing print materials such as maps and posters at very low cost.

3. Inputs

a. Local Staff Salaries

For the interactive radio program series, AVANCE will organize two program development teams -- one for mathematics and one for language --

and one professional radio production team. Each of the two program development teams will consist of a coordinator, two content specialists provided by the Ministry of Education, one field classroom observer for formative evaluation, and two trained scriptwriters. The production team will include a producer, a director, an editor, 4 part time musicians, 4 adult actors, and 6 child actors (all part time). A radio component coordinator will supervise the work of the three teams. Support staff will include two drivers, two typists, and an electrical engineer to supervise maintenance of project supplied electronic equipment.

To promote and publicize the activities of the educational media component, AVANCE will also employ a trained advertising director. To provide services to the schools throughout the country, AVANCE will have a logistics coordinator who will have a support staff of two distribution coordinators. The logistics coordinator and his staff will work both through private sector distribution channels and through Ministry of Education channels to provide the broadest possible coverage of supplies and support services.

To develop teacher training articles for the newspaper, the newspaper will employ a teacher training expert, on detail from the Ministry of Education for the life of the project.

The operating budget of El Agricultor will be supported by an AVANCE counterpart contribution, supplied during the first three years of the project directly to AVANCE by ESF local currency generations.

b. Technical Assistance and Training

Training and technical assistance inputs will be combined. No long term formal staff training will be financed for the educational media component, but considerable on-the-job training will be provided by a technical assistance team. A technical assistance source will be contracted to provide the following categories of technical assistance.

- (1) Interactive radio, instructional design, scriptwriting, and formative evaluation, 2 years.
- (2) Radio program production, direction and editing, 1 year.
- (3) Equipment design procurement, installation operation, and maintenance for radio production, transmission and reception, 1 year.

The three long-term technical assistance assignments described above will each include as a primary requirement the training of Honduran staff to high levels within the time specified for the assignment.

The project will also provide funding for short-term technical assistance in specialized areas such as evaluation design and data analysis, creative special effects for radio, outside assessment of script and program quality, and development of appropriate energy sources for radios in

non-electrified schools. Six person-months of short-term technical assistance will be provided for this specialized need during the first three years of the project. For the remaining seven years of the project, three person-months of short-term technical assistance per year will be provided to assist in ongoing staff up-grading; review and evaluation of ongoing activities; assistance with unanticipated problems and modifications in project activities, design, staff, and equipment; and to provide advisory assistance to the Government of Honduras and AID concerning possible additional or follow-on educational radio programs.

In addition to on-the-job training provided by the technical assistance staff, additional training funds will be provided for (1) observation visits to relevant educational radio projects in other countries by MOE officials and local project staff; (2) short courses for project staff in specialized technical areas such as transmitter maintenance, and (3) periodic in-country technical workshops for staff professional upgrading.

c. Equipment and Facilities

The components of the technical design may be summarized as follows:

(1) Production Facilities

The educational media component will require a building for offices and production facilities. The building will be constructed by AVANCE on donated land in Tegucigalpa, and will include office space for all the local and technical assistance staff of the radio component, separate workrooms for the instructional design and scriptwriting teams, ample storage space, and modern production studios and equipment. The project will provide funding for constructing the building and equipping it with all electronic equipment needed for high-quality professional production, office furniture and equipment including a word processing equipment, and funding for operational expenses and supplies for the ten year life of the project.

(2) Transmission Facilities

During the initial five years of the project, the project will make use of the shortwave transmission facility already in place under AID's educational radio project in the Mosquitia. This facility, located in Puerto Lempira, is of an experimental design. It includes a transmitter that should provide clear and reliable daytime coverage to all of Honduras. AVANCE counterpart funds, provided by ESF local currency generations, will be used to finance the operating expenses of this radio station. The counterpart budget for this component will be the joint responsibility of AVANCE and of the Government of Honduras. It is expected that any counterpart funds not covered by ESF local currency generations will come from AVANCE revenue-generating activities. An objective of the component will be financial self-sufficiency for AVANCE. Sources of revenue will include: (1) the sale of the newspaper, books, and other low-cost educational materials, (2) revenues from commercial printing jobs done on the project-supplied printing press, and (3) advertising sold for the newspaper and other AVANCE media activities. All revenues generated by AVANCE will be used to subsidize AVANCE's educational services.

During the initial five years of the project, experience will be gained with the new, experimental shortwave transmission techniques. Should this system of transmission prove to be efficient, it will be expanded, probably with another transmitter located in the central part of the country. If shortwave transmission should prove to have limitations, the feasibility of alternative transmission systems will be assessed for implementation in a later phase of the project. Other options will include upgrading the existing national network of Radio Honduras, funding a powerful offshore AM transmitter with national coverage, and operating through existing commercial radio stations.

(3) Reception Facilities

The project will provide inexpensive shortwave receivers of a suitable size for classroom use. For schools without electricity, small solar battery chargers and 6 volt batteries will be provided as part of the educational radio package. It is impossible to project demand by communities and teachers for the classroom radio service. For budgeting purposes, it is estimated that 1,000 classroom radio kits will be sold during the second year of the project (the first year of transmission), 2,000 during the third year; 3,000 during the fourth year; and 4,000 during the fifth year.

(4) Maintenance

The project will provide funding for the services of a local private sector electronic firm for the initial five years of the project. The contract will include an ample supply of spare parts, replacement parts, test equipment, and expendable supplies needed to keep the entire system fully functional.

(5) Printing equipment

To lower the cost of printing the newspaper, to print other low-cost materials that may be developed under the project (low-cost dictionaries, reference works, supplementary textbooks, etc.), and to generate revenues to subsidize the printing of educational publications, a printing plant will be supplied for AVANCE by the project.

4. Special Institutional Arrangements

The Primary Education Efficiency Project will include an authorization for funding all activities described in this Project Paper, including the private sector activities described under the "Educational Media" component. The Project Agreement with the Government of Honduras will obligate funding for the public sector activities. In the Agreement, the Government of Honduras will indicate its willingness to cooperate with the implementation of the educational media component including the voluntary use of the interactive radio services in classrooms throughout the country, and its agreement to detail four MOE personnel (as described above) to AVANCE.

Immediately following the signing of the Project Agreement, AID will negotiate a new Grant Agreement with AVANCE for the activities in the "Educational Media" component.

Technical assistance will be procured separately for the "Educational Media" component. AVANCE will negotiate directly with a consortium of technical assistance suppliers that already have a contractual arrangement to provide technical services to AID-financed development communication projects. The technical assistance contractor will have the additional responsibility for managing the procurement of commodities.

Radio services will be developed and phased in over a five year period. The implementation plan is designed to provide national coverage of initial first grade broadcasts from the beginning of the 1987 school year. The first year's broadcasts will be entirely Honduran-produced and of thoroughly professional technical quality, but it is expected that they will undergo considerable revision before permanent, systematic use in first grade classrooms begins the following (1988) school year. The initial development year of first grade broadcasts will have the following objectives: (1) to carefully evaluate and revise segments, programs, and the whole first grade radio curriculum based on carefully-monitored use of the preliminary programs in a medium-sized sample (30 to 100) of classrooms in different parts of the country; (2) to expose parents and teachers to the new programs in a non-threatening way, building motivation and support for subsequent implementation on a larger scale the following year; (3) to thoroughly train and refine the project production team based on the experience of a realistic production schedule, and; (4) to generate widespread public awareness and a positive image of new initiatives of the Honduran Government in the education sector.

Also during 1987, all the facilities, equipment, and supplies needed for full scale implementation beginning in 1988 will be procured and tested, and an efficient delivery system will be developed. Publicity on the national mass media will begin in 1987 and distribution of kits to schools will start during the second half of 1987.

D. PROJECT ADMINISTRATION PLAN

(1) Role and Responsibilities of AID

Overall project responsibility for project management will be in the hands of a direct hire Education Officer. A mission project committee composed of the project manager(HRD/E), the project support officer (DF), a representative of the AID controller, and personnel contracted under the project, will review project status monthly, identify potential problems, develop appropriate solutions and prepare occasional status reports.

To assist in-house AID and MOE Project administrative staff, project grant funds will be used to contract three personal service contractors: (1) a senior Honduran education professional to advise AID and the MOE on project policy and design, (2) a logistics technician responsible for tracking paperwork, and (3) an engineer to oversee all construction and

commodities. The AID project manager will supervise the three personal services contractors who in turn will work closely with the MOE and AVANCE to assure compliance with the terms and conditions of the Project Agreement, to verify that proper procedures are followed on all procurement, contract and management, and to help solve any implementation problems or project issues that arise. Long-term TA contractors assigned to specific components will be tasked to help identify and solve problems.

The Development Finance office will prepare the Project Agreement, and will be responsible along with the Human Resources Development office for preparing Project Implementation Letters and other correspondence. The Office of Controller will review all disbursement requests for conformity with AID regulations and ensure that appropriate accounting practices are followed by the MOE and other participating organizations. The Office of Development Planning will coordinate all evaluations with the project manager.

(2) Role of the Ministry of Education

The project will use an administrative system designed specifically to streamline decision-making and paperwork. Also, consistent with Ministry of Education preferences, project implementation will be designed to strengthen existing units within the Ministry. Each component will be the responsibility of the "General Directorate" to which it corresponds functionally. The Teacher Training and Textbook Components will be the responsibility of the General Directorate of Primary Education. The Construction, Renovation and Maintenance Component will be responsibility of the General Directorate of School Construction. The Management Information System and Education Research Component will be organized under the office of the MOE Vice-Minister for Technical Affairs, with additional cooperation from the departments of Research and Educational Statistics of the General Directorate of Planning and Educational Reforms.

Because of the history of administrative difficulties experienced by the AID Rural Primary Education Project (522-0167) using a centralized approach to project management, the new Primary Education Efficiency Project will use a decentralized scheme assigning most administrative responsibility to the operational level of the MOE General Directors. This approach will make project management more flexible and project implementation less slow and cumbersome. Each General Director is personally responsible for the functioning of his unit and has considerable latitude for decision-making. Each General Directorate has its own administrative unit which manages its budget. The administrative staffs of the General Directorates are relatively stable and many of the administrative staff members of these units perform their jobs capably because they have been on the same job for many years.

This less centralized arrangement will largely eliminate the congestion and bottlenecks that plague administrative procedures and paperwork under a more centralized system. To further facilitate project-related paperwork, one or two additional administrative staff members will be added to each of the General Directorates involved in the project to track the budget and to facilitate paperwork.

Overall project management will be the responsibility of the Vice-Minister of Education for Technical Affairs. There will also be a Project Advisory Committee made up of the General Directors, presided over by the Vice-Minister for Technical Affairs, which will meet at least twice a month to analyze the project's progress and to accelerate implementation and to provide formal coordination when necessary.

At the operational level, each component will have a Director responsible for internal cooperation of his own unit. This Director will, if possible, be someone who is an employee of the Ministry of Education with a high level of training and experience in the substance of the Component he will support.

In summary, the organizational structure of the Project will be headed by the Vice-Minister of Technical Affairs, assisted by a General Coordinator. The General Coordinator has an Advisory Committee made up of the General Directors. Below them will come the General Directors with their respective administrative units. Finally come the Component Directors.

(3) MOE Institutional Capability

The MOE has been an overly centralized and unstable institution. Frequent personnel turnovers and bureaucratic infighting have hampered past efforts to implement projects. Past wisdom led project designers to initiate an administrative plan that circumvented the power of Dirección General chiefs in favor of a centralized coordination committee headed by a project administrator. Designers had hoped this plan would diffuse individual power centers and expedite project implementation by enhancing coordination among components while obscuring the authority of individual component heads. Output targets were not well defined and were not discussed when new actors came on to the scene.

The result was that most decision making took place in the office of the project administrator who had questionable capabilities. Dirección General chiefs and component leaders felt no compulsion to actively execute project activities, because they had minimal authority and unclear accountability. Some professional component leaders moved forward on their activities, but these efforts were viewed by the administrator as attempts to exert undue influence to regain their power base, and these actions were stonewalled. A negative reinforcement environment was created which penalized sound work and, in real terms, rewarded poor performance. The Rural Primary Education Project with all of its problems is a prime example of negative unintended consequences produced by artificially altering the administrative configuration of an institution.

Uncertainty regarding the administrative capability of MOE participants has required that a system be devised to match authority and accountability in order to promote better implementation practices and to incorporate component or project shutdown procedures based on nonperformance. The project has and will utilize three methods to extract the best institutional performance to meet the goals of this effort. First, Mission and MOE staff worked intensively together to design this Project. The MOE

staff were the chiefs of the units which will participate in the project. It is expected that this unique experience for MOE staff will engender thorough knowledge of the project and give them a sense of self-interest and a sense of purpose and accountability in seeing that project activities are implemented on time and with quality. Second, the administrative plan calls for decentralized implementation where as the chiefs of each participating Dirección General will have decision-making authority for their components and will be responsible for reaching the targets. Coordination will occur formally, but all components will not be dependent on the ability or willingness of one individual. Third, the project will integrate the Management by Objectives (MBO) system into implementation. Judgements on project accomplishments will be based on outputs and not processes. Future obligations and programming will depend on reaching output targets. All major actors will participate in devising the yearly targets, and will be responsible for their attainment or lack thereof. In this way, project implementation will be able to overcome the institutional constraints evident in the MOE.

E. Evaluation Plan

Component V, "Learning Objectives and Evaluation", includes funding and technical assistance for a permanent program of project evaluation. Project evaluation will require the participation of project staff from all the components. Many of the components involve a substantial investment in formative evaluation activities -- the systematic field testing of project outputs in schools with careful observation and documentation of problems and strengths associated with each. The formative evaluation data generated in the course of each component's activities will be retained and summarized for overall project evaluation purposes.

Tracking of progress toward meeting project objectives will take place in the course of the formal Management By Objectives (MBO) process. The appropriate indicators will be identified, with precise measurement procedures, at the pre-project MBO workshop. Progress toward meeting each major objective will be evaluated by comparing accomplishments against projected annual benchmarks in a major project review to be held once a year.

A parallel tracking and measurement activity will take place in coordination with AID/Washington, which is developing a standardized set of indicators and measures for tracking the regional NBCCA program in the education sector. The AID/W indicators will be used to measure progress in the education sector in Honduras, providing impact data that will be directly comparable to data from the other Central American countries. The NBCCA indicators will also provide a validity check for the USAID/MOE MBO indicators that will be developed in Honduras.

Summative evaluation will take place in year 4 and year 8 of the project. These two evaluations will not require extensive field data gathering because almost all essential data will be available through the project components. The dependent variable that will be most directly effected by the project -- academic achievement levels -- will be measured continuously and rigorously by Component V throughout the project using a carefully-designed national sample.

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The other major dependent variables are the different indicators of the efficiency of the primary school system -- repetition rates, promotion rates, dropout rates, 6th grade completion rates, and years to complete the 6th grade. This information will be available from enrollment statistics and a cohort analysis that is performed annually by the M.I.S. staff. Cost information will be obtained from the MOE annual budget.

At the year 5 mid-project review, all indicators of system efficiency will be computed for detailed analysis. Based on the Year 4 evaluation, preliminary decisions will be made about possible future AID programming in the education sector. Technical assistance will be provided on a limited scale from the LAC Regional Field Technical Support Contractor to review the computation, analysis and interpretation of the economic and educational measures.

At the year 8 final project review, all relevant efficiency indicators will be computed and analyzed again. Relationships between project inputs, outputs, and impact indicators will be analyzed longitudinally over the entire life of the project. A small study in rural and urban communities will survey teacher and parent attitudes and behaviors with regard to all project components and activities. The efficacy of community participation and private sector collaboration through AVANCE will be analyzed. The final evaluation study will be accomplished using project grant funds, through an independent evaluation contractor. The final project summative evaluation will be presented and discussed in a final MBO review meeting of MOE and AID officials.

V. Financial Plan and Analysis

1. Background and Breakdown

The GOH has faced a fiscal crisis which has severely limited the level of resources targeted to the education sector in general, and primary education in particular. The MOE has been unable to meet the school access requirements to enable all eligible students to attend schools, nor have they been able to meet educational material requirements to satisfy the qualitative needs of the system. Further, the lack of financial resources has inhibited the MOE's ability to innovate in education. AID and other donors have invested in the educational sector to alleviate short-term pressures while instituting changes to support qualitative and efficiency measures.

Currently, the GOH budget for education amounts to 18% of the entire government budget. Approximately \$90 million is dedicated to primary education out of \$178 million for the educational sector. However, approximately \$84 million (93%) is dedicated to teacher salaries and contributions to social security for employees. Despite this high percentage of teacher salaries, the Ministry still lacks personnel ceilings to hire new teachers for schools without teachers. The new President and the Minister of Education have stated their support for improving the efficiency and quality in education. The demand for additional teachers and pressure from the unions for increased salaries will consume a great proportion of additional allocations.

Given the foregoing financial situation, the Mission has designed a project that will emphasize short-and long-term impacts on quality and efficiency in education, while minimizing the recurrent costs of the Ministry of Education.

The total project cost is \$39,044,000 of which AID will contribute \$27,500,000 (\$5.5 million loan and \$22.0 million grant) and the GOH will contribute the equivalent in local currency of \$11,544,000 or 30% of project costs. Project funds will be obligated during the first four fiscal years of the project, but disbursed throughout the life of the project. The initial obligation will be \$3,000,000 in Grant and \$600,000 in Loan. Approximately 48% of the AID contribution will finance commodities, 29% will finance TA or temporary salary costs, 12% for training, 10% for direct salary and operating expense support and 1% for experimental activities. Approximately 40% of the GOH contribution will finance school construction and maintenance, while 60% will support salaries and other in kind costs. Refer to Tables 5 and 6 to see the line item budget by loan, grant and GOH contribution and the eight-year disbursement schedule by component.

The key criterion used for determining the loan-grant split was innovation in terms of the Honduran education sector. The Honduran system uses primary textbooks written about 20 years ago by foreign authors. The conceptualization, drafting by Honduran authors, printing and distribution of over 4 million books and teacher guides is viewed as an innovation and a social requirement. The educational media, testing and evaluation, and education research components represent new technologies and unique activities to be carried out in Honduras, and therefore require grant financing to gain acceptance and to enable proper trial and error implementation. Furthermore, the educational media component will be implemented entirely by a PVO. The Management Information System and Teacher Training are important contributors to the project purpose, but these activities have been executed for a number of years with strong financial support from AID, and therefore the Mission believes loan financing is more appropriate. School construction is viewed as GOH-owned, therefore local currency will cover this activity.

2. Recurrent Cost Implications

Over the next several years, it is expected that the MOE budget will be limited primarily to salary support for teachers. A key justification of this project is to use existing resources more efficiently. The interventions under this project will finance activities to reach planned project outputs without incurring substantial recurrent costs. For example, upon completion of the entire textbook and teacher guide series, the staff of the textbook development group will be reduced to only a core group of one editor, two authors and a curriculum specialist. The Ministry will no longer require a full staff, because future printings will use the textbooks developed under this project. The core group will make modifications when necessary. The teacher training center will need full-time staffing, if the Ministry plans to use it year round. During the life-of-project, GOH-owned local currency will finance one-quarter of the salaries while AID will cover operating expenses. The center was completed under a prior AID project and the majority of costs have been incorporated into the MOE budget. The post project recurrent cost implications is contingent on the planned use of the center.

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Table 5

BUDGET BY U.S. CONTRIBUTION (LOAN-GRANT) AND HONDURAS CONTRIBUTION
 PRESUPUESTO POR CONTRIBUCION DE LOS EEUU (PRESTAMO-DONACION) Y CONTRIBUCION DE HONDURAS
 (\$000)

MOE-USAID ACTIVITIES	U.S. CONTRIBUTION CONTRIBUCION DE LOS EEUU			HONDURAS CONTRIBUTION CONTRIBUCION DE HONDURAS			PROJECT TOTAL TOTAL DEL PROYECTO
	LOAN PRESTAMO	GRANT DONACION		LOCAL CURRENCY EQUIVALENT EQUIVALENTE EN MONEDA LOCAL			
	FX	LC	TOTAL	FX	LC	TOTAL	
TEXTBOOKS/LIBROS DE TEXTO							8291
--PRINT-DISTRIB/IMPRESION-DISTRIB					8291	8291	2297
--SALARIES/SUELDOS					1766	1766	130
--TA/ASISTENCIA TECNICA				120		120	84
--TRAINING/CAPCITACION				84		84	332
--COMMODITIES/MOBILIARIO-EQUIPO				382		382	
TOTAL				586	10057	10643	11174
TEACHER TRAINING/CAPCITACION DOCENTE							579
--COMMODITIES/MOBILIARIO-EQUIPO	155	375	530				2760
--SALARIES/SUELDOS				400	194	594	594
--TA/ASISTENCIA TECNICA							3244
--TRAINING/CAPCITACION		3244	3244				971
--OPERATING EXPENSES/COSTOS DE OPERACION		971	971				
TOTAL	155	4590	4745	400	194	594	3139
EDUCATIONAL RESEARCH/INVESTIGACION EDUCACIONAL							51
--COMMODITIES/MOBILIARIO-EQUIPO				37	14	51	551
--SALARIES/SUELDOS					551	551	102
--TA/ASISTENCIA TECNICA				102		102	400
--OPERATING EXPENSES/COSTOS DE OPERACION					400	400	
TOTAL				139	965	1104	1104
MANAGEMENT INFO SYSTEM/INFORMATICA							345
--COMMODITIES/MOBILIARIO-EQUIPO	320	25	345				801
--SALARIES/SUELDOS		410	410		421	421	472
--TA/ASISTENCIA TECNICA				472		472	110
--TRAINING/CAPCITACION				50	60	110	325
--OPERATING EXPENSES/COSTOS DE OPERACION					325	325	
TOTAL	320	435	755	522	806	1328	2037

LEARNING OBJECT/OBJETIVOS APRENDIZAJE								
--COMMODITIES/EQUIPO			129	50	179			179
--SALARIES/SUELDOS				960	960			960
--TA/ASISTENCIA TECNICA			380		380			380
--OPERATING EXPENSES/COSTOS OPERACION				449	449			449
--EVALUATIONS/EVALUACIONES			100	20	120			120
TOTAL			609	1479	2088			2088

CONSTRUCTION/CONSTRUCCION							5250	5250
(Renovation, Maintenance, Furniture/ Renovacion, Mantenamiento, Mobiliario)								
TOTAL							5250	5250

PROJECT MANAGEMENT/ANEJO DEL PROYECTO				700	700		70	770
MOE-USAID TOTALS	475	5025	5500	2256	14201	16457	8651	30508

AVANCE-USAID ACTIVITY

EDUCATIONAL MEDIAS/MEDIOS EDUCACIONALES								
--COMMODITIES/MOBILIARIO-EQUIPO			2348	952	3300		1729	4629
--SALARIES/SUELDOS					0		2021	2021
--TA/ASISTENCIA TECNICA			1693		1693			1693
--EXPERIMENTS/MEDIOS EXPERIMENTALES			250	300	550			550
TOTAL			4291	1252	5543		3750	8292

GRAND PROJECT TOTALS	475	5025	5500	6547	15453	22000	12000	39510
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Table 6

SUMMARY BUDGET
RESUMEN DEL PRESUPUESTO
(\$000)

USAID-RME ACTIVITIES COMPONENT	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT
I. Textbooks/Libros	610.0	2,930.0	2,283.0	2,995.0	1,972.5	142.5	150.5	120.5
II. Teacher Training/Capacitacion de Maestros	929.3	1,677.0	1,572.0	1,423.1	1,436.6	572.8	527.2	6.0
III. Educational Research/Investigaciones Educativas	144.0	150.0	135.0	135.0	135.0	135.0	135.0	135.0
IV. Management Info./Informacion Administrativa	524.0	569.0	504.0	272.0	214.0	0.0	0.0	0.0
V. Learning Objectives/Objetivos de Aprendizaje	533.0	383.0	232.0	203.0	247.0	174.0	120.0	170.0
VI. Construction/Construccion	1,750.0	1,750.0	1,750.0	0.0	0.0	0.0	0.0	0.0
Project Management/Manejo del Proyecto	110.0	123.0	123.0	108.0	93.0	73.0	70.0	70.0
TOTAL	4,600.3	7,592.0	6,605.0	5,136.1	4,098.1	1,117.3	972.7	495.5
VII. Educational Media/Medios Educativos	2,647.0	2,689.0	1,541.0	735.0	336.0	376.0	25.0	299.0

The learning objectives and evaluation subcomponent and the education research subcomponent are relatively small, but will relate to high-impact activities. The Agreement will covenant for maintaining the two-person policy unit, as well as a core group of test developers. It is hoped that national standardized testing will be a reality by the PACD, so only a core group will be required for longer-term modification activities. In sum, these two subcomponents will have minimal long-term recurrent cost impact on the MOE budget, i.e. less than \$200,000 per year after the project. The Management Information Unit was initiated under the previous project. The project will finance additional personnel and equipment for the next five years to strengthen and expand the capabilities of the Unit. The services of the Unit are used by all facets of the Ministry. These activities are necessary for any functioning institution, and while a minimal level of recurrent costs will be incurred by the expansion of the Unit, this will be balanced by a substantial increase in quality production of information and a reduction in time to make decisions.

Finally, all construction implies recurrent costs for maintenance. However, construction activities will be minimal and will only last three years under this project. The community involvement angle will help reduce initial costs of the MOE and the participatory approach will place more responsibility on local communities to maintain schools, thereby significantly reducing the burden on the limited fiscal resources available.

In summary, in and of themselves, the components will minimally add to the recurrent cost liability of the MOE, probably less than \$1.0 million per year. However, the internal savings to the system caused by the improved efficiency and quality, i.e., reduction of repetition and dropout rates, and increase of student achievement, will surmount recurrent costs by several million dollars per year. Therefore, this project and its long term implications should have no detrimental financial impact on the MOE.

3. Audit and Inspections

The Controller General of Honduras has the capability to perform audits of the project. However, the audits would not be made in a timely manner. Funds have been provided under the host government's contribution to contract external auditors to make annual audits of project activities. The RIG/Tegucigalpa will also make periodic audits which should help assure that project funds and property are safeguarded and accounted for.

4. Methods of Payment and Implementation

The Mission will use the traditional methods of payment to finance the procurement of services and commodities. Direct payments will be made to contractors for commodities, technical assistance and training of project personnel. A revolving fund will be established using ESF local currency generations to pay for host country costs, such as, procurement of commodities, contracting of technical assistance and local support costs. The GOH will be reimbursed for the payments made from the revolving fund. Table No. 7 shows the method of implementation, method of payment and the approximate cost that will be incurred for each method of payment. Using these methods of payment will minimize the Agency's vulnerability.

PRIMARY EDUCATION EFFICIENCY PROJECT (No. 522-0273)
 TABLE 7
 METHODS OF IMPLEMENTATION AND FINANCING
 (\$,000)

<u>Method of Implementation</u>	<u>Method of Payment</u>	<u>Approximate Amount</u>
<u>I. COMMODITIES</u>		
H.C. Profit Making Contractor	Direct Reimbursement	10,257
Purchase Order or Direct Profit Making Contractor	Direct Payment	3,621
<u>II. PROJECT ASSISTANCE SERVICES</u>		
H.C. Personal Services Contractor	Direct Reimbursement	4,808
Direct Personal Services Contractor	Direct Payment	100
H.C. Personal Services Contractor	Direct Reimbursement	20
<u>III. TECHNICAL ASSISTANCE</u>		
Direct Personal Services Contractor	Direct Payment	3,167
H.C. Personal Services Contractor	Direct Reimbursement	194
<u>IV. TRAINING</u>		
Non-Profit Contractor or Personal Service Contract	Direct Payment	134
Host Country Contract	Direct Reimbursement	3,304
Host Country Administration	Direct Reimbursement	50
<u>V. OTHER</u>		
Local Support Costs	Direct Reimbursement	<u>2145</u>
	TOTAL	27,800

VI. Implementation Plan

1. Management by Objectives

Implementation of the Rural Primary Education project has been hampered by constant turnover of executive-level MOE staff responsible for the project, changes in operational staff, shifting levels of interest and commitment to the different components of the project, slow and indifferent coordination of project activities, ineffective expediting of paperwork, and constantly-slipping deadlines. To some extent, this has been due to the lack of a clear and detailed set of implementation objectives to which everyone is fully committed, and strong incentives to meet the objectives on time.

The Primary Education Efficiency Project will institute a new approach to project implementation by using a formal Management By Objectives (MBO) procedure. The MBO approach will generate a clear and specific set of short, medium, and long range objectives which will be fully-understood and agreed upon by everyone involved in the project prior to initiation of project activities. The MBO objectives will provide a clear delineation of responsibilities and establish accountability for all project activities, and will provide for continuity of objectives, priorities, and activities as USAID, MOE, and contract staff come and go during the eight year life of the project.

Immediately following signing of the Project Agreement, USAID/Honduras will arrange with PDS funding for the American Management Association to sponsor a one-week MBO project planning session at a hotel outside of Tegucigalpa. The MBO conference will be attended by USAID HRD/E and O/DF professional staff and by all MOE staff who will be responsible for project activities, including the Minister of Education, the Vice Minister for Technical Affairs, the Director General of Primary Education, the Director General for School Construction, the head of the Department of Learning Resources, the head of the Management Information System, and the head of the In-service Teacher Training Unit. Full-time attendance and participation in the MBO conference will be required by the above individuals. The MBO conference will produce a detailed and comprehensive set of objectives and benchmarks covering all project activities. This document will become Project Implementation Letter Number 2, along with an agreement to meet to review progress toward meeting the MBO objectives on a yearly basis. Agreement of the MBO implementation and the MBO approach to project implementation in PIL Number 2 will be a Condition Precedent to Disbursement of Project funds.

Project Grant funds will be used to contract for the services of a professional MBO contractor for the life of the project. The MBO contractor will spend three weeks in Honduras each year during the project reviewing progress toward meeting goals and benchmarks and running a formal MBO conference for all project executive staff -- AID, MOE, and contract -- at a retreat outside of Tegucigalpa.

It will be understood and stated in PIL Number 2 that the MBO activity is not simply a mechanism for project tracking, monitoring, or

evaluation. MBO will be a tool for programming and reprogramming project resources, and an incentive for everyone involved to adhere to Project objectives. Based on the results of the yearly MBO update retreats, AID will determine what modifications need to be made in the project and will re-allocate resources and amend the project as required. Project funds for components that fall seriously short of their benchmarks in any single year, or that are consistently behind for two or more years, will be de-obligated or reprogrammed. The MBO approach institutionalizes the continuity needed to meet the special implementation difficulties created by the constant turnover of executive and project management staff in both the MOE and AID. New individuals will have the previous MBO plan to guide efforts as they become acquainted with their roles. The yearly updates will enable them to negotiate more appropriate targets given the new environment, with the understanding that overall project targets still must be met.

2. Sequence of Activities

While the exact sequence of activities will be determined by the MBO process described above, the general approach to implementation of the project components is summarized in the activity charts in Annex G.

3. Procurement of Technical Assistance and Commodities

The Project Agreement will state that all international procurement of technical services and commodities will be performed by AID or by AID contractors, at the discretion of AID. All local procurement of services and commodities will be performed by the Government of Honduras, with AID approvals.

Technical services from outside Honduras will be procured in two major packages and two smaller contracts. First, all outside technical assistance and training required for the MOE components of the project will be procured from a single U.S. institutional contractor, based on an open competitive process and contracted directly by AID. The MOE will review and concur with the scope of work prior to publication of the Request for Proposals and an MOE Project representative will participate as a member on the technical review panel that will study the proposals that are received to judge their responsiveness. Besides providing the services of technical advisors, this institutional contractor will serve as purchasing agent for all commodities that need to be purchased outside Honduras for the MOE components of the project. The PIO/T will be developed by the USAID/HRD/E Project Officers within one month of the completion of the initial MBO workshop. The contractor should be selected within four months of project initiation, and a contract signed and initial staff arriving in-country within six months, by the beginning of 1987.

The second major package will be technical services required for the private sector component of the Project, Component VI, "Educational Media." For this component, AID will buy-in to a consortium consisting of the Education Development Center (EDC), the Academy for Educational Development (AED), and Friend Dialogues, Inc. This consortium has been contracted by the ST/ED Radio Learning Project specifically to provide technical services to AID

projects with mass media components. The EDC consortium offers the capability exceptionally capable and experienced individuals and institutions in the radio education and educational media area. Since the consortium was already contracted by AID under competitive procurement procedures, USAID/Honduras can negotiate a scope of work and budget directly with EDC and, if agreement is reached, simply add incremental funding to the existing ST/ED contract with EDC through a PIO/T. This procedure is quick and straightforward, and could make EDC technical services available within three months of the signing of an agreement with AVANCE for this component. Should agreement not be reached in direct negotiations with EDC, a standard competitive procurement procedure can be undertaken to find a responsive contractor. This contractor will also have responsibility for procurement of all commodities needed from outside Honduras for the component.

A third AID institutional contract will be for the services of a professional Management by Objectives contractor.

Finally, AID will contract directly for the services of three individuals under Personal Services Contracts. These individuals will be a project technical manager, a project logistics manager, and an AID-MOE liaison officer. These individuals will be contracted using Project Grant funds. The initial period of their contracts will be one year, renewable for up to eight years.

VII. Project Analysis Summaries

The following paragraphs summarize the social, technical and economic analyses that were performed to demonstrate the analytical basis for this project. The complete analyses can be found in Annex F.

A. Social Analysis Summary

The social soundness analysis in Annex F analyzes the state of primary education in Honduras and the dimensions, causes, and effects of the inefficiency which characterizes the system. While the physical coverage of primary education is estimated at 86%, poor quality instruction causes the majority of students to fail academically, repeat grades unnecessarily, and drop out of school before finishing the sixth grade. The consequences are a great waste of economic and human resources and perpetuation of high illiteracy and low productivity in the rapidly expanding population of young people.

In sociocultural terms, the interventions that will be financed by this project to improve the efficiency of primary education do not present serious obstacles to successful implementation. Most of the components -- textbooks, teacher training, the computerized management information system, and school construction, renovation, and maintenance -- are continuations of activities that are well-known and widely accepted in Honduras. The importance of primary education, including education for girls, is now almost universally accepted in Honduran culture. In general, the system of public

primary education is extremely traditional. Almost everybody involved in any way with primary education -- parents, teachers, students, politicians, and education professionals -- is committed to a formal, traditional educational system, with school buildings, professional teachers, textbooks, 6 grades, and traditional academic curriculum subject areas. The pervasiveness of commitment to this model means that attempting radical reform in the delivery or content of primary education would meet strong and almost universal resistance. This project, as a result, will work to improve the cost-effectiveness of the traditional formal school system, which is already in place throughout Honduras. The project components mentioned above will be readily accepted by teachers, students, parents, and politicians because they are easily recognizable as parts of the traditional formal school model.

There are four important innovations that will be implemented by the project. Two are new technologies -- educational radio and standardized testing. In the course of project design, both were field tested in rural schools to determine their workability and acceptability, and both proved feasible without any significant difficulties on a pilot scale. Nevertheless, because of the conservative, traditional educational establishment and the inevitable suspicion and resistance to any new technology, utilization of these two new technologies will be entirely voluntary. The two new technologies will be promoted using teacher training and social marketing approaches, and it is expected that initial positive experiences by more progressive, innovative teachers will result in increasing acceptance and demand for the new services on the part of increasing numbers of teachers. Neither requires extensive new infrastructure in the course of this project, and are regarded as experimental and evolutionary. If the innovations become widely accepted in the course of the project, it is possible that a second phase or a follow-on project will expand and more fully institutionalize these two new technologies.

The other two innovations are processes. One is increasing the involvement of the local community, especially the parents of primary school children, in the program of the local school. A number of techniques -- promotion by parents, social marketing campaigns in the mass media, promotion at the community level, development of attractive support services that parents can offer to the teacher -- will be used to involve community resources in support of the school. Interviews in the course of project design and experience in several MOE programs reveal that parents and communities are anxious to support their local school and teacher if given encouragement and something specific and worthwhile to do. The other new process is involvement of the Honduran private business sector in support of public education, through the development of support services and materials in the "Educational Media" component of the project. While there is little precedent for this approach, the private sector organization AVANCE has already succeeded in raising the consciousness and level of involvement in education on the part of a group of important Honduran businessmen. The success of the initial AVANCE educational project -- the rural newspaper El Agricultor -- has stimulated the enthusiasm of this dynamic private sector group to initiate other new educational services. Both AVANCE and the MOE have expressed enthusiasm for this new partnership between the public and private sectors in support of primary education.

B. Technical Analysis Summary

The interventions selected for implementation are not technically complex or difficult to implement. A study of the printing capacity in the country found adequate installed capacity in the printing industry to print the textbooks, teacher guides, and supplementary materials that will be supplied by the project. Experience under the Rural Primary Education project has shown that private sector shippers can deliver books and building supplies throughout the country without overwhelming difficulties. Experience with self-help school construction under a small project in the MOE has demonstrated that schools in rural communities can be constructed, renovated, and maintained at low cost by involving the community directly in each local project. Construction, maintenance, and renovation in urban areas, on the other hand, will require a more traditional non-participatory approach.

Logistics and transportation will be a problem in all components. Each component requires that project staff travel throughout the country to perform a variety of administrative, supervisory, training, and research functions. The project will supply a number of utility passenger vehicles to facilitate travel and funding for travel and per diem expenses. The Ministry of Education will be asked to develop a management mechanism for the efficient dispatching and maintenance of project-supplied utility vehicles.

The educational radio component is the only technically-innovative component in terms of equipment. Since the interactive radio approach is new, the project does not contemplate any major transmission infrastructure. The project will use an existing shortwave transmitter which is designed to provide clear national coverage, and will provide simple transistorized off-the-shelf reception equipment for use in classrooms. This system will be adequate for coverage of up to several thousand classrooms throughout the country and will permit the MOE, AVANCE, and AID to evaluate the utility and feasibility of the interactive radio approach.

C. Economic Analysis Summary

The proposed project is designed to enhance both the quantity and the quality of education in Honduras. The principal gains resulting from the project will be reflected in (1) reduced dropout and repeater rates at all primary grade levels, and (2) higher educational achievement at all primary grade levels. Reduced dropout and repeater rates translate directly into increased graduates at all grade levels due to the project. Enhanced achievement means that, with the project, graduates at each grade level will, on the average, attain higher levels of cognitive, intellectual and social development than without the project.

The fundamental methodological assumption behind the economic analysis is that increased levels of education, both in terms of higher numbers of graduates and in terms of enhanced educational achievement at all grade levels, will have a positive impact on worker productivity, and that higher levels of productivity will be reflected in higher levels of labor income. Accordingly, the economic analysis calculated the present value of incremental expected future income streams accruing to students benefiting

from the project, and then compared that figure with the present value of project related costs. Using a discount rate of 15% reflecting the opportunity cost of capital in Honduras, the benefit-cost ratio achieved by the project is 4.7. When those project benefits relating to enhanced educational achievement at each grade level (as distinct from those associated with increased numbers of graduates at each grade level) are excluded, the benefit-cost ratio is 2.0. These results strongly suggest that the proposed project will result in high economic returns. The full economic analysis is presented in Annex F.3.

VIII. Conditions and Covenants

(1) First Disbursement

Prior to any disbursement of the assistance, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Borrower/Grantee will, except as the Parties may otherwise agree to in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(i) An opinion of the Attorney General of the Republic or of counsel acceptable to A.I.D. that this Agreement has been duly authorized and/or ratified by, and executed on behalf of, the Borrower/Grantee and that it constitutes a valid and legally binding obligation of the Borrower/Grantee in accordance with all of its terms;

(ii) A statement of the name(s) of the person(s) holding or acting in the office of Borrower/Grantee specified in section 9.3, and a specimen signature of each person specified in such statement.

(2) Additional Disbursement

Prior to any disbursement of Grant funds, or to the issuance of any commitment documents under the Project Agreement for the Grant except for requirements under the textbook component, the Borrower/Grantee shall, except as the Parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D., a plan outlining Project targets to be reached for each MOE administered component by the end of the first year of implementation based on a Management by Objectives Conference attended by all key participants from the MOE and A.I.D.

Prior to any disbursement of the Loan funds or the issuance of any commitment documents under the Loan, the Borrower/Grantee shall, except as the Parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D.:

- (i) an in-service teacher training plan;
- (ii) a plan to integrate the capability of the construction, renovation and maintenance units into the existing MOE administrative structure;
- (iii) a signed agreement of cooperation between the MOE and the Honduran Private Sector Organization, AVANCE.

(4) Subsequent Disbursements: Prior to any disbursements after the first year of the Project, the Borrower/Grantee shall, except as the Parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D., evidence that the MOE has conducted a yearly Management by Objectives Conference to review the previous year's performance and develop the output targets for the following year's implementation plan.

e. Special Covenants

The Parties agree to establish an evaluation program as an integral part of the Project except as the Parties otherwise agree in writing, the program will include, during the implementation of the Project and at one or more points thereafter:

- (1) a baseline study of the conditions of Honduran primary education existing at the time of Project initiation;
- (2) evaluation of progress toward attainment of the objectives of the Project;
- (3) identification and evaluation of problem areas or constraints which may inhibit such attainment;
- (4) assesment of how such information may be used to overcome such problems in this or other Projects;
- (5) evaluation, to the degree feasible, of the overall development impact of the Project.

The Borrower/Grantee covenants that, unless otherwise agreed to in writing by the Parties, that it will:

- (a) jointly decide with A.I.D. representatives to terminate Project components that consistently fail to reach planned targets;
- (b) retain a core staff of textbook authors, editors and curriculum specialist at the conclusion of A.I.D. financial support for the positions;

(c) utilize MOE budgetary resources to maintain a well-staffed and Functioning Management Information Unit; and

(d) retain a core staff of learning objectives and evaluation specialists at the conclusion of A.I.D. financial support for the position.

IX. Environmental Assessment

The Mission conducted an initial environmental examination during PID development and made a negative determination. No further requests have come from the Bureau Environmental Office and no other evidence has been presented contrary to our initial findings. In summary the Project will have seven components: The textbooks, teacher training, educational research, management information system, learning objectives and evaluation, educational medias and school construction. The first six components fall under the Categorical Exclusion Section 216.2 (c) under A.I.D. Environmental Procedures. This section indicates that education, technical assistance and training efforts are no subject to the procedures. However, the seventh component which involves schoolroom construction is subject to the regulations.

Nonetheless, the schoolroom construction should present only minor environmental concerns in a limited area. The construction of small schoolrooms will require minimal leveling and creation of sewage facilities. The actual construction will create minimal levels of floating dust and disturbed soils. Each site selected will undergo an evaluation to assure that environmental concerns are addressed. However, the Mission believes that as in the case of the previous project (Rural Primary Education 522-0167), the environmental impact will be negligible. Furthermore, overall construction will be limited in numbers and last for only three years.

Having evaluated the proposed for potentially significant impacts, it is the Mission's judgement that none will occur. Therefore, a negative determination is recommended.

ANNEX A

INFORMATION MEMORANDUM TO THE MISSION DIRECTOR

FROM: Ted Landau, DF 

THROUGH: Peter Krastover, DF 

SUBJECT: Decisions Stemming from Mission Review of the Primary Education Efficiency PID (522-0273)

DATE: December 2, 1985

The following reflects decisions made in response to issues raised (copy attached) at the subject PID review. When necessary, the PID was revised to incorporate recommendations of the Review Committee.

The Review Committee made five key decisions relative to the Project that were not covered in the issues paper.

First, given the innovative nature of the Project, it was decided that a strong project evaluation component should be included. In this sense, an intensive baseline study would take place, followed in the third year by a major evaluation, with additional evaluations factored in later in the Project.

In conjunction with the first decision, the second action was to elaborate in the PID and design into the PP two phases. The first phase will include the quality package for the first three grades and implementation of the other components. Grades one through three will require the largest level of inputs and will have the greatest immediate impact if successful. The evaluation during the third year will determine the initial success of the Project and will form the basis for deciding whether or not to enter the second phase.

The third major decision was to enhance the community participation aspects of the Project. It was agreed that emphasis on community participation would deliver greater benefits to the Project and to the long-term requirements of the Honduran educational system.

Fourth, the Mission will study administrative measures during intensive review to strengthen the policy reform unit. One way to strengthen their position is to include a policy agenda as part of the project agreement. This will serve as a basis for measuring progress on the policy front.

Finally, the construction component will be included in the Project to serve as a bridge to other international donor construction activities if they materialize. The Mission will conduct intensive discussions with IBRD and IDB to engender their involvement in school construction.

A. Strategy

(1) Training and Motivation of Teachers: The issues paper questioned whether or not there was an overemphasis on textbooks and not enough emphasis on teacher training. The Review Committee concluded that there was an appropriate mix and magnitude of components outlined in the Quality Education Package. The Mission will examine during intensive review whether more teacher training during the LOP should be planned.

The issues paper also was concerned with whether the PID covered teacher motivational problems adequately. Part of the issue will be handled through emphasis on community participation activities and improved instructional materials. Additional incentive issues such as promotions, pay scales and fringe benefits will be looked at during intensive review and will be included in the agreed upon policy agenda with the MOE.

(2) Curriculum Definition: The issues paper indicated that the PID should have integrated practical skills training into project activities. The Review Committee concluded that this project must concentrate on the four basic core courses to produce the improved efficiency and the more learned student. Although practical training is deemed important, these activities would detract from the core skills training and add costs to the Project. Teachers will be instructed to utilize local materials in the course of their daily routines.

(3) MOE Capacity: The issues paper questioned the capability of the MOE to carryout the activities, as well as the project promoting centralization and the growth in government. The Review Committee concluded that with the proper leadership and the support of technical experts, the experience is available to properly complete the components. Furthermore, although the MOE will need to carryout several major activities, the Project will emphasize community participation to facilitate greater decentralization.

(4) Cost-Sharing: The issues paper indicated that cost-sharing mechanisms for recipients might stimulate greater local participation and individual responsibility, as well as reduce recurrent costs for the government. During intensive review, the PP design team will explore several options to enhance cost-sharing principals such as local revenue generations, book charges and matching grants through individual or community charges. Policy options will also be included in the agreed policy agenda.

(5) Loan-Grant Split: The issues paper contended that given the social nature of the Project a higher grant to loan ratio would be appropriate. The Review Committee concluded that attributing loan and grant funds for technical services, training and commodities would follow normal A.I.D. procedures except for innovative measures. The radio and testing components would generally be grant funded.

(6) Grade Emphasis: The issues paper addressed the point that the completion of the fourth grade is the key to retaining literacy and increasing productive capacity. The belief is that concentration on the first four grades would reduce costs while having impacts similar to interventions through the sixth grade. The Review Committee decided that this issue needed further study during intensive review.

(7) Fiscal Support to Education: This issue dealt with financing teachers' positions for one year to have them integrated into the government payroll. The Review Committee decided to drop this component, study it with the government during intensive review and cover the teachers' issue in the policy arena if necessary.

B. Implementation

(1) Training of Personnel Other Than Teachers: The issues paper sought further clarification of training offered to other educational personnel, particularly supervisors. The supervisors will receive the three-week course. Steps toward providing additional managerial training will be studied during intensive review. The Review Committee affirmed the importance of maintaining the information loop from upper management through all levels to the teachers and vice versa. Without reinforcing this loop, the Project would encounter crippling problems.

(2) Permanent Training of Teachers: This issue was addressed earlier.

(3) Textbook authors: The issues paper questioned the supply and adequacy of the Honduran textbook authors to handle this effort. The Committee concluded that an appropriate number of quality authors existed in the country.

(4) Project Initiation Date: This issue dealt with the plausibility of implementing the first grade quality package by FY 1987 given the development, experimentation and evaluation needs. The Committee expressed its support for meeting this deadline.

ANNEX B

LOGICAL FRAMEWORK
PRIMARY EDUCATION EFFICIENCY PROJECT
 (522-0273)

<u>Goal</u>	<u>Objectively Verifiable Indicators</u>	<u>Means of Verification</u>	<u>Assumptions</u>
To improve the productivity and quality of life of the Honduran people	-Increased Ag. productivity -Improved public health status -Reduced Fertility -Increased Family Income	-GOH Economic and social -Social Statistics -MOE Surveys	-Political Stability -Continuing Democratic Process -Growing Employment Opportunities
<u>Purpose</u>			
To improve the quality, efficiency, and cost effectiveness of primary education in Honduras	-60% improvement in student achievement -30% reduction in grade repetition rates -10% reduction in dropout rates -13% reduction in schoolyears to produce 6th grade graduate -28% reduction in cost per student in grades 1 - 6	-Project developed academic achievement test scores -Project Evaluation studies -MOE statistics	-Parents value primary education completion over other opportunities. -GOH polity commitment to allocating appropriate level of resources to primary education. -Teachers committed to improving instruction and efficiency and willingness to adopt appropriate innovations.
<u>Outputs</u>			
I. <u>Textbook Component</u>			
1. New national textbook series written and field tested and officially approved	1. 24 new textbook titles and 24 new teachersguides (4 subjects, 6 grades) written, reviewed, field tested, and approved by MOE		
2. Honduran capability to write modern textbooks	2. 4 teams of 5 authors each trained and experienced in textbook preparation and revision	-Project evaluations	

ANNEX B

<u>Outputs</u>	<u>Objectively Verifiable Indicators</u>	<u>Means of Verification</u>	<u>Assumptions</u>
3. Textbooks and teacher guides printed and distributed	3. 3,988,000 new textbooks provided to 997,000 primary school students; 157,168 teacher guides provided to 39,292 primary school teachers - full book coverage of the primary system in 1991.	-MBO workshops -MOE records	
4. Enhanced capability to print and distribute textbooks in the Honduran private sector; enhanced MOE capacity to administer textbooks printing and distribution	4. Private sector printers and distributors with experience in massive scale textbooks printing and distribution. New MOE capacity to Project demand, plan, order, store, slip, and deliver textbooks, based on a computerized inventory system.	-AID Project records -AID Project Monitoring & site visits	
5. Model standardized test provided to teachers for voluntary use in measuring students academic achievement	5. 96 model tests (4 per subject per grade) developed based on MOE basic learning objectives printed in teacher guides with instructions for classroom use and national performance standards	 cont.	
<u>II. In-Service Teacher Training Component</u>			
1. National program of in-service teacher training workshops expanded and functioning	1. 300 professional teacher trainers, 18 departmental supervisors and 300 regional supervisors and model teachers trained to serve as in-service teacher trainers		

<u>Outputs</u>	<u>Objectively Verifiable Indicators</u>	<u>Means of Verification</u>	<u>Assumptions</u>
2. Functioning National In-Service Teacher Training purposes 3 months per year	2. La Paz Teacher Training Center functioning for project during first five years of the project		Center
3. Experimental system of in-service distance teacher training field tested and evaluated	3. Use of rural newspaper and/or radio to reinforce in-service teacher training tested for 3 years and evaluated with 10,000 teachers		
4. Teachers trained in use of new textbooks, multigrade teaching, community relations, basic learning objectives, and testing and evaluation	4. 39,292 teachers, the total 1991 primary school teachers trained in 2-week workshops 4 years		
5. System of basic learning objectives	5. Fundamental learning objectives developed from official curriculum in 4 subject areas for 6 grades		
<u>III. Education Research</u>			
1. Permanent Education Policy Study Unit	1. One unit with 2 full time professional education policy researcher/analysts		
2. Studies of policy and administrative alternatives	2. Average of 5 studies completed per year (3 with original data gathering from the field), LOP total of 40 studies		
3. Policy research conferences and workshops	3. Average of workshops per years, LOP total of 20 workshops		

<u>Outputs</u>	<u>Objectively Verifiable Indicators</u>	<u>Means of Verification</u>	<u>Assumptions</u>
<u>IV. Management Information System</u>			
1. Enlarged computer capacity	1. Expanded CPU, expanded and decentralized terminal access in MOE; remote access through 12 departmental supervisors		
2. Enlarged base of trained users	2. 200 MOE staff trained in misutilization		
3. Permanent Academic Testing Program	3. Item bank, testing system in use tracking academic achievement of a representative national sample of primary education students		
<u>V. Learning Objectives and Evaluation</u>			
1. Officially approved basic minimum learning objectives	1. 24 final lists of minimum objectives (4 subjects for 6 grades)		
2. Permanent test item bank	2. Computerized item bank with 24 files (4 subjects, 6 grades)		
3. Model tests with instructions and scoring norms in teacher guides	3. 96 model tests published in teacher guides (4 subjects for 4 tests for 6 grades)		
4. Academic achievement tests developed for national evaluation	4. 24 tests in use with annual upgrading from item analysis and item bank		
5. Academic achievement testing program functioning at national level	5. Tests being administered to representative national sample of primary school children at the beginning and end of each school year. Results analyzed and disseminated		

<u>Outputs</u>	<u>Objectively Verifiable Indicators</u>	<u>Means of Verification</u>	<u>Assumptions</u>
6. Results from national testing program for project tracking	6. At least 10 waves of test data available (2/year per 5 years)		
7. Teachers voluntarily using nationally-developed, tests for student evaluation and diagnosis	7. At least 20% of teachers making regular use of model tests for grading students		
8. Project evaluations completed	8. 2 major empirical project evaluations completed, in year 5 and year 8, of project impact on achievement and efficiency indicators.		
<u>VI. Construction, Renovation and Maintenance</u>			
1. New system of community - based construction, renovation, and maintenance developed	1. MOE community promoters working with teachers and communities to plan and implement school projects with local labor & materials		
2. New schools constructed	2. 150-300 schools constructed per year for 3 years, for a LOP total of 450 to 900 schools depending on success of MOE cost-reduction strategy is successful		
3. Schools renovated	3. 100-200 schools renovated per year for 3 years for a LOP total 300-600 schools renovated, depending on success of MOE cost reduction program		
4. Schools receiving maintenance	4. 100-200 schools receiving maintenance per year, for a LOP total of 300-600 schools depending on success of MOE cost reduction program		

Outputs	<u>Objectively Verifiable Indicators</u>	<u>Means of Verification</u>	<u>Assumptions</u>
VII. <u>Educational Media</u>			
1. <u>Interactive Classroom Radio System</u>	1.		
a. Interactive radio production staff	a.	Staff of 20 trained educational radio program producers;	
b. Production, transmission, and reception capabilities	b.	Production studio; transmission capability with national coverage; reception facilities sold and in use in 10,000 classrooms	
c. Programs in use	c.	Programs developed, field tested, revised, and in regular use in math and language areas for grades 1.3	
2. <u>Educational Print Media Production Program</u>	2.		
a. Newspaper posters keyed to primary school curriculum	a.	30 special posters per year in El Agricultor for 3 years for 5,000 classrooms, LOP total or 750,000 posters	
b. Newspaper section designed for distance in-service teacher training	b.	30 special 'information' pages per year in El Agricultor for 3 years for 5,000 teacher, LOP total of 750,000 teacher pages	
3. Mosquitia bilingual education service	3.	82 primary schools in Mosquitia receiving special transitional bilingual instruction by radio	
4. Experimental Education Media Program	4.	Average of four small field, experiments per year with innovative instructional media and materials	

Inputs

	LOAN	GRANT
Commodities	915	11,699
Technical Assistance (External and Local)		8,157
Training	3,204	194
Personnel and Support	1,381	1,300
Experimental Activities	_____	<u>650</u>
TOTAL	5,500	22,000

5C(1) - COUNTRY CHECKLIST

Listed below are statutory criteria applicable generally to FAA funds, and criteria applicable to individual fund sources: Development Assistance and Economic Support Fund.

A. GENERAL CRITERIA FOR COUNTRY ELIGIBILITY

1. FAA Sec. 481(h)(1); FY 1986 Continuing Resolution Sec. 527. Has it been determined or certified to the Congress by the President that the government of the recipient country has failed to take adequate measures or steps to prevent narcotic and psychotropic drugs or other controlled substances (as listed in the schedules in section 202 of the Comprehensive Drug Abuse and Prevention Control Act of 1971) which are cultivated, produced or processed illicitly, in whole or in part, in such country or transported through such country, from being sold illegally within the jurisdiction of such country to United States Government personnel or their dependents or from entering the United States unlawfully?

No such determination has been made

2. FAA Sec. 481(h)(4). Has the President determined that the recipient country has not taken adequate steps to prevent (a) the processing, in whole or in part, in such country of narcotic and psychotropic drugs or other controlled substances, (b) the transportation through such country of narcotic and psychotropic drugs or other controlled substances, and (c) the use of such country as a refuge for illegal drug traffickers?

No such determination has been made

3. FAA Sec. 620(c). If assistance is to a government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) the debt is not denied or contested by such government?

A.I.D. knows of no such cases

4. FAA Sec. 620(e)(1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities?

There is no evidence of such action

5. FAA Sec. 620(a), 620(f), 620D; FY 1986 Continuing Resolution Sec. 512. Is recipient country a Communist country? If so, has the President determined that assistance to the country is important to the national interests of the United States? Will assistance be provided to Angola, Cambodia, Cuba, Iraq, Syria, Vietnam, Libya, or South Yemen? Will assistance be provided to Afghanistan without a certification?

No, No assistance will be provided to the mentioned countries

6. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction by mob action of U.S. property?

There has been no such action in 14 years

7. FAA Sec. 620(l). Has the country failed to enter into an agreement with OPIC?

Honduras has an agreement with said organization

8. FAA Sec. 620(o); Fishermen's Protective Act of 1967, as amended, Sec. 5. (a) Has the country seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters?

There is no evidence that an action of this nature occurred for many years.

(b) If so, has any deduction required by the Fishermen's Protective Act been made?

9. FAA Sec. 620(q); FY 1986 Continuing Resolution Sec. 518. (a) Has the government of the recipient country been in default for more than six months on interest or principal of any AID loan to the country? (b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the appropriation bill (or continuing resolution) appropriates funds?

a. No

b. No

10. FAA SEC. 620(s). If contemplated assistance is development loan or from Economic Support Fund, has the Administrator taken into account the amount of foreign exchange or other resources which the country has spent on military equipment? (Reference may be made to the annual "Taking Into Consideration" memo: "Yes, taken into account by the Administrator at time of approval of Agency OYB." This approval by the Administrator of the Operational Year Budget can be the basis for an affirmative answer during the fiscal year unless significant changes in circumstances occur.)

Yes, taken into account by the Administrator at the time of approval of Agency OYB

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11. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?

No

12. FAA Sec. 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears were such arrearages taken into account by the AID Administrator in determining the current AID Operational Year Budget? (Reference may be made to the Taking into Consideration memo.)

Honduras is not in arrears to the extent described in Article 19 of the U.N. Charter

13. FAA Sec. 620A. Has the government of the recipient country aided or abetted, by granting sanctuary from prosecution to, any individual or group which has committed an act of international terrorism?

No

14. ISDCA of 1985 Sec. 552(b). Has the Secretary of State determined that the country is a high terrorist threat country after the Secretary of Transportation has determined, pursuant to section 1115(e)(2) of the Federal Aviation Act of 1958, that an airport in the country does not maintain and administer effective security measures?

No

15. FAA Sec. 666. Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA?

No

16. FAA Sec. 669, 670: Has the country, after August 3, 1977, delivered or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards? Has it transferred a nuclear explosive device to a non-nuclear weapon state, or if such a state, either received or detonated a nuclear explosive device? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.)

No

17. FAA Sec. 670. If the country is a non-nuclear weapon state, has it, on or after August 8, 1985, exported illegally (or attempted to export illegally) from the United States any material, equipment, or technology which would contribute significantly to the ability of such country to manufacture a nuclear explosive device?

No

18. ISDCA of 1981-Sec. 720. Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 35th General Assembly of the U.N. of Sept. 25 and 28, 1981, and failed to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the Taking into Consideration memo.)

This has been taken into account by the Administrator during elaboration of the OYB.

19. FY 1986 Continuing Resolution Sec. 541.

Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions?

No

Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations?

No

Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?

No

20. FY 1986 Continuing Resolution. Is the assistance being made available to any organization or program which has been determined as supporting or participating in the management of a program of coercive abortion or involuntary sterilization? No

If assistance is from the population functional account, are any of the funds to be made available to family planning projects which do not offer, either directly or through referral to or information about access to, a broad range of family planning methods and services? Not Applicable

21. FY 1986 Continuing Resolution Sec. 529. Has the recipient country been determined by the President to have engaged in a consistent pattern of opposition to the foreign policy of the United States? No

22. FY 1986 Continuing Resolution Sec. 513. Has the duly elected Head of Government of the country been deposed by military coup or decree? No

B. FUNDING SOURCE CRITERIA FOR COUNTRY ELIGIBILITY

1. Development Assistance Country Criteria

FAA Sec. 116. Has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy? No

2. Economic Support Fund
Country Criteria

FAA Sec. 502B. Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the country made such significant improvements in its human rights record that furnishing such assistance is in the national interest?

Not Applicable

5C(2) PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A. includes criteria applicable to all projects. Part B. applies to projects funded from specific sources only:
B.1. applies to all projects funded with Development Assistance loans, and
B.3. applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT

1. FY 1986 Continuing Resolution Sec. 524; FAA Sec. 634A.

Describe how authorizing and appropriations committees of Senate and House have been or will be notified concerning the project.

A Congressional Notification will be submitted by A.I.D. indicating the funding requirements of this project.

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$500,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

a.b. These activities have been done.

3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?

The Honduran Congress will approve the project upon signature of the Executive Branch Representatives.

4. FAA Sec. 611(b); FY 1986 Continuing Resolution Sec. 501. If for water or water-related land resource construction, has project met the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See AID Handbook 3 for new guidelines.)

Not Applicable

5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project?

Yes

6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.

No other donors are prepared to finance activities under this project at this time.

7. FAA Sec. 601(a). Information and conclusions whether projects will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; and (c) encourage development and use of cooperatives, and credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.

Since primary education effects basic productivity and learning capabilities, improvement of the quality of the student and efficiency in the system will enhance activities in all sectors of society.

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8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

Most equipment and technical assistance will be purchased from U.S. firms. A better trained workforce help promote investment opportunities in Honduras.

9. FAA Sec. 612(b), 636(h); FY 1986 Continuing Resolution Sec. 507. Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.

All steps have been taken through Honduran interagency agreement that the country is contributing the required amount of local currency.

10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

No

11. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

Yes

12. FY 1986 Continuing Resolution Sec. 522. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?

Not Applicable

13. FAA 118(c) and (d). Does the project comply with the environmental procedures set forth in AID Regulation 16. Does the project or program take into consideration the problem of the destruction of tropical forests?

Not Applicable

14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (dollars or local currency generated therefrom)?

Not Applicable

15. FY 1986 Continuing Resolution Sec. 533. Is disbursement of the assistance conditioned solely on the basis of the policies of any multilateral institution?

Not conditioned at all based on the policies of any multilateral institution.

16. ISDCA of 1985 Sec. 310. For development assistance projects, how much of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, and private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)?

At least 10 percent

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance
Project Criteria

- a. FAA Sec. 102(a), 111, 113, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status, (e) utilize and encourage regional cooperation by developing countries?

The nationwide approach of this project will have significant impact in the poor since this group is usually the last to receive the benefits of education. By strengthening the educational system and improving the quality of outcoming students, all aspects of Honduran society will be improved particularly in terms of productivity, self-help measures and, strengthening democratic institutions.

b. FAA Sec. 103, 103A, 104, 105, 106. -- Does the project fit the criteria for the type of funds (functional account) being used?

105. The project specifically deals with education

c. FAA Sec. 107. Is emphasis on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?

Where applicable, the project will promote appropriate technology

d. FAA Sec. 110(a). Will the recipient country provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed country)?

The country will provide at least 25% of the costs of the program

e. FAA Sec. 122(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?

This project should have a major short and long-term

f. FAA Sec. 128(b). If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority?

All private sector participation and educational research is geared to reaching the poor majority of beneficiaries.

g. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective participation in governmental processes essential to self-government.

This project targets a basic requirement for self-development. It will utilize the capabilities of Hondurans to design and write textbooks, and develop and produce radio programming. The project will strengthen the participating institutions through training and experience.

2. Development Assistance Project
Criteria (Loans Only)

a. FAA Sec. 122(b).

Information and conclusion on capacity of the country to repay the loan, at a reasonable rate of interest.

The participating country has the capacity to repay the loan

b. FAA Sec. 620(d).

If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan?

Not Applicable

3. Economic Support Fund Project
Criteria

a. FAA Sec. 531(a). Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of part I of the FAA?

Not Applicable

b. FAA Sec. 531(c). Will assistance under this chapter be used for military, or paramilitary activities?

Not Applicable

c. ISDCA of 1985 Sec. 207. Will ESF funds be used to finance the construction of, or the operation or maintenance of, or the supplying of fuel for, a nuclear facility? If so, has the President certified

Not Applicable

5. FAA Sec. 604(a). Will construction or engineering services be procured from firms of countries which receive direct economic assistance under the FAA and which are otherwise eligible under Code 941, but which have attained a competitive capability in international markets in one of these areas? Do these countries permit United States firms to compete for construction or engineering services financed from assistance programs of these countries?

If required, only U.S. or local firms will be utilized

6. FAA Sec. 603. Is the shipping excluded from compliance with requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent such vessels are available at fair and reasonable rates?

Shipping will be in compliance with said Act

7. FAA Sec. 621. If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? If the facilities of other Federal agencies will be utilized, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

Yes

Private firms will be utilized in all cases

8. International Air Transportation Fair Competitive Practices Act, 1974. If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available?

Yes

9. FY 1986 Continuing Resolution Sec. 504. If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States?

The contracts will when promulgated

B. Construction

1. FAA Sec. 601(d). If capital (e.g., construction) project, will U.S. engineering and professional services be used?

U.S. or local firms

2. FAA Sec. 611(c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable?

Yes

3. FAA Sec. 620(k). If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed \$100 million (except for productive enterprises in Egypt that were described in the CP)?

Not Applicable

that such country is a party to the Treaty on the Non-Proliferation of Nuclear Weapons or the Treaty for the Prohibition of Nuclear Weapons in Latin America (the "Treaty of Tlatelolco"), cooperates fully with the IAEA, and pursues nonproliferation policies consistent with those of the United States?

- d. FAA Sec. 609. IF commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?

Not Applicable

5C(3) - STANDARD ITEM CHECKLIST

Listed below are the statutory items which normally will be covered routinely in those provisions of an assistance agreement dealing with its implementation, or covered in the agreement by imposing limits on certain uses of funds.

These items are arranged under the general headings of (A) Procurement, (B) Construction, and (C) Other Restrictions.

A. Procurement

1. FAA Sec. 602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?

Yes

2. FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or under delegation from him??

Yes

3. FAA Sec. 604(d). If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company?

The cooperating country does not discriminate against marine Insurance Companies

4. FAA Sec. 604(e); ISDCA of 1980 Sec. 705(a). If offshore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)

Not Applicable

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C. Other Restrictions

1. FAA Sec. 122(b). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter? Yes

2. FAA Sec. 301(d). If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights? Not Applicable

3. FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries? Yes

4. Will arrangements preclude use of financing:
 - a. FAA Sec. 104(f); FY 1986 Continuing Resolution Sec. 526. (1) To pay for performance of abortions as a method of family planning or to motivate or coerce persons to practice abortions; (2) to pay for performance of involuntary sterilization as method of family planning, or to coerce or provide financial incentive to any person to undergo Precluded
Precluded

sterilization; (3) to pay for any biomedical research which relates, in whole or part, to methods or the performance of abortions or involuntary sterilizations as a means of family planning; (4) to lobby for abortion?

Precluded

b. FAA Sec. 488. To reimburse persons, in the form of cash payments, whose illicit drug crops are eradicated?

Precluded

c. FAA Sec. 620(q). To compensate owners for expropriated nationalized property?

Precluded

d. FAA Sec. 660. To provide training or advice or provide any financial support for police, prisons, or other law enforcement forces, except for narcotics programs?

Precluded

e. FAA Sec. 652. For CIA activities?

Precluded

f. FAA Sec. 636(i). For purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained?

Precluded

- g. FY 1986 Continuing Resolution, Sec. 503.
To pay pensions, annuities, retirement pay, or adjusted service compensation for military personnel? Precluded
- h. FY 1986 Continuing Resolution, Sec. 505.
To pay U.N. assessments, arrearages or dues? Precluded
- i. FY 1986 Continuing Resolution, Sec. 506.
To carry out provisions of FAA section 209(d) (Transfer of FAA funds to multilateral organizations for lending)? Precluded
- j. FY 1986 Continuing Resolution, Sec. 510.
To finance the export of nuclear equipment, fuel, or technology? Precluded
- k. FY 1986 Continuing Resolution, Sec. 511.
For the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? Precluded
- l. FY 1986 Continuing Resolution, Sec. 516.
To be used for publicity or propaganda purposes within U.S. not authorized by Congress? Precluded

ANNEX E

Certification Pursuant to Section 611(e) of The Foreign Assistance Act of 1961, As Amended

I, ANTHONY J. CAUTERUCCI, the principal officer of the Agency for International Development in Honduras, having taken into account among other factors the maintenance and utilization of projects in Honduras previously financed or assisted by the United States, do hereby certify that in my judgement Honduras has both the financial capability and human resources capability to effectively maintain and utilize the development assistance project: Primary Education Efficiency.

Anthony J. Cauterucci
Director, USAID/Honduras

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w/att

SECRETARIA DE HACIENDA Y CREDITO PUBLICO
REPUBLICA DE HONDURAS

Tegucigalpa, D. C., julio 25, 1986

No. CP -SF-009

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Señor
ANTHONY J. CAUTERUCCI
Director Agencia para el
Desarrollo Internacional
Presente

JUL 28 9 48 AM '86

USAID

Señor Director:

La Secretaría de Hacienda y Crédito Público, en nombre y representación del Gobierno de la República de Honduras, muy atentamente se permite presentar a la Agencia para el Desarrollo Internacional formal solicitud de financiamiento por US\$.5.5 Millones en concepto de préstamo y US\$.22.0 Millones en calidad de Donación para desarrollar un proyecto denominado Mejoramiento de Educación Primaria, cuyo propósito es mejorar la eficiencia, costo-efectividad y la calidad de la educación primaria en Honduras, en base a solicitud presentada por la Secretaría de Educación Pública, a través del Oficio No.822-5 de fecha 22 de julio de 1986 del cual se adjunta copia

De usted muy atentamente,



[Handwritten Signature]
J. ERICAIN DE GIRCN
Ministro

OFFICIAL
FILE COPY

CFC/GdeC/ledes.

Secretaría de Estado
EN EL DESPACHO DE
EDUCACION PUBLICA
REPUBLICA DE HONDURAS

Don Cristóbal

COMAYAGUELA, D. C., 22 de julio, 1986

Señor Ministro:

Muy atentamente me permito solicitarle que, por su digno medio, se solicite a la Agencia para el Desarrollo Internacional (AID), la firma de un Convenio para la ejecución de un proyecto en apoyo a la eficiencia de la educación primaria en Honduras.

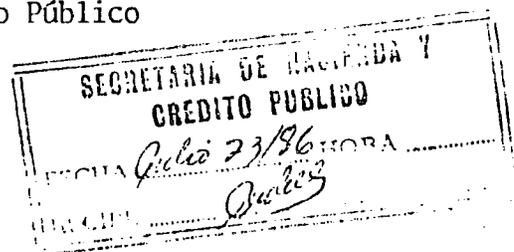
El proyecto en referencia contiene siete componentes interrelacionados que en conjunto apuntan a mejorar la eficiencia, costo-efectividad y la calidad de la educación primaria mediante el mejoramiento del rendimiento de los alumnos; reducción de las tasas de deserción, repitencia y ausentismo y disminución de los costos unitarios por estudiante egresado del sexto grado.

Los componentes previstos en el proyecto son: (1) Textos Escolares, Guías para el Maestro y Materiales Educativos; (2) Capacitación de Maestros; (3) Investigación Educativa; (4) Sistema de Informática; (5) Objetivos y Evaluación del Aprendizaje; (6) Construcción, Renovación y Mantenimiento de Aulas y (7) Medios Educativos. El componente (7), Medios Educativos, será ejecutado a través del grupo del sector privado AVANCE.

El proyecto tendrá un costo total de veintisiete millones quinientos mil dólares (US \$27,500,000), de los cuales veintidos millones de dólares (US \$22,000,000) corresponden a fondos de Donación y cinco millones quinientos mil dólares (US \$5,500,000) corresponden a fondos de Préstamo. De los fondos de Donación se destinarán cinco millones quinientos cuarenta y tres mil dólares (US \$5,543,000) para el grupo del sector privado AVANCE a fin de financiar el componente (7), Medios Educativos.

El Gobierno de Honduras, por su parte, aportará ocho millones seiscientos cincuenta y un mil dólares (US \$8,651,000) incluyendo nuevos costos y costos aportados en especie y el grupo del sector privado AVANCE aportará tres millones trescientos cuarenta y nueve mil dólares (US \$3,349,000) incluyendo nuevos costos y costos aportados en especie.

Al Señor Ministro de Hacienda y Crédito Público
Abogado Efraim Bú Girón
Su Despacho





Secretaría de Estado
EN EL DESPACHO DE
EDUCACION PUBLICA
REPUBLICA DE HONDURAS

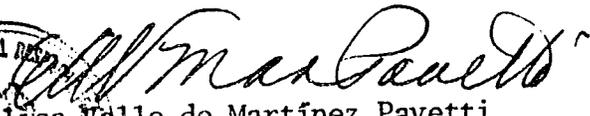
COMAYAGUELA, D. C.

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El proyecto tendrá una duración de ocho años extendiendo sus acciones hasta agosto de 1994.

Como usted comprenderá, Señor Ministro, el proyecto en referencia coincide con las políticas definidas por el presente Gobierno en el sentido de mejorar la calidad de la educación en Honduras dando prioridad a la atención de los problemas de la escuela primaria y buscando mejorar las condiciones de vida de la población hondureña.

Con el ruego que le dé el trámite correspondiente a la presente solicitud, quedo de usted con toda consideración y estima.


Elisa Valle de Martínez Pavetti
Ministra de Educación Pública

SECRETARÍA DE ESTADO EN EL DESPACHO DE EDUCACION PUBLICA

EVdeMP.

CERTIFICATION PURSUANT TO SECTION 611(e) OF THE
FOREIGN ASSISTANCE ACT OF 1961, AS AMENDED

I, Anthony J. Cauterucci, the principal Officer of the Agency for International Development in Honduras, having taken into account among other factors the maintenance and utilization of projects in Honduras previously financed or assisted by the United States, do hereby certify that in my judgement Honduras has both the financial capability and human resources capability to effectively maintain and utilize the capital assistance project: PRIMARY EDUCATION EFFICIENCY PROJECT.


Anthony J. Cauterucci
Mission Director, USAID/Honduras

ANNEX F.1

SOCIAL SOUNDNESS ANALYSIS

I. Beneficiaries

A. Characteristics of the Honduran Population

As this is a national project, the beneficiary population is defined nationally in terms of the Honduran population. The most recent Honduran census in 1974 showed just under 3 million people, while recent projections estimated that the 1985 population is 61% rural and 39% urban. The overall annual population growth rate is 3.2%. Given this population growth rate, the Honduran population should double in the next 20 years.

The Honduran population has also become increasingly young as the proportion of people under the age of 15 increases. The approximate median age of 16 years in 1945 decreased to 14.8 years in 1974, as the percentage of children under 15 increased from 41.7% in 1945 to 47.4% in 1984. The under-15 population now constitutes nearly 50% of the population and is continuously increasing and placing ever-rising demands on social services, particularly in the areas of health and education.

The population density over the 112,088 square kilometers of Honduras is 37.7 persons per square kilometer. Population distribution is not, however, uniform. The four eastern departments of El Paraíso, Olancho, Colón, and Gracias a Dios comprise 50.9% of the country's territory but only 14% of the population. The population is highly dispersed, with about one-third living in small villages with fewer than 500 inhabitants, another third in villages and towns with between 500 and 2500 inhabitants, and the last third in towns and cities with a population greater than 2500. The dispersed population results in high costs for infrastructure construction and maintenance, including educational infrastructure. The country's rugged topography further contributes to the isolation of many remote communities and to the high cost of providing educational services.

With regard to educational attainment levels of the population, the 1974 census showed that 41% of the population over 10 years of age had never been to school, while 28% had attended up to the first three grades. It is possible to infer that up to 69% of the population may be illiterate, either from never having learned or through disuse. The implications for rural primary education are important when we note that in the urban sector, 10.7% have never been to school and 25.5% have not attend beyond third grade, while in the rural sector 51.7% have never attended school and 30.4% have attended up to third grade. Functional illiteracy by this measure would be over 80% of the rural over-10 population.

In 1983, according to official statistics, 41.5% of the over-10 population could not read or write. The highest illiteracy rates were found in the departaments of Lempira, Intibucâ, La Paz, Ocotepeque, and Copân where illitercy averaged 55% of the adult population. It should be noted that these are districts with higher population concentrations, in contrast with eastern departments of the country.

B. Educational context

1. Enrollment

During the period of 1978-1982, Honduran primary school enrollment increased an average of 6.4% per year, including an average 7.3% annual increase in rural areas. Between 1982 and 1984, the rate of enrollment increase declined to an annual rate of 5.1%, which translates to an annual absolute increase of 33,000 children per year. Enrollment for 1982 was reported at 671,000; enrollment rose to 703,608 in 1983; and further increased to 737,133 by 1984.

	1982	1983	1984
Total school age population (7-13)	775,907	802,915	830,333
Total school age enrollment (7-13)	590,532	614,264	643,160
Total enrollement by all ages	671,780	703,608	737,133

The 1984 enrollment, which takes into account children of all ages enrolled in primary school, would represent 88.8% of the school age children if it were limited to children between the ages of 7 and 13. However, an analysis of the figures from 1983 indicate that the total age 7-13 population in 1983 was 802,915 children, of whom only 614,295 enrolled in school -- just 76%. Some 90,000 primary school children were over the standard 7-13 school age, and a total of some 190,000 school age children did not enroll.

Looking at enrollment distributions, in urban primary schools 26% of the total enrollment went to first grade, 19% went to second grade, 16% went to third grade, 15% went to fourth grade, 13% went to fifth grade, and 11% went to sixth grade. Although there is a slight concentration of children in first grade, the percentages even out after the second grade until the sixth grade, where enrollment is about half that of first grade.

In the rural primary schools, in contrast, 39% of the total enrollment went to first grade, 22% went to second grade, 14% to third grade, 11% to fourth, 8% to fifth, and just 6% to sixth grade. These data show a tremendous concentration of children in the first grade, an enrollment which is more than six times the enrollment in sixth grade and nearly double that of second grade. Two-thirds of the total school population is enrolled in the first two grades and three-fourths is found in the first three grades of the rural primary school.

It appears that the prime cause of the accumulation of children in the early grades is the high rate of grade repetition, which is the direct result of academic failure. Of children between the ages of 8 and 10 years of age, fully 64% had repeated first grade. This report will examine failure, dropping out, and grade repetition more fully below.

2. School Facilities

The MOE reports that there are currently 6205 primary schools, 87% of which are located in rural areas and 13% in urban areas. Honduran schools are classified according to enrollment, from first to fourth class, which once again underlines the dispersed nature of the Honduran population. In 1983, 62.5% of rural primary schools had enrollments of under 60 students and were therefore classified as fourth class. Another 27% with enrollments between 60 and 150 children were classified as third class, meaning that nearly 90% of rural primary schools have enrollments under 150 students.

Looked at another way, 87% of all primary schools are rural, although just 61% of the total population is rural. The number of school rooms corresponds more closely to population statistics, where 63% of the school rooms are found in rural schools and 37% are found in urban ones.

School room overpopulation is shown by the fact that the 15,000 school rooms hold an average of 47 students per room (45 per room in rural schools, 50 per room in urban schools). Based on the supposition that Honduran school rooms should contain 40 students, the 1983 shortfall was 2590 rooms, of which 1240 were rural and 1350 were urban. This number has increased in the intervening two years.

3. Teachers

There are currently 19,800 primary school teachers on the MOE's payroll with an average of 800 new openings created per year. In 1983, 45% of the 19,8000 teachers were found in urban schools and 55% in rural schools. In urban schools, 94% of the teachers teach just one grade, while only 33% of rural teachers have just one grade. This means that 67% of rural teachers are responsible for more than one grade, and a large number teach as many as all six grades in one classroom.

As regards teacher training, some 40% of the rural primary school teachers lacked the professional credential which comes with graduation from a normal school, while just 3% of urban teachers lacked the professional credential. About 50% of the non-accredited teachers recently participated in an in-service program to provide them with accreditation, but non-titled teachers continue to be employed. The country's 13 normal schools graduate an average of 2000 teachers a year.

It was estimated that in 1983 there was a shortfall of 700 teachers to reduce the average 45 students per teacher in rural schools to 40. The student-teacher ratio has become increasingly unfavorable in recent years as new teacher hiring has been limited at the same time that student population has climbed. High student-teacher ratios under crowded conditions, coupled with the necessity of covering several grades, have all contributed to dropping out and low learning levels.

Rural teachers are by and large young, as 51% are less than 30 years old. In addition, in 1983 60% of the teachers had worked less than 10 years in primary education, an indication that for many teaching is not a lifelong profession. This is particularly true of male teachers, as 74% of rural teachers are women. This may be due in part to the unattractive salary scale where 500 Lempiras (about \$250) is base salary, among the lowest-paying professions for secondary school graduates.

4. Responsibility for education

The government of Honduras is responsible for primary education. Only 5.5% of primary school enrollments were in private schools, which numbered 39,145. Just a third of these, or 13,800, were located in rural areas. Education policy is set by the state with little or no input from the users of the services (employers, parents, students community at large). School boards and advisory committees as we know them in the United States do not exist.

II. Sociocultural feasibility

A. Sociocultural Dimensions of Primary Education Inefficiency

One of the major problems which the Primary Education Efficiency Project intends to attack is that of students failing or dropping out and repeating the same grade, particularly the at the first grade level in rural primary schools, where just 49% are promoted to second grade. Of the 51% who are not promoted, 29% repeat the first and 22% drop out of school. Poor attendance is a prime cause of both grade repetition and dropping out.

In 1983, 29.5% of the first graders, 17.6% of the second graders, and 14.5% of the third graders enrolled in rural primary schools were repeating the grade, as compared with 22.9% of the first graders, 13.9% of the second graders, and 12.6% of the third graders in urban schools. In both urban and rural schools the percentage drops to 2.5% of the sixth graders.

First grade repetition is the most severe. Of the total of 77,133 who are the rural repeat population, some 46,935 or 61% are repeating the grade. When rural first through third grades are grouped, repeaters represent 91% of the total enrollment for all grades. In urban schools, 45% of the repeaters are in first grade, and grades one through three contain 81% of the repeating students.

One of the products of grade repetition is a high percentage of early primary school students whose age is not typical for their grade. For 1983, it was found that the average age of children enrolled in first grade was 8.3 years old, which includes both first time enrollments of children, normally 7 years old, as well as those repeating first grade, normally 8 years old. For second grade the average was 9.6 years, as repeating students continue to inflate the average school age.

However, it turns out that the sixth graders' average age returns to the expected age of about 13 years. This is an indicator that those who repeat in the lower grades drop out before reaching the sixth grade. Of 100 children who enter primary school nationwide, only 30 finish sixth grade. In rural schools, just 19 finish sixth grade of the initial group of 100.

Teaching in the primary schools is done by poorly-motivated and indifferent teachers. Teachers often do not fully understand the curriculum or the subject matter themselves, nor do they try to present material in practical, relevant, interesting or entertaining ways. Only 23% of classrooms have textbooks of any kind, so students must learn from whatever the teacher is able to write on the blackboard. Classrooms are usually crowded, with one teacher having to teach fifty to eighty students, sometimes with all six grades in one classroom. The teacher receives little support, encouragement, or supervision either from the local community or from the Ministry of Education.

As a consequence, the learning experience for children is often irrelevant, tedious, and frustrating. The teacher plods through his lesson plan mechanically. The children fidget and their attention wanders. The classroom is dreary and confining. In this unproductive environment, students drift away from school. Attendance drops off as the school year progresses. Many students attend only sporadically. Even students who do attend may comprehend and learn little of what is supposed to be taught. Parents

eventually conclude that little of value is taking place in school, and become indifferent concerning their children's attendance. Students who do not learn what is taught receive failing grades and are required to repeat grades, often more than once. Eventually, the pattern of academic failure and grade repetition leads the student to drop out for good."

Factors influencing educational performance include the following.

1. Didactic resources: The majority of the present 19,000 teachers function without teacher's guides and less than 25% of all primary school children have usable textbooks. Research in school systems worldwide has demonstrated the important relationship between access to textbooks and academic achievement.
2. Teacher preparation: In 1983, some 4230 primary teachers, representing 22.3% of all primary teachers, did not have teaching credentials, Of those who do have credentials, most are not up to date on the latest developments in teaching technology. Nor is the quality of education in the Normal Schools believed to be of good or consistent quality, all of which means that the teaching force is less than adequate.
3. Multigrade schools: Most rural schools have several grades in one room under one teacher with no assistance from teacher-aides or peer monitors. Few children get the attention they need to learn, and much of their activity is make-work that stems from the teacher's need to simply maintain order and the semblance of the educational process.
4. Non-relevant curriculum: The present curriculum is oriented primarily toward the urban population and toward progress toward secondary school. Rural educational needs and a curriculum oriented toward terminal primary school have been neglected. The irrelevance of much of the curriculum may cause parents to pull their children out of school.
5. Lack of adequate quality controls: As the system is currently structured, there is no clear idea among teachers, supervisors, or administrators as to the minimum standards of achievement. The curriculum is structured around general objectives that the teachers are told to follow. The teachers prepare, implement and grade exams based on their own lesson plans, but no standard guidelines for teaching or for evaluation of academic achievement are provided to teachers.

6. Difficult family economic situation: Underemployment has been on the rise and unemployment now registers 24% of the economically active population. Family income is stretched thin while at the same time the under-15 population is growing very rapidly. Parents are required to purchase school supplies, and for many an ordinary pencil and 10-page notebook may represent an insurmountable expense.
7. Lack of parent-community participation in the learning process: Parents are invited to schools when there is a need for raising funds or when manual labor is required for maintenance and construction. School directors and teachers inadvertently assume that, because the majority of their parents are illiterate, they are unqualified to assist and participate in teaching/learning activities. Parents, therefore, and the community at large are not involved in the teaching/learning process.
8. Weak management at upper MOE levels: Due to rapid turnover at high MOE levels as well as the limited human resource base that characterizes Honduras, management at upper levels tends to be weak. Individuals with limited or no administrative or management experience are often put into key MOE positions and have difficulties carrying out their functions in an adequate fashion.
9. Pressures from teachers associations: Teacher associations in Honduras have traditionally played a major role in the educational process. In the early 1980's when the teacher associations were at their peak, the associations had a say in virtually every high level decision taken at the MOE. The teacher associations are militant and well-organized. They are highly politicized and normally function as adversaries to the Ministry of Education and its programs.
10. Political favoritism: Honduran politicians contribute to MOE inefficiency. Congressmen often influence where teaching slots will be distributed and they choose and place administrators, school directors, and teachers through their power as party leaders. Their friendship with MOE staff contributes to absenteeism and other abuses of established professional norms since administrators are often unable to reprimand or evaluate personnel without running the risk of losing their own jobs or being challenged by those with political ties.
11. School shortfall: It is estimated that the country will need 11,000 new classrooms over the next six years to meet current and projected demand. Many schools are in poor condition or incomplete. Furniture is often falling apart or not available at all. Schools are completely lacking in some isolated rural areas. In addition, there is a lack of teachers for the present and projected schools. As a result, many children simply do not have access to primary education.

B. Improvements Expected from the Primary Education Efficiency Project

The Primary Education Efficiency Project is designed to produce a series of improvements. The most important activities as regards the Social Soundness Analysis are those devoted to instructional quality. Administrative and policy reform is designed to help the MOE adjust to the changes inherent in the instruction quality program, while the primary education expansion program of school construction is intended to help maintain school coverage while other sources of school construction are also sought.

The instructional quality activities include several related components that are intended to be complementary and which will be closely coordinated in substance, sequence, and format. The textbook component involves providing a new set of primary school textbooks for all schools, grades, and students in Honduras. The production of these materials will involve technical experts from other Latin American countries working with local authors to ensure a product that is technically sound, up-to-date, and relevant to the reality of the country. Teacher guides to accompany the new texts will be distributed along with the new textbooks.

The learning objectives and academic achievement evaluation component involves the development of standard norms and objectives for primary school achievement. These norms will assist the teacher in focusing on core curriculum requirements and provide objective and uniform criteria for student evaluation. It is hoped that the tests based on these norms will stimulate teachers to pass students on to the next grade if they pass the tests, rather than keeping students back for subjective reasons. The component will also provide a bank of test data for diagnosing and evaluating overall academic achievement throughout the country.

The in-service teacher training component will strengthen the existing MOE teacher training unit by providing in-service training to all 23,500 Honduran primary teachers, all field supervisors, and all school directors, partly at regional training sites and partly at the new training facility at La Paz. In-service training will focus on three areas. First, the school-community relations area will motivate and prepare teachers to interact more effectively with the communities where the schools are located. Second, the school maintenance area will train school personnel in the promotion and organization of school maintenance activities. Third, the instructional quality area will train teachers in the use of the new textbooks, modern teaching techniques, and special methods for teaching effectively in the remote and spartan environment of the average Honduran primary school.

C. Problems and prospects in project implementation

1. Guiding principle of community involvement

One of the guiding principles of the Project is that the teacher and the community are the two essential elements in an efficient primary school system. The role of the central MOE is to supply support services to make it possible for the teacher to be responsive to the needs of the community. An essential function of the teacher should be to interact with the local community, adapting educational services to its needs and harnessing the resources and support that it can offer. This new focus is a response to the lack of a Honduran tradition of parental or community interest, participation, or activism in support of education.

Communities can and should be enlisted in overseeing the external performance of the teachers, particularly in the tricky area of teacher absence. It is well known that many teachers live far from their schools, often out of necessity but rather by choice, and that they consider Monday as a travel day to get to their schools from their homes. Classes thus begin regularly on Tuesday and end on Thursday, since the teacher then uses Friday as another travel day to get home for the weekend. During a study in Olancho in which researchers took actual attendance for a full 5 days of school, on Monday and Friday more than half the children were absent. On Tuesday and Thursday, just 25% were absent, and attendance was nearly perfect on Wednesday, a clear indication that students were used to missing Monday and Friday classes.

The communities should be encouraged to control this sort of absenteeism, and there is indeed a tradition of doing so. It is not uncommon for a committee from a small community to take the trouble to come to Tegucigalpa and make a direct appeal to the Minister or even the President to remove a teacher, usually for function in the communities. A community might have a committee or charge an individual with overseeing teacher attendance. All supervisors and the communities could then make an annual report to the Ministry. It is not the place of this report to specify the mechanism, but rather to suggest that such a mechanism is possible.

One of the possible innovations that will be studied and field tested under the Project's "Education Research" Component is the possibility of channeling some discretionary funds for the school through a community organization. As regards controlling some discretionary funds for the school, this appears to be an excellent idea, in fact, crucial. It represents the possibility of a degree of control and power over the school which the communities have

never previously had. To some extent, it is not particularly important exactly how these funds are used but simply that the community has control over them. Some guidelines regarding the Community School Discretionary Funds might be the following. First, every community should receive a certain minimum amount. For example, all fourth class schools (under 60 students) receive the same amount, all third class schools (60 to 150 students) the same amount, and so on. Some sort of school committee and some form of reporting how the funds were spent should be required, but there needs to be enough flexibility so that the school committee is made aware that it definitely controls the funds. The school committee, which in many cases already exists (the organization of these committees is one of the responsibilities of the teacher), should receive an orientation upon receiving the funds. The community, not the MOE or the person giving the orientation or the supervisor or the teacher, should decide how the funds will be used.

2) Establishing academic norms

One of the Project objectives is to establish "a set of clear instructional objectives and minimum academic standards." These norms must be seen as having sequencing priority over other elements in the Project due to fact that the content of new textbooks, radio lessons, and the instruction provided in teacher in-service training must be based on these norms.

It is clear that these norms do not at present exist. A consultant from the Educational Testing Service held a seminar with some 20 teachers in which he found that each teacher operated under a different set of standards as regards the content which a child should have upon successfully completing first grade. What for some teachers was a minimum level of achievement was for others a maximum or ideal standard, one to aim for but not expect to achieve with the great majority of students.

The establishment of norms nonetheless requires the full participation of the teaching professionals. It would be possible for an individual or small group of "experts" to unilaterally establish and promulgate a set of norms, but it is doubtful if this would meet with more than mixed success. Teachers as a group must have input which will ensure widespread acceptance on the part of teachers and from the teachers' professional associations.

D. Sociocultural Feasibility of Project Components: Adoption of Innovations

Of the various activities that will be undertaken under the Primary Education Efficiency Project, a number are not highly innovative and do not appear to require specific analysis to determine their sociocultural feasibility in the Honduran context. Only two -- radio education and the use of standardized tests -- are entirely new in the Honduran educational environment. As a result, these two activities were field tested in Honduran schools in the course of project design to determine their sociocultural acceptability and feasibility.

The need for textbooks is universally recognized, and there will be no significant objection to the provision of new textbooks. One possible source of contention could be in the fact that the writing of a new textbook series is being financed by the U.S. Government, leading to suspicions that the U.S. will try to influence the content of the books in hopes of brainwashing the children of Honduras with content and images that are culturally and politically advantageous to the U.S. and disadvantageous to Honduras. This suspicion will be pre-empted by having the book writing teams be composed entirely of Honduran authors and educators, selected competitively according to their competence and experience. Technical assistance advisors for this component will be supplied from other Latin American countries, both to alleviate suspicions about U.S. participation in the writing of the books and to increase the likelihood that the books will be suitable for use in the Latin cultural environment. Another concern will be the cultural appropriateness of the new books. The Ministry of Education and A.I.D. have agreed during the project design and negotiation that the books should be visibly Honduran in their content and orientation and that they should reflect Honduran history, geography, and economic reality clearly and explicitly. This Honduran emphasis should make the books politically acceptable to Honduran teachers and critics of the education system, and understandable and relevant to the children.

With regard to in-service teacher training, a tradition of workshops for teachers exists in Honduras and there is no reason to anticipate cultural or political sensitivities to be offended by this component. While parents sometimes grumble when schools are closed so that the teachers can take a short course, they accept the need for the teacher to upgrade his skills. In the past, teachers have always been willing to attend workshops, and normally even pay their own travel and living expenses. This indicates that teachers value and enjoy in-service workshops, and will participate willingly.

The Management Information System represented a new technology when it began nine years ago, but it is now thoroughly familiar to MOE staff and policymakers. Demand for new services and greater access throughout

the Ministry is strong. The only innovative part of this component is the idea of placing microcomputers in the offices of selected Departmental Supervisors. This concept will initially be tried on a small scale to determine the acceptability and utility of decentralizing MIS access to this extent.

School construction, renovation, and maintenance are popular activities in Honduras. Communities might object to the new mode of school construction that will be implemented under this Project. The self-help community-based approach described in the paper, using local labor and materials as much as possible, requires far more sacrifice from communities than did the old kind of construction where the MOE or a contractor supplied all the materials and labor. Furthermore, the schools will not only require more sacrifice from the community, but the resulting school will not be as attractive as the schools built under previous projects. Communities familiar with other schools by the MOE, AID, and World Bank could feel that they are getting a bad deal. The addition of more intensive promotion at the community level will have to anticipate this kind of objection, explaining that the new approach is essential if everyone who needs a school is going to have one, and motivating communities to take special pride in the fact that they built the school themselves

Standardized testing is an innovation in Honduran primary schools, and a negative reaction on the part of parents, teachers, and students could be expected if testing were imposed suddenly on the entire system. Standardized testing is controversial even in the United States, where it is considered by critics to be an unnatural and culture-bound format for measuring what children have learned. Students not thoroughly socialized into the procedures of standardized test-taking, it is often argued, are at a disadvantage in answering multiple-choice questions. To test this notion, the project design team derived a set of minimum learning objectives based on the national curriculum, developed and pretested multiple-choice test items for different subject areas for second and fourth graders, and administered tests to a sample of 800 rural and urban primary school students in their classrooms. To the surprise of the team, there was little difficulty with the standardized multiple-choice test format. Neither teachers nor students had serious problems understanding the administration and taking of the tests, and there were very few objections or complaints. Still, because of the newness of this approach, standardized testing will not be imposed on teachers. It will be introduced gradually, and its use by teachers will be voluntary. Teacher training workshops will explain the advantages of standardized achievement testing, and the model tests that will be provided in the teacher guides will be designed to be helpful to teachers and easy to use. It is hoped that the practice of standardized academic achievement testing will come to be perceived as useful and non-threatening with this approach, and that the notion of systematic testing and evaluation will be accepted by teachers, parents, and students over a five to ten year period. However, because of the uncertainties that remain concerning the ultimate acceptance of standardized testing, its formal mandatory introduction into the Honduran primary school system will not be attempted by this project.

The use of educational radio and other mass media in schools is the other major innovation that will be introduced by this project. Like standardized testing, radio was pilot tested in schools by the project design team because of its newness and unfamiliarity in Honduras. Radio lessons from the Stanford University Radio Mathematics Project were used in twelve rural schools on a test basis. The acceptance of this entirely new approach to teaching was overwhelming. Teachers liked the radio lessons because their workload was reduced and because students' motivation and interest increased. Students liked the lessons because they are fun and entertaining and liven up the otherwise dull school day. However, in spite of this experience, fears of a negative teacher reaction led the Ministry of Education to reject the notion of a school radio project run by the Ministry. As a result, a different approach was identified which is intended to avoid possible objections on the part of teachers. A school radio kit will be advertised over the national commercial mass media, creating initial interest and a positive image of the educational radio service. Parents and teachers will be encouraged to get together to raise funds locally to buy the kit in order to help the teacher provide better education for the children of the community. The kit will be sold through the Honduran private sector by local outlets of national businesses throughout the country. This approach provides a gentle introduction of an unfamiliar and potentially threatening technology. The system will only be used where there is genuine interest and a positive attitude and motivation. Teachers who do not like the idea can simply pass it up. Since the educational radio service will be used only where it is really wanted, experience with it should be mostly positive. As other teachers see the service working, demand for the service should grow. The system will thus spread spontaneously, although the speed of adoption and the degree of coverage that will ultimately be achieved are impossible to predict. This approach has two other advantages. The first is that it involves the community in the instructional program of the school in a constructive way for the first time. The educational radio service provides a simple, concrete way for the community to make an important contribution to the educational process. Second, the approach involves the Honduran business sector directly in support of public education. This new constructive relationship will mobilize new resources from the private sector which have previously not been available to public education, and will enhance the image of the private sector. Thus, the unusual design of this component is especially tailored to anticipate social and cultural circumstances in Honduras. While new and experimental, the approach appears feasible and effective in terms of promoting participation of new sectors in education and promoting the adoption of a promising new instructional technology.

ANNEX F.2

TECHNICAL ANALYSIS

This Annex reviews technical issues related to the feasibility of the project. Since the different components of the project involve different technologies, the analysis is presented by components.

COMPONENT I: TEXTBOOKS

Only 23% of Honduran primary school classrooms have textbooks. Those that have books seldom have complete sets. Books are often old and in poor condition, and since there is little hope of getting new or replacement books, teachers tend to use the books that they have as little as possible, hoping to make them last. The books provided by the Ministry of Education are from an old series developed during the 1960's under a regional AID-funded project that developed a primary school textbook series for use throughout Central America. This series, commonly called the "ODECA-ROCAP Books" in Honduras, did not achieve the standarization necessary for Central America-wide printing and distribution. It was, however, used by several Central American countries, including Honduras, as the model for their own national textbook series

The Ministry of Education's textbook unit, the Department of Learning Resources, has defended the ODECA-ROCAP textbooks as being pedagogically sound and generally appropriate in content for Central America. The books have the advantage over other commercially-available textbooks of being a complete, fully integrated set. All core curriculum areas are included, and presentation is consistent and sequential from one year to the next for the full year span of the primary grades. Another advantage of the ODECA-ROCAP books is that they are familiar to parents, teachers and students because they have been in use for so many years.

However, the Mission and the MOE have concluded that the ODECA-ROCAP Series has outlived its usefulness in Honduras. A recent unsuccessful attempt by USAID/Honduras to negotiate a loan to print the Series again for nationwide distribution caused dissatisfaction with the old books to crystallize with unexpected intensity. Discontent with the old books pervades the primary school system from top to bottom. The books are criticized as being pedagogically obsolete. For example, the mathematics books are based on set theory (the "new math") that was tried and abandoned in the United States some years ago. The reading books use long stories which do not hold the attention of many students and which are considered difficult to use by teachers.

Another criticism of the ODECA-ROCAP books is the fact that they are not Honduran. The books were written during a time of increasing Central American integration, and the possibility of shared textbooks had both economic and political advantages. Now, however, Honduras feels the need to define its own unique national identity and to transmit that identity to the upcoming generation of Hondurans through the educational system. The old ODECA-ROCAP books do not teach the unique features of Honduran geography, history, or culture. They do not show Honduran places or people, or discuss the special characteristics of the economy of Honduras. The books reflect a more metropolitan cultural basis and do not deal in symbols recognizable to the predominately-rural Honduran population.

A third objection to the old books is esthetic. There is a general feeling that the old books look old-fashioned and that they are not attractive, entertaining, or enjoyable to use. The books are considered too long, and the teacher guides are confusing and difficult to follow. The new series will be considerably shorter, resulting in lower costs of printing and replacing textbooks in the future.

A feasibility study determined that there are seven private printing firms in Honduras able to undertake the task of printing the textbooks to be financed by this project. The printing plant that will be provided to AVANCE under Component VII of the Primary Education Efficiency project will give it the capability to print textbooks. It is anticipated that AVANCE will participate in production of some of the books, along with other Honduran private printing companies, and selected GOH printing facilities. The job of printing large numbers of textbooks and teacher guides will be divided into several packages so as to not overwhelm any individual supplier and to spread the benefits of the work among several different printers. The contracts for the different packages will be awarded based on open competitive bidding to get the most efficient services available. Distribution of books will be accomplished entirely by private shipping contractors rather than by the Ministry of Education. Experience with the distribution of construction and maintenance supplies under the Rural Primary Education Project showed that there are many small truckers who can be contracted to make deliveries to even very remote sites with reasonable reliability.

The feasibility of writing modern and effective textbooks and teacher guides was also addressed in the course of project design activities. Four teams of authors were organized with PDS funding to begin work on drafting prototype textbooks in the four major curriculum areas -- social science, natural science, math, and language (reading and writing). Each team consisted of four Honduran educators, selected for expertise in their curriculum area, creativity, and writing experience. The teams produced initial drafts of prototype textbooks in the four subject areas for the first grade in less than six weeks. The prototype textbooks were judged to be of excellent quality. They were colorful, creative, and pedagogically sound. This experience indicates that good quality new textbooks can be drafted in a short time period if the team of drafters is collegial and highly competent.

COMPONENT II: TEACHER TRAINING

In-service teacher training is one of the essential elements of a strategy to improve primary education in Honduras. While it is true that there are external factors that interfere with educational efficiency, there is also ample evidence that there are potent factors in the school environment that contribute to the poor academic achievement of students.

Primary school teachers labor under difficult conditions. There is a generalized perception on the part of teachers that the kind of support services and supervision that would be necessary for them to do a good job are not provided, resulting in low levels of morale, motivation, and interest in their work.

In rural and marginalized urban schools, the student population is growing at a rate that exceeds the capacity of the Government to provide the new classroom spaces, materials, and teachers needed to meet demand. This situation is especially serious in the lower grades where the problems of repetition, absenteeism and dropout are greatest. In 1983, 39% of the total primary school enrollment was in the first grade. First grade enrollment is almost twice second grade enrollment and six times greater than sixth grade enrollment. Two-thirds of the total primary school enrollment is in the first two grades; three-quarters of total enrollment is in the first three grades.

In rural schools, 66% of all teachers teach more than one grade, and there is an average of 45 students per teacher. In 1983, 40% of teachers were not officially certified. While half of the uncertified teachers are participating in a professional upgrading program, the program is suffering from serious technical and economic difficulties. Even teachers who have graduated from normal schools and have official teaching certificates are not properly trained to work under the conditions that are found in the schools in rural areas. As a result, they are often more concerned with finding a way to continue their own secondary and higher education in order to eventually leave teaching for a better profession, one that will permit them to live in an urban area.

The concentration of children in the lower grades, the prevalence of multi-grade classrooms, the lack of basic teaching materials, and the lack of training and support services for teachers, then, are some of the factors that make the school itself one of the significant causes of educational inefficiency. The consequence is a high repetition and dropout rate. Twenty-nine percent of students repeat and twenty-two percent drop out in the first grade alone.

The teaching force is young. The majority, about 51% are under thirty years of age. In 1983, 60% of teachers had less than ten years of teaching experience. Male teachers, especially, do not stay in the teaching profession any longer than they have to. Seventy-four percent of primary school teachers are female.

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The youth and lack of experience of primary school teachers are factors that could cause an in-service teacher training program to be well-received and effective, although they are also indicators of the instability and impermanence of the teaching profession, especially for males, resulting from a variety of economic and social circumstances.

Supervision, which plays an important quality control role in any educational system, is ineffective in the Honduran primary school system because of financial constraints. Supervisors are not given money for travel expenses or per diem in order to visit the schools they are supposed to supervise. They also face the same kinds of support problems at their own level -- lack of suitable training, supplies, and support services -- that affect the teachers at the school level.

The Agreement signed on July 31, 1980, for A.I.D. Project 522-0167, included as one project component improvement of the system of in-service teacher training and teacher supervision. The component focused primarily on: (a) a systematic upgrading of all the departamental and auxiliary supervisors (equivalent to state and local school superintendents in the U.S.) through an ongoing in-service training program, and (b) qualitative upgrading of teachers and teaching by providing more modern and intensive supervision and training. The National In-service Teacher Training Program ("Programa de Actualización del Magisterio") was created as an office of the Ministry of Education's General Directorate of Primary Education.

Thirty-six in-service teacher trainers ("actualizadores") were appointed to the new unit. This staff has received extensive project-financed training, both in Honduras and in the U.S., resulting in a highly-trained core professional staff for the permanent, expanding program of in-service teacher training that will be financed under the Primary Education Efficiency Project. The in-service teacher trainers have also implemented a number of technical training programs for Departamental Supervisors, Auxiliar Supervisors, school directors, and teachers. The in-service training program has been innovative in a number of important ways, emphasizing new teaching methods, experimenting with the operation of the decentralized administrative structure ("Núcleos Educativos Integrados") that teachers obtain greater percent and community participation in the school program.

As a result of this program, participating schools have achieved a degree of independence in solving their problems that previously could only be solved by seeking help from the central Ministry of Education bureaucracy. One specific example is a reduction of over 10% in the cost of building and maintaining classrooms in participating communities resulting from greater community support for the school. In the training and field activities under this program, the participating teachers have had to contribute their own travel and per diem expenses. Even this personal financial sacrifice has apparently not diminished their enthusiasm and participation in the various courses and workshops that have been offered.

The training that has been offered to date by this program has been limited in its impact by its focus on certain specific teaching methods and by the lack of a system with resources and infrastructure to provide national coverage. Training has been offered to only a limited number of schools. There has been no overall evaluation of its impact on teaching or student academic achievement.

The National In-service Teacher Training Program will soon have its own National In-service Teacher Training Center, located in the city of La Paz, about 100 kilometers from Tegucigalpa. The Center will have a capacity of 400 teachers, and will be in operation in 1987. The Center was conceived as the focal point and administrative center for the National In-service Teacher Training Program. It is designed to provide on-site training for supervisors, school directors and model teachers, who will then provide training and support services to primary school teachers in their places of work.

In summary, a number of conditions already exist which form a solid foundation for work in in-service teacher training, including: (a) an experienced, trained, motivated, and well-organized core group of professional in-service teacher trainers, (b) teachers who are interested in receiving in-service training, (c) a body of specific experiences that demonstrate the benefits on in-service teacher training, (d) local community interest in improving education, and (e) a new National In-service Teacher Training with facilities to accommodate and train large number of supervisors and field training staff.

What remains to be developed is: (a) a training system based on the achievement of specific learning objectives, (b) a program of operations for the National In-service Teacher Training Center, (c) support materials and equipment for in-service teacher training, and (d) a system of follow-up and support services that could be delivered through the existing network of supervisory personnel.

Because of the extensive MOE experience in the area of in-service teacher training and the exceptionally well trained and motivated professional staff that has been created under the Rural Primary Education Project (522-0167), the proposed activities are feasible. The use of a pyramid, or "multiplier", model to reach all teachers in the country with face-to-face training workshops will make it possible to provide intensive training simultaneously to teachers from nearly 7,000 schools without excessive cost or disruption. The administrative hierarchy of the Ministry of Education, which reaches individual teachers through a chain of intermediaries (the departmental supervisor, the regional supervisor, and the school director) has been shown to be an effective network for mobilizing the teachers, transmitting resources, and coordinating activities.

COMPONENT III: EDUCATION RESEARCH

There is little opportunity for serious educational research in Honduras. Public funds available for education are inadequate to meet even the minimal operating expenses of the national education system. The strong and persistent demand for new, expanded and improved educational services is even more difficult for the hard-pressed GOH to meet. Clearly, providing new resources for education R&D and long-range policy studies would be difficult for the already overextended and underfunded Ministry of Education.

Nevertheless, it is precisely the chronically-desperate plight of public education in Honduras which points up the need for serious, long-range analysis of possible alternatives to present educational practices and administrative structures. In the course of development of the Primary Education Efficiency Project, a list of possible innovations was developed and studied. Some of the possible reforms are radical in nature; others simply involve fine-tuning existing practices. Some are technical, having to do with the pedagogical processes of Honduran primary education. Others are administrative, having to do with the structure and logistics involved in the organization and delivery of educational services. A few are economic, dealing with the financing of educational services and the allocation of funds to different parts of the system.

There are hundreds of possible reforms that appear to hold promise for improving primary education in Honduras in one way or another, but all of them involve difficulties or one kind or another that make determination of their feasibility and desirability an uncertain task. Some of the difficulties associated with possible reforms are economic. Is the cost of change worth the improvement in educational services that might result? Some difficulties are political. Every aspect of the status quo has constituents with vested interests in maintaining the present order of things, sometimes resulting in powerful and well-organized resistance to change. Some possible reforms present serious technical and logistical difficulties.

The interventions selected for implementation under the Primary Education Efficiency Project -- textbooks, teacher training, educational media, and community-based infrastructure -- represent improvements that are regarded as reasonably "safe" in terms of technical, social, and economic feasibility. However, many other promising reforms were not included in the project because of uncertainties about their feasibility or cost/effectiveness. There are many possible technical and administrative changes that might dramatically improve education. In fact, it is reasonable to argue that without discovery, validation, and implementation of quite a number of significant reforms of various kinds -- resulting in a gradual but comprehensive overhaul of primary education -- there is little hope of ever achieving truly universal, high quality, affordable primary education in Honduras.

The one year project design program that led to the Primary Education Efficiency Project demonstrated that a small, very flexible unit of committed professional educators can assess and field test policy alternatives in a practical and convincing way without the excessively elaborate, expensive, and time-consuming studies that are so often associated with policy analyses in the education sector. The process involved discussion of all possible feasibility considerations, pro and con, regarding a particular innovation; review of research literature available internationally concerning the innovation; and field testing on a small scale.

By centering the senior staff of the component within the executive level of the Ministry of Education, the relevance of the research program to Ministry concerns is assured. By having the operational program of field research activities centered in a private sector firm, the agility and independence of field research activities is protected.

There is adequate capability within Honduras to do applied education research. The problem in the past has been providing funding resources and an opportunity to perform the research. The mechanism proposed in the Primary Education Efficiency Project is based on the successful one-year program of research and pilot projects that was carried out using Mission PD&S money to help design the Project. With a small amount of funding and using a team of high quality Honduran education professionals, eight field studies of different kinds were completed in one year which were of higher quality and provided more policy-relevant insights than anything the participating Honduran educators had ever seen before.

COMPONENT IV: MANAGEMENT INFORMATION SYSTEM

The Ministry of Education Management Information System has received A.I.D. support for nine years and has come to occupy a secure and important place in the Ministry of Education. Weaknesses of the unit are the lack of a permanent, highly-trained professional staff and a clear long-term plan for further development, utilization, and institutionalization of the unit's functions.

The additional equipment that will be supplied by the Primary Education Efficiency will be designed to be fully compatible with the WANG system that has been provided with previous A.I.D. support. The system has proven reliable and serviceable in Honduras. A maintenance contract will be included in the package of A.I.D. support to assure that the equipment will be operated and maintained correctly. The project will also train additional MOE technicians in the effective operation, maintenance, and utilization of the system. To assure efficient use of the capacity provided by the computer, a data base management system will be procured and installed.

The only untried technical element of the activities planned under the component is the installation of microcomputers in the offices of Departmental Supervisors. This activity will be regarded as experimental. The equipment will initially be installed in only a few departmental offices for evaluation, and expansion of the network to other departmental capitals will only occur if the initial experiments show that the microcomputers can be used effectively and maintained well in remote communities.

COMPONENT V. LEARNING OBJECTIVES AND EVALUATION

Primary school education in Honduras has suffered due to the lack of uniform and realistic academic standards. Many teachers work without specific knowledge of what students are expected to know at the end of each grade level. For the most part teachers teach whatever they can remember from normal school and whatever available resources permit. Both teachers and parents seem to share informal criteria for promoting students that often reflect unrealistically high standards. The consequence of applying these unrealistically high and often very subjective criteria is a high rate of academic failure, resulting, in turn, in high repetition and dropouts rates, especially at the first and second grade levels.

It has been found in other countries that improvements in the quality of instruction and in academic achievement alone do not necessarily result in improved efficiency, as measured by lower failure and repetition rates. Even if teachers are trained and instructional materials (such as textbooks) are provided, many teachers and parents continue to apply essentially their subjective criteria for evaluation of students and making pass-fail determinations.

Considerable energy presently goes into evaluation of students' academic progress, but because of the way in which student evaluation is performed the results are not always interpretable. Grades as they are presently determined do not serve as a very informative source of diagnostic information concerning the strengths and weaknesses of individual students or of the overall primary school system. Some teachers do a substantial amount of testing, and a great amount of work goes on throughout the system in the computing and reporting of grades. However the fatal deficiency in the evaluation of academic achievement -- both of individual students and of the national educational system -- is the lack of uniform standards that can be applied consistently and systematically to all children in the system..

The Honduran Ministry of Education has an official primary school curriculum which is a general document describing the objectives of primary education and the content of the different required subject areas. This official curriculum has been reviewed carefully in the course of project

design and feasibility studies, and it has been concluded that it is an adequate and competent general curriculum which does not require a major overhaul. Curriculum reform is invariably a controversial, politically, sensitive, time-consuming, and expensive undertaking and the concrete results of the effort may not become visible until many years later.

Instead of curriculum reform, this project will undertake activities that will make the curriculum more operational on a practical level. The Learning Objectives and Evaluation Component of the project will support the identification and identification of a clear, managable, definitive statement of the basic instructional objectives in each of the four core curriculum subject areas for each of the six primary grades. Based on this set of fundamental instructional objectives, new textbooks, radio lessons, and teacher training services will be designed. Also, an item bank and multi-purpose achievement testing capability will be developed.

Realistically, it will take many years to achieve the ultimate goal of the development and implementation of a full scale testing system that will both provide diagnostic information to teachers for instructional decision-making and will serve as a mechanism for evaluating the impact of program. This time is required for several reasons. Honduran teachers have never conducted formal testing program and the process could initially be viewed as threatening. A gradual introduction will be required to effect the transition.

Significant levels of training and technical support will be required in item writing, test development, test administration, processing, scoring, and reporting. Technical support will also be required in the design and maintenance of the item bank.

The project design will entail two strands. Each strand will serve a different purpose and will rely on an item bank of sufficient size to support it.

Strand 1: Development of Achievement Tests for Evaluating Student Achievement.

In an effort to promote the smooth introduction of achievement testing into primary schools, tests will initially be part of the new teacher guides and their use will be optional. Model tests and grading suggestions based on national norms in each of the four subject areas will be included in the teacher guides. Training will be provided on the use of tests and their value in assisting teachers in evaluating learning, remediation of instructional weaknesses, and in making pass/fail decisions. As teachers become acquainted with the tests and how to use them over the life of the project, a gradual transition will be made leading to the increasingly generalized administration of standardized end-of-course tests and the provision of diagnostic information to teachers.

Strand 2 Development of Tests for Evaluating Project Impact.

The development of the tests for evaluating the impact of the project on student achievement can proceed quickly. These tests will be tied to the standard set of grade level objectives. Each subject area will be represented by several short 15-20 item tests. The tests as a whole will guarantee coverage of the content but individual students and teachers will only be burdened by a very short test taking very little class time to administer. A representative sample of students at each grade level will be selected and the tests administered. The information in aggregate form will provide a sound indicator of project impact on student achievement.

COMPONENT VI: Construction, Maintenance, and Renovation

The construction of primary school classrooms has been a centerpiece of A.I.D. support to human resources development in Honduras for a number of years. Almost 2,100 classrooms have been constructed in five departments by the Rural Primary Education Project (522-0167). A.I.D. has made a major contribution to the expansion of access to primary education for the rural population of the country. According to official MOE statistics, enrollment ratios are now around 90%.

In the analysis that led to the design of the new Primary Education Efficiency project, however, it was concluded that the rapid pace of expansion of physical infrastructure in recent years has exceeded the absorptive capacity of the Ministry of Education. The teaching force has not expanded as fast as the number of classrooms, leaving some old classrooms empty as teachers are reassigned to work in new classrooms. Teaching materials are increasingly scarce. Classes are becoming larger and more teachers have to be assigned to remote rural communities, resulting in low teacher morale.

As a result, the A.I.D. program in the education sector in Honduras will de-emphasize school construction and will focus most of its resources on improving the quality and cost-effectiveness of primary education. Until the Ministry of Education is able to deliver effective and economical educational services, continued heavy investment in infrastructure increases the permanent operating budget burden of the GOH while failing to produce the payoff it should in terms of increased productivity and quality of life.

The Primary Education Efficiency project contains a school construction and maintenance component, but the magnitude, the mode of construction, and the rationale are all different from those of school construction activities financed by A.I.D. in the past. School construction activities in this project will be part of an integrated package of activities designed to produce qualitative improvement as quickly as possible. Construction will be supported only to the extent that it proceeds concurrently with qualitative improvements and supports, directly and indirectly, the essential activities designed to improve the quality and efficiency of primary education.

In support of this approach, there are several factors that favor some continued support for school construction in Honduras if undertaken in a non-traditional way. The first factor is that construction activity, because of its political popularity, can serve as an incentive for policy dialog. In Honduras, experience has shown that linking progress in implementing key policy reforms to school construction has encouraged openness on the part of officials in the Ministry of Education. Second, continuing to maintain an A.I.D. presence in the infrastructure area provides an opportunity to experiment and innovate in the school design and construction area with new approaches that could significantly reduce the high cost of expanding the coverage of primary education in the future. Third, A.I.D. assistance can be structured to include incentives for community participation and initiative, making construction a point of departure for an active working relationship between the local community and the school -- something that currently does not exist in most Honduran communities.

An additional factor that favors some continued A.I.D.-financed school construction is the fact that new schools continue to be an important need in Honduras, and A.I.D. is presently the only international donor building schools. The National Bipartisan Commission on Central America (NBCCA) identified universal access to primary education as one of the "ambitious yet realistic objectives for the 1980's." Honduras has achieved an impressive primary school enrollment rate of almost 90%, but it is estimated that nearly 700 new classrooms a year will be required simply to keep up with the growth of the primary school age population. If no major donor is interested in supporting school construction, enrollment ratios might stagnate or even begin to drop.

The School Maintenance Program in the Rural Primary Education project has demonstrated that community resources can be mobilized in support of the school building. Promoters work with parents and teachers to identify physical needs of the school and to arrange for the local resources -- mainly construction materials and local volunteer labor -- needed for a specific repair job. The Ministry of Education then complements the local resources that can be found with whatever else is needed but not available -- hardware, frames, roofing material, blackboards, etc.

Another model that has worked successfully on a small scale in the Ministry of Education is the self-help community-based program called the "Esteban Guardiola" and "Pompilio Ortega" project. This program depends on community initiative, local labor, and local materials. It has operated successfully for a number of years on a small scale, and produces schools of acceptable quality for about half the cost of schools built by construction contractors.

The success of this model and the high cost of constructing schools under traditional contracting arrangements with construction companies has led to the notion that more ambitious school renovation and new school

construction activities could take advantage of community resources to a greater extent than they have in the past. Both A.I.D. and the Ministry of Education are convinced that costs could be reduced substantially by investing extra resources in promotional activities to mobilize community resources. In addition to lowering infrastructure costs, making greater use of community resources has the important advantage of involving the community in activities supporting the school. The spirit of ownership, initiative, and participation that can be generated in the course of building a community school could subsequently manifest itself in permanent community support for the school and the teacher.

Engineering design studies undertaken in the course of project design have produced four alternative designs for school buildings which might further cut costs. Packed earth, adobe, reinforced rock, and tile roofing are approaches to constructing school structures which would require virtually no materials from outside most Honduran rural communities. Since virtually all buildings outside of a few urban centers in the country use this kind of construction, there is no doubt that these construction techniques and materials are practical and readily available. The two issues that would have to be resolved before large scale utilization of local construction techniques for school construction began are design of the building and the possibility of improving local materials. Design will require careful attention because construction with local materials has implications for the size of windows and the weight of the roof. For example, large windows are required to adequately light and ventilate classrooms, but walls with large gaps for windows are less able to support the weight of the roof. Furthermore, if roofs are made of locally-produced tile, they will be very heavy, requiring more support than has been the case with the present school design which uses lightweight roofing material. This kind of design consideration will require that different alternative designs and possible materials be tried out before one or more standard designs are defined for massive implementation. The second consideration is that local materials such as adobe might be substantially improved by the addition of special products such as tar or cement. Studies of the cost/effectiveness of improving on local materials with some outside additives will be made early in the project.

Local construction of schools will have the additional advantage of greatly facilitating maintenance of the schools. If the community builds the school itself, using local materials, it will know how to maintain it and will feel the sense of ownership and responsibility that will make periodic maintenance and even upgrading of the school more likely.

Technical considerations such as the relative advantages of different locally-available construction techniques and materials, the special requirements of school designs appropriate for community-based construction, and cost/effective programs of social promotion were not fully resolved in the course of project design. It was agreed that field experience with a variety

of designs, without a fixed quota of schools to finish or a specific unit cost target, will enable the Ministry of Education to try alternative materials, designs, and promotional tactics under real working conditions and will permit optimal solutions to evolve over a two or three year period.

COMPONENT VII: EDUCATIONAL MEDIA

Educational radio has proven to be a highly cost/effective adjunct to traditional formal primary school instruction in a number of projects in developing countries, and will be used in the Primary Education Efficiency Project to improve the quality of the educational experience quickly and dramatically. Experience in other countries has shown that radio can actually replace key elements of the formal school delivery system the teacher and/or the textbook. However radio is most powerful as an instructional medium when used in combination with the other components of traditional instruction, rather than as a substitute. In the Primary Education Efficiency Project, radio will be used in the classroom to help lighten the teacher's instructional workload, to reinforce and drill material taught by the teacher and the textbook, and to enrich the otherwise dreary atmosphere of the primary school classroom.

The advantages of radio, compared with other traditional or mass media instructional technologies, are well-documented. With the new "interactive" approach to instructional radio program design and production, radio has been shown repeatedly to be an effective teacher. Experience conclusively demonstrating the impact and cost/effectiveness of instructional radio in improving student achievement at the primary school level includes the following:

- a. Rad'o Mathematics in Nicaragua. Between 1974 and 1979, this project developed and field tested interactive radio programs for grades 1-4. Results of careful evaluation studies of student achievement clearly demonstrated the effectiveness of radio. In one major mathematics achievement test, control classes (without radio and with minimal textbooks) scored 44.3% correct; classes with textbooks but without radio scored 48.7% correct; and radio classes scored 62.1% correct.
- b. Radio Mathematics in Thailand. With World Bank financing, Thailand began broadcasting first, second, and third grade math lessons nationally in the early 1980's. Test results indicate that radio classes did better than control classes in every region in all three years that have so far been evaluated. In addition, the test results indicate that the radio programs are contributing to regional equity by narrowing the urban/rural learning gap.

- c. Radio Language Arts in Kenya. From 1979 to 1985, this project adapted the interactive methodology to teaching of English as a second language to lower-primary students in Kenya. Evaluation in the areas of listening, reading, speaking, and writing revealed that children in radio classrooms consistently outscored children in regular classrooms.

- d. Radio-Based Primary Education in the Dominican Republic (RADECO). The RADECO Project is using the interactive radio methodology to deliver basic primary education to out-of-school youth in rural communities. Results of the first grade and second grade evaluations indicate that RADECO students are learning as much of the core curriculum in a daily one-hour broadcast as students are learning in conventional classes.

The fact that radio is also an effective medium for enrichment and entertainment is demonstrated by the popularity and financial success of commercial radio in Honduras and similar countries. Radio transmission and reception equipment has been shown to be affordable and maintainable in countries like Honduras, and adequate creativity and talent exist locally to make professional-quality program production feasible without excessive delays for training. Once a radio system is in place, the costs of sustained operation are low.

Economic Analysis1. Introduction

The economic benefits of improving both quality and availability of primary education in Honduras are many, but vary in the degree to which they can be quantified. This analysis reviews the experience found in the literature for interventions in supply of textbooks, teacher training, radio education, achievement testing and construction of additional schools in developing countries. Estimates of the value of economic benefits resulting from target reductions in dropout and repetition rates and increased productivity allow the calculation of the anticipated economic rate of return to the project. Both the experience with similar projects in other countries and the benefit-cost analysis conducted for the proposed activities suggest that the Honduras Primary Education Efficiency project will yield a high economic return. An additional developmental impact derives from the general finding of the education literature that the benefits of increased access to education and improved educational quality accrue proportionately more to children from lower income groups.

2. The Economic Impact of Investment in Education

Numerous economic studies demonstrate the strong link between national educational achievement and the growth rate of national income. For Honduras, for example, it is estimated that 6.5 percent of national income increases are due to the growth in the volume of human capital embodied in the country's labor force¹. The fact that this figure is somewhat lower than estimates for other countries, both developing and developed, seems suggestive of a need for greater efficiency within the Honduran educational system, to increase the national income impact of combining educated labor with the existing supply of physical capital and other resources.

At the microeconomic level, access to schooling is known to increase worker and farmer productivity, reduce fertility rates, improve nutritional levels and raise the value of household production of goods and services. Empirical estimates of the rate of return to educational expenditures in developing countries show these investments to be at least as profitable as investments in productive physical capital, with the effect most pronounced the lower the level of per capita income.

The main emphasis of developing country governments and international donor agencies has been the expansion of schooling opportunities so that all children have access to at least a primary school education. As universal coverage becomes a reality in many countries, the question of educational

quality is coming to the forefront. Recent research suggests that returns to quality improvements may be at least as great as the returns to quantity, and that investments in improved quality benefit children from disadvantaged backgrounds the most.

In Honduras, access to education is available to most of the school-age population. Currently about 86 percent of 6 - 11 year olds have access to primary education. The construction component of the proposed project will help Honduras move closer to the goal of full primary coverage.

Serious deterioration in academic quality, however, has occurred in recent years, both as a result of the ambitious expansion program and the fiscal crisis. Consequently, Honduran schoolchildren are not acquiring the necessary skills to be productive in their higher studies and careers. On the macroeconomic level, the current deficiencies in Honduran primary instruction, if unchecked, will impede the growth in national output for years to come.

a. The Economic Benefits of Increased Access to Education:

The proposed project will increase access to education directly through the school construction and maintenance component. Indirectly, the availability of schooling will also be expanded via the radio education component, which will reach into areas or populations unserved by the primary school system. For the individual, more years of schooling generally translate into higher earnings, a relationship which has been shown to hold across many countries. It is generally true, however, that there are diminishing marginal returns to educational investments, particularly for the secondary and higher levels. In other words, the greatest marginal impact on income comes with the completion of primary school.

While increased incomes are the most easily measured impacts of greater access to schooling, other benefits also result. Better nutritional levels, a higher value of in-home production, lower fertility and higher agricultural productivity have all been linked to higher schooling levels. Again, the marginal impact of education on these indicators tends to be higher for primary school, and in rural areas. This is important to note because the cash contribution to income of primary education in rural areas understates its true impact in improving standards of living. The noncash impacts listed occur outside of the formal, measured segment of the national economy and will not show up in estimates of GDP.

b. The Economic Impact of Quality Improvements in Primary Education:

Research into the economics of education has emphasized estimating the returns to investment in educational quantity. However, the number of years an individual spends in the classroom is at best a rough proxy

measure of his level of cognitive skill development. Mastery of basic skills in literacy and numeracy is crucial for individuals to be successful in agricultural and industrial occupations, and in the pursuit of studies at the secondary level. In turn, improvements in instructional effectiveness, through provision of textbooks, teacher upgrading and other interventions, have been shown to be a key factor in explaining differences in academic achievement in developing countries. Indeed, the level of instructional quality may outweigh student socioeconomic background in explaining achievement differentials for low-income students in the developing world.² Past experience with the type of quality interventions contemplated in the proposed project is summarized below.

- Textbooks: - Evidence from many countries substantiates the achievement gains which result from the provision of textbooks. A widely cited World Bank review of textbook research³ concludes that:

"From the evidence we have so far, the availability of books appears to be the single most consistently positive school factor in predicting academic achievement."

Table 1, which summarizes the results of recent textbook research, appears on the following page.

Achievement gains are most important in countries at a relatively lower level of development. In Western countries, where classrooms are richly supplied with instructional materials, the improvements in achievement stemming from an incremental investment in textbooks are very small. Differences in educational accomplishments in developed countries are more related to family background and parental motivation, given that even the worst schools in the West are supplied with a level of instructional aids unknown in the typical LDC primary school. In the LDCs, by contrast, the scarcity of instructional resources explains the large impact resulting from introduction of textbooks into the classroom. In the Honduran case, where 77 percent of primary school classrooms have no textbooks at all, the potential impact on achievement is likely high.

In addition to achievement gains, there is the likelihood that a richer instructional environment will persuade children and their parents that completion of more years of primary school is desirable. Textbooks may help reduce desertion rates in the primary grades by making education more enjoyable and relevant to the student.

TABLE 1
Documentation of Relationship between Reading Materials
and Primary School Outcomes
in Low-Income Countries

<u>Author</u>	<u>Country</u>	<u>Grade Level</u>	<u>Outcome Measure</u>	<u>Relationship</u>
Coomber and Keeves(1973)	Chile,	Primary (10- year olds)	Science	+
	Iran		achievement	-
Farrell and Scheifelbein (1974)	Chile	Primary grades 6-8	Math, language achievement	+
		Same cohort, 4 years later	Survival to end of secondary school	+
Fuller and Chantavanish (1977)	Thailand	Grade 3	Language and math achievement	+
Jamison and Montenegro (in press)	Philippines	Grades 1-2	Filipino, math, science achievement	+
Heyneman and Montenegro (in press)				
Lynch (1974)	Ecuador	Grade 1	Reading, math and science	0
ODEPOR (1977)	El Salvador	Grades 2,3, 5,6,8,9	Spanish, math, social and natural sciences	+
Simmons and Askoy (1972)	Tunisia	Individual students, Grades 4,8	Arabic, French and arithmetic	+
Thorndike (1973)	Chile	Primary (10 year olds)	Reading	+
	Iran		comprehension	-
Wolff (1970)	Brazil	Grade 1	Promotion to Grade 2	+
Jamison, Searle, Galda and Heyneman (1981)	Nicaragua	Grade 1	Mathematics achievement	+

Source: The original table, which summarizes textbook research for primary and secondary grade levels is found in Dean T. Jamison et al., "Improving Elementary Mathematics Education in Nicaragua: An Experimental Study of the Impact of Textbooks and Radio on Achievement" Journal of Educational Psychology 73 (No. 4) pp. 558-559.

Note: The negative results of the studies for Iran have been attributed by some authors as due to the relative wealth of that nation's urban students, who were the group under study.

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- Radio Classes - Radio education has been used in a number of countries to improve both educational access and effectiveness. The importance of radio education to developing countries stems from the difficulty of extending primary schooling to remote rural areas, especially in countries where these areas are not well linked into the national mainstream due to biases in national investment, poor road and communications networks and geography. As Honduras possesses a large, poorly integrated rural population, the potential gains from introducing radio primary education are high.

In countries similar to Honduras, radio lessons yield a variety of positive impacts. Overall, the general experience has been that children participating in radio instruction in primary schools demonstrate a higher level of scholastic achievement than those who do not take part in these programs. One reason for this outcome relates to the level of teacher training in rural areas. Urban-oriented teachers often resist placement in rural schools - this means that schools in the countryside receive a series of new and inexperienced teachers, who leave as soon as they accumulate sufficient seniority to qualify for a position closer to town. Rural schools are staffed with teachers who, on average, possess fewer teaching credentials than their urban counterparts. Radio instruction helps even out instructional quality in rural areas by compensating for the lesser experience and training of rural teachers.

Other reasons for achievement gains from radio primary education suggested in the literature are improved attendance for both teachers and students and greater community involvement in local education.

Radio education also can help increase enrollment in primary school. A problem faced by rural schools in LDCs is the low population density in the campo, which makes it difficult to offer the six-grade, six-teacher school which is the norm in urban areas. Most rural schools in Honduras, for example, lack the full six grades as the number of teachers assigned to the school (one or two) as well as the number of available students make the management of a six-grade school impossible. Often, repetition in such cases represents "qualified" students who are waiting for their next grade to be offered.

The extension of radio schooling can "stretch" the teacher's time to allow the offering of additional grades. While the instructor's attention is given to one grade level, other students can be taught via radio lessons. Thus radio instruction has had a direct positive impact on rural primary enrollment in some countries, where previous repetition and drop-out rates were due in part to a lack of student places in the higher primary grades.

Radio education also has another sort of enrollment impact in enabling persons to study who are out of school or who have no access to school. Some radio programs are established with this particular population in mind. However, even programs like the one envisioned in the proposed project which are designed for in-school primary students offer benefits to other listeners. The Nicaragua radio mathematics program, for example, unexpectedly found itself with a large out-of-school listenership despite these individuals' lack of access to the programmed worksheets which accompanied each lesson. The value of this benefit is impossible to quantify, but will enhance the economic return to the proposed project in Honduras.

- Standardized Testing - Testing only measures educational achievement. In a perfect educational system, testing would serve to evaluate student performance and would not influence the economic impacts of schooling itself.

Honduras, however, represents a different case. Poor preparation of teachers, the lack of effective supervision and the absence of standardized student performance norms have all created the situation where a "good teacher" is perceived as one who fails a large number of students. High student repetition rates - more than one-quarter of first graders fail each year - place a tremendous burden on the financially-constrained Honduran primary school system. The introduction of standardized testing planned under the project will provide teachers with an objective norm to determine which students must fail. Teacher awareness of the areas of instruction covered in the test will direct classroom lessons toward a standardized body of knowledge which students must master. The goal is to transform the local judgement of what constitutes a "good teacher" into one whose students can achieve a high degree of progress in mastering the curriculum. Achievement of this goal will make the primary system far more cost-effective by reducing the number of instruction-years required to produce a primary school graduate.

- Teacher Training - The experience with introduction of quality improvements for primary education in other countries clearly emphasizes one point. The difference between success and failure of the interventions is the degree to which teachers have been effectively trained in their application. In countries where radio programs have been haphazardly used and textbooks left unopened, the blame has generally be laid on the lack of teacher instruction in the use of the new technologies. The teacher training component of the proposed project will ensure that the impact of the instructional quality package is not diluted or lost at the individual classroom level. Teacher training activities will primarily serve to reinforce the effectiveness of the other components of the program.

Additional goals have been set forth for the teacher training component. The in-service instruction will be oriented toward increasing community involvement in the schools and toward improving school maintenance. These activities should have positive economic returns in the cost reduction they imply for the educational system. These benefits, however, are difficult to evaluate and will not be quantified for this analysis.

- Other Project Components - The Primary Education Efficiency Project includes additional components in the area of policy analysis, management information and evaluation. All three should improve the cost-effectiveness of the Honduran primary school system. The bulk of the benefits will accrue over the medium to longer term, and will be diffused over all MOE primary school activities.

3. Methodology of Project Economic Analysis:

This project economic analysis estimates the economic benefits and costs of the proposed investment, to evaluate the degree to which the present value of its economic benefits exceeds that for its costs. The greater the value of the project's ratio of benefits to costs, the more confidence there will be that the investment is more profitable than alternative possible activities. The yardstick for this calculation, the opportunity cost of capital, is estimated to be 15 percent (in real terms). This estimate reflects the scarcity of capital for investment in Honduras.

a. Measurement of Economic Benefits:

The economic benefits of the proposed expansion in access to primary school and improvements in instructional quality can be divided into two categories: 1) greater internal efficiency or cost-effectiveness of the primary school system and 2) improved external efficiency, or higher future productivity due to the academic achievements of primary students.

Internal Efficiency Benefits

Reduction in Repetition Rates

A well-functioning school should have no more than 3-5 percent of its students repeating a grade in any given year. In Honduras, repetition rates are much higher, as shown in Table 2 of this analysis. The large number of repeating students in the system translates into an increased financial burden for the educational budget. While these repetition rates in part reflect obstacles to school attendance such as seasonal needs for child labor in agriculture, the poor quality of academic instruction and teacher attitudes toward passing pupils are also responsible. The major project intervention to reduce repetition will be the introduction of standardized testing, to change the criteria for deciding if students may pass to the next year.

TABLE 2

COHORT ANALYSIS ASSUMPTIONS
With and Without the Educational Efficiency Project

	YEAR	1955	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
WITH PROJECT	Actual	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
Repetition Rates (Percent)													

First Grade		27.3	27.0	26.0	23.0	20.0	18.0	16.0	15.0	14.0	12.0	11.0	11.0
Second Grade		15.8	16.0	15.0	13.0	11.0	10.0	10.0	9.0	8.0	8.0	7.0	7.0
Third Grade		12.1	12.0	12.0	11.0	10.0	9.0	7.0	6.0	6.0	5.0	4.0	4.0
Fourth Grade		9.0	9.0	9.0	8.0	8.0	7.0	7.0	6.0	6.0	5.0	4.0	4.0
Fifth Grade		7.0	7.0	7.0	7.0	7.0	6.0	6.0	5.0	5.0	5.0	4.0	4.0
Sixth Grade		3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Desertion Rates													

First Grade		18.5	19.0	18.0	17.0	16.0	15.0	14.0	14.0	13.0	12.0	12.0	12.0
Second Grade		11.7	12.0	11.0	11.0	10.0	9.0	9.0	8.0	8.0	7.0	6.0	6.0
Third Grade		12.5	12.0	12.0	12.0	11.0	10.0	10.0	9.0	8.0	8.0	7.0	7.0
Fourth Grade		13.0	13.0	13.0	12.0	12.0	11.0	11.0	10.0	9.0	8.0	7.0	7.0
Fifth Grade		8.0	8.0	8.0	7.0	7.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0
Sixth Grade		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WITHOUT PROJECT													
Repetition Rates													

First Grade			27.0	26.0	25.0	25.0	24.0	27.0	21.0	21.0	20.0	19.0	19.0
Second Grade			16.0	15.0	14.0	13.0	13.0	12.0	12.0	12.0	11.0	11.0	11.0
Third Grade			12.0	12.0	12.0	11.0	11.0	10.0	10.0	9.0	9.0	9.0	9.0
Fourth Grade			9.0	9.0	9.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Fifth Grade			7.0	7.0	7.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Sixth Grade			3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Desertion Rates													

First Grade			18.0	18.0	18.0	17.0	17.0	16.0	16.0	16.0	15.0	15.0	15.0
Second Grade			12.0	11.0	11.0	11.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Third Grade			12.0	12.0	12.0	11.0	11.0	10.0	10.0	10.0	10.0	10.0	10.0
Fourth Grade			13.0	13.0	12.0	12.0	12.0	11.0	11.0	11.0	10.0	10.0	10.0
Fifth Grade			8.0	8.0	7.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Sixth Grade			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NOTES: Textbook Distribution begins in 1988.
See text for explanation of assumptions.

Very little systematic study has been made of the relationship between repetition rates and instructional quality. One study funded by AID⁵ investigated why students fail first grade in Rio Grande do Sul in Brazil. The investigator found that student access to textbooks a predictor of success in passing first grade. However, the results are ambiguous, as the author believes that possession of textbooks may be a proxy for level of family income.

For this project, a progressive reduction in repetition rates is assumed as a project outcome, based both on increased achievement from quality improvement and on changed teacher policies on holding students back resulting from achievement testing and in-service training. A reduction in the numbers of students held back one or more grades will translate into more graduates at higher grade levels for a lower number of instructional years.

Reduction in Desertion Rates - Educational specialists believe that a threshold exists in primary schooling (usually cited as 4-6 grades). Students who do not reach this threshold are less likely to retain their literacy, and much of the educational investment is lost. If desertion rates can be reduced, students will spend, on average, more years in school and a greater number will fully retain literacy after schooling is completed.

The relationship between instructional quality improvements and desertion rates depends on the non-school system constraints to school attendance. Some of these constraints include the need for child labor in rural areas, the private costs of schooling such as for clothing and transport, and travel difficulties during farm migration seasons or rainy weather. To the extent that non-school system constraints to attendance exist in Honduras, the project interventions will have a limited effect in lowering drop-out rates.

The school construction program is also expected to have a small impact on desertion rates by offering more primary school "slots" for the population. The Radio Program could have a similar effect as it enables more grades to be effectively offered in multigrade schools. In sum, the project is expected to have a positive, but small, impact in reducing desertion rates. In terms of economic benefits, this decrease in the number of students who abandon their education in its early years will increase the future overall productivity of the work force. In terms of instructional years, a decrease in desertion implies an increase as students stay longer in the system. For this reason, the overall change in number of instructional years (from both the reductions in desertion and repetition rates) must be factored in the calculation of project costs. A change in instructional years implies an increase or decrease in the cost of the primary school system.

External Efficiency Benefits

The other set of project benefits results from improvements in the external efficiency of the primary school system. External efficiency relates the cost of educating primary school pupils to the improvement in lifetime productivity students can expect as a result of their educational investments. For this project, the external efficiency benefits are defined as the increase in later productivity resulting from 1) completion of more years of schooling due to lower repetition and desertion rates and 2) for each year of schooling, a greater productivity than that which would have occurred without the project, due to higher educational quality.

Estimating the productivity gains associated with more years of schooling requires information on how earnings vary with educational achievement. For Honduras, the most recent such information is contained in a 1978 household survey which includes data on head-of-household income and educational achievement for urban and rural areas of the country. With these data, it was possible to estimate through linear regression the earnings differentials among different levels of primary schooling achievement. These differentials are shown in Table 3. (The linear regressions separate out returns due to job experience from returns to schooling. Otherwise, returns to schooling would be overstated, e.g. if only simple averages of earnings at each schooling level were used.)

For students who complete more grades as a result of the project then, the productivity benefit is the differential between earnings without the project and with the project-induced higher level of grade achievement. Additional grades completed are inferred by comparing the numbers of primary school system leavers in each grade between the with and without project cohort analysis scenarios (shown as Tables 4 and 5).

Estimated earnings differentials, however, are based on past vintages of primary schooling, when educational quality was lower than that envisioned for children studying during the years of the project. Hence, they do not reflect likely increases in productivity resulting from educational quality improvements under the project. For this reason, the earnings differences were only used to calculate the value of increased years of education completed as a result of the project. An additional project benefit measure is needed for reflect improvements in quality. The quality benefit is enjoyed by all students enrolled during the project years, not only by those who stay in school longer due to the project activities.

There is no analytically exact way to calculate apriori the monetary impact of improved educational quality. For illustrative purposes, the benefit was quantified as the equivalent of one full year of primary education for students who complete a full six grades enjoying the quality enhancements planned under the project. A weighted average of the benefit was calculated for students who have textbooks for only part of their primary education.

TABLE 3

ESTIMATED ANNUAL INDIVIDUAL EARNINGS BY LEVEL OF SCHOOLING

Honduras
(Lempiras)

Estimates of wage differentials were made through linear regression using household survey data for 1978 and controlling for level of job experience. The different earnings levels reported below are for new job entrants.

Years of Schooling Completed		ANNUAL EARNINGS						
		- 0 -	- 1 -	- 2 -	- 3 -	- 4 -	- 5 -	- 6 -
M E N								
% of population								
=====								
Urban	(22.4)	742	907	1107	1352	1651	2016	2462
Small Town	(12.0)	522	633	768	931	1129	1370	1661
Rural	(65.6)	747	845	956	1081	1224	1384	1566
W O M E N								
=====								
Urban	(22.4)	166	203	247	302	369	451	550
Small Town	(12.0)	312	381	462	560	679	824	1000
Rural	(65.6)	83	94	107	121	137	155	175

ESTIMATED DIFFERENTIALS
For Additional Years of Schooling
Weighted by Location and Gender Proportions

	1978	1986
	Lempiras	Lempiras
No Schooling	423.98	720.76
First Grade	+ 82.79	+ 140.74
Second Grade	+ 75.21	+ 127.86
Third Grade	+ 86.99	+ 147.88
Fourth Grade	+ 101.62	+ 172.76
Fifth Grade	+ 117.70	+ 200.10
Sixth Grade	+ 151.36	+ 257.31

NOTE: Increments listed above are for additional one year only.
Total average earnings for a given school level are found by summing the increments.
Gender weights are based on proportions within each grade in 1984 school year.

TABLE 4

COHORT ANALYSIS
 HONDURAS - 1985 through 1996
 (Thousands)
 WITH FREQUENT SCENARIO

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
	Enrollment											
New Entrants		184	190	197	204	212	219	226	233	241	249	257
GRADE												
FIRST	244	251	258	264	265	265	267	269	273	279	282	288
Promotion	132	138	144	153	170	178	187	191	199	212	217	222
Repetition	67	68	67	61	53	48	43	49	38	33	31	32
Desertion	45	45	46	45	42	40	37	38	35	33	34	35
SECOND	152	156	163	167	180	189	196	207	210	216	229	233
Promotion	110	113	121	128	142	153	159	171	176	184	200	203
Repetition	24	25	24	22	20	19	20	19	17	17	16	16
Desertion	18	19	18	19	18	17	18	17	17	15	14	14
THIRD	119	125	127	136	143	157	168	171	182	187	193	207
Promotion	90	95	97	105	113	127	139	145	156	165	172	184
Repetition	14	15	15	15	14	14	12	10	11	9	8	8
Desertion	15	15	15	16	16	16	17	15	15	15	14	15
FOURTH	91	98	104	106	113	122	136	149	154	166	171	179
Promotion	71	76	81	85	91	100	111	125	131	144	152	159
Repetition	8	9	9	8	9	9	9	9	9	8	7	7
Desertion	12	13	13	13	14	13	15	15	14	13	12	13
FIFTH	71	76	82	86	91	97	106	118	131	138	151	158
Promotion	60	65	69	74	78	85	93	106	118	124	137	144
Repetition	5	5	6	6	6	6	6	6	7	7	6	6
Desertion	6	6	7	6	6	6	6	6	7	7	8	8
SIXTH	58	62	67	71	76	81	87	95	108	120	126	140
Promotion	56	60	65	69	74	79	85	93	106	117	124	137
Repetition	2	2	2	2	2	2	2	2	2	2	3	3
Desertion	0	0	0	0	0	0	0	0	0	0	0	0
SYSTEM LEAVERS												
First	45	45	46	45	42	40	37	38	35	33	34	35
Second	18	19	18	19	18	17	18	17	17	15	14	14
Third	15	15	15	16	16	16	17	15	15	15	14	15
Fourth	12	13	13	13	14	13	15	15	14	13	12	13
Fifth	6	6	7	6	6	6	6	6	7	7	8	8
Sixth	56	60	64	69	74	79	85	93	106	117	124	137
TOTAL INSTRUCTION YEARS	735	768	800	833	869	911	960	1008	1057	1105	1152	1205

...uates, rather than deserters.

TABLE 5

COHORT ANALYSIS
 HENLOFAS - 1986 through 1996
 (Thousands)
 WITHOUT PROJECT SCENARIO

	1985 Enrollment	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
New Entrants		184	190	197	204	212	219	226	233	241	249	257
G R A D U E												
FIRST	244	251	258	264	270	277	283	288	294	303	310	316
Production	132	137	145	151	159	166	175	182	185	197	204	208
Repetition	67	68	67	66	65	64	62	61	62	61	59	60
Desertion	45	45	47	48	46	47	45	46	47	45	46	47
SECOND	152	156	162	169	174	182	190	198	205	210	219	228
Production	110	113	120	127	132	140	148	154	160	166	174	180
Repetition	24	25	24	24	23	24	23	24	25	23	24	25
Desertion	18	19	18	19	19	18	19	20	21	21	22	23
THIRD	119	125	127	135	143	149	156	164	171	176	181	190
Production	90	95	97	103	112	116	125	131	138	142	147	154
Repetition	14	15	15	16	16	16	16	16	15	16	16	17
Desertion	15	15	15	16	16	16	16	16	17	18	18	19
FOURTH	91	98	104	106	113	121	125	135	142	150	154	159
Production	71	76	81	84	90	96	101	109	115	123	126	131
Repetition	8	9	9	10	9	10	10	11	11	12	12	13
Desertion	12	13	13	13	14	14	14	15	16	15	15	16
FIFTH	71	76	82	86	90	96	102	108	116	122	130	134
Production	60	65	69	74	77	85	90	95	102	107	114	119
Repetition	5	5	6	6	6	6	6	6	7	7	8	8
Desertion	6	6	7	6	6	6	6	6	7	7	8	8
SIXTH	59	62	66	71	76	80	86	92	97	104	109	117
Production	56	60	64	69	74	78	85	90	95	102	107	114
Repetition	2	2	2	2	2	2	2	2	2	2	2	2
Desertion	0	0	0	0	0	0	0	0	0	0	0	0
SYSTEM LEAVERS												
First	45	45	47	48	45	47	45	46	47	45	46	47
Second	18	19	18	19	19	18	19	20	21	21	22	23
Third	15	15	15	16	16	16	15	16	17	16	18	19
Fourth	12	13	13	13	14	14	14	15	16	15	15	16
Fifth	6	6	7	6	6	6	6	6	7	7	8	8
Sixth*	56	60	64	69	74	78	85	90	95	102	107	114
TOTAL INSTRUCTION YEARS	735	768	800	833	866	904	943	984	1024	1063	1104	1144

*Graduates, rather than deserters.

Having textbooks or not was taken as the measure of access to improved quality education as textbooks are the primary quality intervention. The teacher training is supportive of the use of textbooks. Radio education, however, is a pilot effort whose benefits cannot be quantified in the early years due to uncertainty about the rate of diffusion of the new technology. The testing and construction components will not directly impact quality.

Because of the imprecision in measurement of this project outcome, an alternative benefit cost calculation was completed for the case of no economic value for quality improvements.

A caveat to the estimates of project external efficiency benefits should be noted here. The earnings increases associated with higher levels of schooling attainment understate the true impact of the project on households' standards of living. Particularly for women, who are more likely to work at home or outside the formal work force, these gains are difficult to estimate. For example, in rural areas, women's recorded earnings amount to only about 10 percent of those for men at the same level of education. The calculation of the project's impact on does not count non-cash improvements to the households' standards of living, ignoring the value of many of the benefits of primary education. These benefits would include higher value home and informal market production, better health and nutrition, lower fertility rates and higher productivity in subsistence agriculture.

b. Measurement of Project Costs:

The economic costs of the proposed activity are divided into three categories: 1) Project Direct Costs, 2) Increased Student Costs and 3) Increased Costs to the Public Sector. These are broken out in Table 6.

Project Direct Costs:

This category of costs reflects USAID/Honduras and GOH counterpart costs of carrying out the proposed activities. Expenditures were taken from the project budget, with foreign exchange costs transformed according to a shadow price of 2.40 lempiras per U.S. dollar.

Student Increased Costs:

Students who undertake additional years of schooling as a result of the project will bear increased costs in terms of the opportunity cost of their time and the direct costs of school supplies and transport. Opportunity costs were estimated as:

First and Second Grades - L 0.00

Third and Fourth Grades - L 180.19

Fifth and Sixth Grades - L 360.38

The full estimated earnings level for primary school leavers was not used in these estimates, as at the average age of leaving the early primary grades, the students' levels of maturity and physical strength would preclude their earning at those wages. Throughout the analysis, it is assumed that students join the work force in full productivity at age 14 (or the equivalent age of a sixth-grade graduate.)

The cost of supplies and other direct student expenditures was estimated at L. 11.00 per school year. This figure was based on evidence from other countries.

Increased Public Sector Costs:

Based on analysis of past years's public sector primary education budgets, the marginal cost of an additional primary instruction student-year was estimated to be L. 85.95. It might be argued that this figure is too high. Since most of the MOE primary school budget is for salaries, the marginal cost to the system of absorbing an additional student might be considered quite low.

The higher estimate is used here to reflect that increased crowding of existing desks, classrooms and other educational facilities will undercut the quality improvements anticipated under the project. Thus, the marginal cost projection is not an estimate of how much more the GOH will spend, but rather of how much more they should spend for each additional instructional year which arises as a result of the project. The estimates of additional instructional years are obtained by comparing the with and without project cohort analyses shown as Tables 4 and 5.

c. Benefit-Cost Calculations:

The Education Efficiency Project demonstrates a high benefit-cost ratio (4.7) when quality benefits are incorporated as described in the sections above. When no quality benefits are attributed to the project - in other words, the only benefit derives from increased grade level achievement of students - the benefit-cost ratio is 2.0. This means that the project internal rate of return is greater than the discount rate of 15 percent, the estimate of the opportunity cost of capital in Honduras. The estimated project economic return suggests that the proposed investment is a highly profitable investment of funds.

It should be noted that in the calculations, lifetime benefits of each primary school system leaver are attributed to in the year in which he ends his schooling. The level of benefits shown for each project year is the current value in that year of the lifetime benefits for each student who leaves school at that time. Any benefits which actually occur in years beyond

the date of departure from schooling are discounted back to that year. This methodology, a calculational necessity given the form in which enrollment data are given, means that benefit figures are not equivalent to the monetary impact of the project in that year. The actual benefit stream would extend throughout the working life of all individuals who are enrolled in primary school during the project life.

4. Project Impact on Measured GDP

The measures used in this economic analysis, net present economic benefits and the benefit-cost ratio, are not directly interpretable as the incremental impact of the project on GDP. The methodology used to calculate economic benefits does not easily disaggregate into a year-by-year estimate of the project contribution to GDP as measured by Honduran economic authorities, and as evaluated by AID macroeconomic tracking systems.

Conceptually, the project impact on measured GDP would be as follows. The productivity benefits, to the extent that they accrue as formal sector wage increases, would be included as increments to GDP in the year in which they occur. Thus, the stream of benefits would be much smaller in each year and would appear over a longer horizon (about 50 years) than the one indicated in the benefit-cost table. If workers' future productivity gains occur in the informal sector or at home, they will not be counted. Another possible outcome, if labor market conditions are in favor of entrepreneurs rather than workers, is that productivity increases will be realized but not transferred to labor. In this case, the gains would appear as returns to other factors of production.

If we assume that all productivity benefits -- both for greater access and for improved quality -- appear in the measured GDP sectors, then the increment to GDP in a future year would be 237,896,525 Lempiras, provided that two additional conditions hold: (1) all of the project beneficiaries are in the labor force in the same proportions assumed in the economic analysis, and (2) the future year in question is far enough out in the benefit stream that there are no longer economic costs of the project in that year. For earlier years in the project benefit-cost stream, there may be subtractions due to the cost to GDP of the resources used in the project.

Project costs would not reduce GDP in several cases. Student opportunity costs would have to reflect withdrawal of labor from the measured sectors of the economy without replacement to appear as a decrease in measured GDP. Student direct costs and public sector costs (if these latter expenditures are made) reflect a shifting of resources away from other sectors, with a possible commensurate decline in national output. Project costs will lower GDP only to the extent that resources are taken away from alternate uses.

5. Distributional Impact:

The economic benefit-cost analysis presented in the preceding section does not consider the effects of the project on income distribution in Honduras. For textbooks, the major component of the project, there is evidence that access for students at lower income levels has a greater proportional impact than for students from more advantaged backgrounds.

Some of these results, reported in Textbooks and Achievement: What We Know are listed below:

Philippines: The rate of academic achievement was faster and gains greater among rural children than for urban students.

Thailand: Achievement gains were higher in "the types of schools which primarily serve lower-status students."

Brazil: Texts were a more important determinant of whether or not first graders failed for rural schools than for urban schools.

Based on this evidence, it is projected that Honduran school children from disadvantaged economic backgrounds will be the primary beneficiaries of the Primary Education Efficiency Project.

6. Conclusion:

The proposed Primary Education Efficiency Project should expect a high economic rate of return. This projection is based on review of the experience of other countries who have tried similar interventions, and on a benefit-cost analysis using Honduras information on wage differentials, enrollment rates and internal efficiency.

ENDNOTES

1 George Psacharopoulos, "The Contribution of Education to Educational Growth: International Productivity Comparisons," in International Productivity Comparisons and the Causes of Slowdown, J. Kendrick, ed. (Cambridge, Mass.: Ballinger Press, 1984), p. 337.

2 N. Birdsall and J. Behrman, "The Quality of Schooling," American Economic Review 74, No. 1 (December 1983).

3 S.P. Heyneman, J.P. Farrell and M.A. Sepulveda-Stuardo, Textbooks and Achievement: What We Know, World Bank Working Paper No. 298 (Washington DC: World Bank, 1978).

4 Peter L. Spain, Dean T. Jamison and Emile G. McAnany, Radio for Education and Development: Case Studies, Volume 1, World Bank Staff Working Paper No. 266 (Washington DC: World Bank, 1977), p. 70.

5 L. Wolff, "Why Children Fail First Grade in Rio do Grande do Sol: Implications for Policy and Research" Rio de Janeiro, Brazil: United States Agency for International Development, 1970.

Document 0474G

Endnotes for Document 0473G

COMPONENT: Teacher Training

SCHOOL YEAR → 86 87 88 89 90 91 92 93 94

ACTIVITY

PROJECT YEAR → 1 2 3 4 5 6 7 8

A. Preparatory Activities

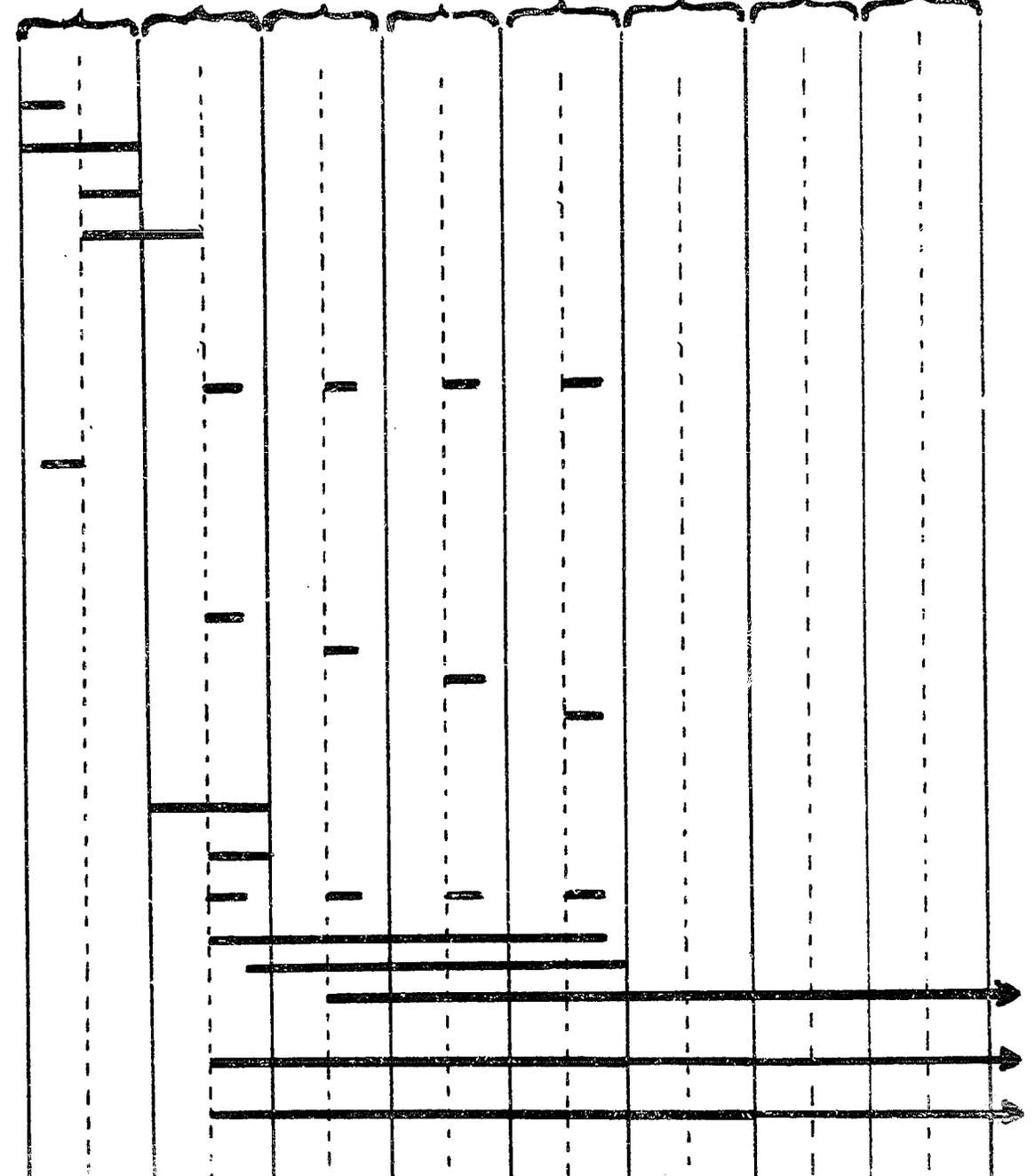
1. Develop master plan
2. Develop operational design:
National Center
3. Training of "Actualizadores"
4. Field testing of new training
modules

B. Design & Development Activities

1. Planning Workshop for
supervisors, directors & model
teachers
2. Development of learning
objectives, all grades

C. Operational Activities

1. Intensive workshops for teachers
 - a) Grade 1
 - b) Grades 2 & 3
 - c) Grades 4 & 5
 - d) Grade 6
2. Continuing education for teachers
 - a) Develop distance education
program master plan
 - b) Develop materials
 - c) Identify local field
"multipliers"
 - d) Train supervisors
 - e) Train model teachers
 - f) Workshops by local
"multipliers"
 - g) EL AGRICULTOR feature series
for teachers
 - h) Radio series for teachers



SCHOOL YEAR → 86 87 88 89 90 91 92 93 94

ACTIVITY

PROJECT YEAR → 1 2 3 4 5 6 7 8

A. Preparatory Activities

1. Organize 4 writing committees.
2. Contract technical assistance and training services
3. Training
4. Development of learning objectives (with testing Component)
5. Development of component master plan

B. Development of Draft Texts & Teacher Guides

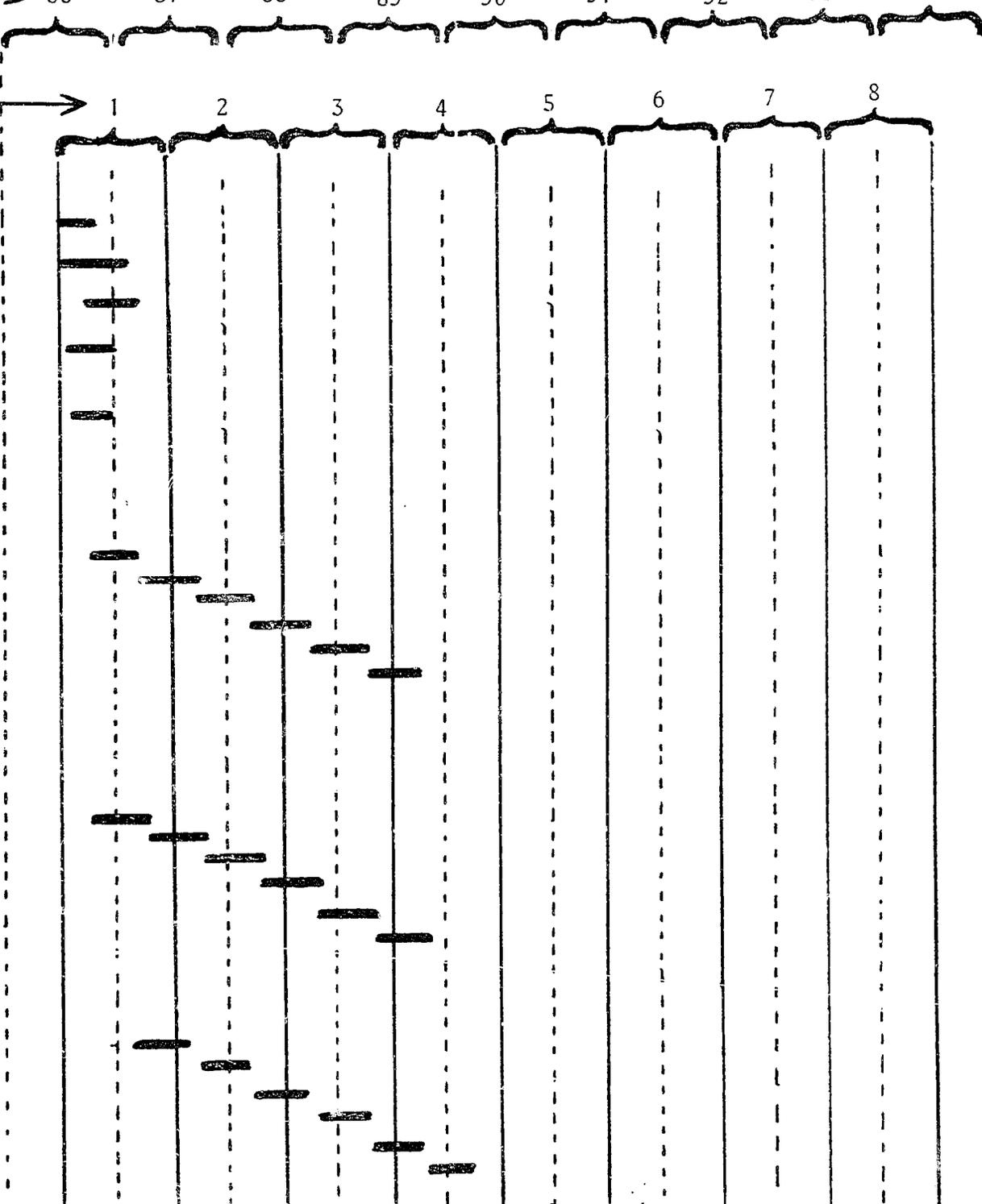
1. Grade 1
2. Grade 2
3. Grade 3
4. Grade 4
5. Grade 5
6. Grade 6

C. Review, Field Testing & Approval of Texts & Teacher Guides

1. Grade 1
2. Grade 2
3. Grade 3
4. Grade 4
5. Grade 5
6. Grade 6

D. Printing of Texts & Teacher Guides

1. Grade 1
2. Grade 2
3. Grade 3
4. Grade 4
5. Grade 5
6. Grade 6



ANNEX G

SCHEDULE OF

ACTIVITIES

TABLE 6

Benefit/Cost Calculations
 EDUCATION EFFICIENCY PROJECT
 First Stage
 ('000s of Lempiras)

YEAR	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
B E N E F I T S											
IMPROVED PRODUCTIVITY DUE TO:											
Increased Access to Education (See note below)	0	0	-8434	-14958	-18370	-15252	-4497	53550	86533	90709	702661
Greater Quality of Education	0	0	3445	6240	12571	42640	85728	140845	150100	152173	209533
SALVAGE VALUE											
New Schools Constructed	0	0	0	0	0	0	0	0	0	0	0
Vehicles and Other Durables	0	0	0	0	0	0	0	0	0	0	0
TOTAL BENEFITS:	0	0	-4989	-8718	-5799	27388	81231	194395	236633	242882	912194
TOTAL DISCOUNTED (15%) BENEFITS:	0	0	-3283	-4987	-2882	11832	30543	63567	67204	59992	196122

C O S T S											
PROJECT COSTS:											
Textbook Component:											
Project Budget (\$)	739	3047	2260	2962	1798	118	96	74			
Economic Costs (Lempiras)	1589	6552	4859	6369	3865	253	205	158			
Radio Components:											
Project Budget (\$)	2625	2742	1594	1311	576	476	364	364			
Economic Costs (Lempiras)	5722	5977	3474	2858	1256	1038	793	793			
In-Service Training/Achievement Testing											
Project Budget (\$)	1113	1774	1669	1570	1578	879	782	104			
Economic Costs (Lempiras)	2265	3609	3396	3194	3210	1788	1591	212			
Management Information Services											
Project Budget (\$)	524	469	342	284	226	0	0	0			
Economic Costs (Lempiras)	1117	999	729	605	482	0	0	0			
Construction											
Project Budget (\$)	1500	1500	1500	0	0	0	0	0			
Economic Costs (Lempiras)	3000	3000	3000	0	0	0	0	0			
Policy/Admin Studies											
Project Budget (\$)	309	266	251	261	261	261	271	206			
Economic Costs (Lempiras)	683	588	555	577	577	577	599	456			
STUDENT COSTS:											
Opportunity Costs:	0	0	0	180	2703	5946	8829	13875	16397	18920	40363
Direct Costs:	0	0	0	33	88	198	264	363	462	528	1111
MARGINAL COST OF INCREASE IN INSTRUCTION-YEARS:											
	0	0	0	258	688	1547	2063	2836	3610	4126	8681
TOTAL COSTS:	13692	20137	15458	13497	12290	10770	13746	18237	20469	23574	50155
TOTAL DISCOUNTED (15%) COSTS:	11912	15224	10172	7720	6108	4853	5168	5964	5813	5823	10783

NET PRESENT BENEFIT = L. 328,768 thousand.
 BENEFIT-COST RATIO = 4.679963 .

ASSUMPTIONS: Textbooks have 5-year life.
 Analysis is in constant 1986 lempiras.
 For other assumptions, please see text.

TABLE 6A

NOTE: The benefit of greater access to primary education takes negative values in the early years due to the comparison of with and without project scenarios. A third-grade leaver without the project may become a sixth grade leaver with the project. The data only capture the event that one fewer third-grader leaves the system in, say, 1988 and one more sixth-grade graduate occurs in 1991. To count the full productivity benefit of an additional sixth-grade graduate overstates the project impact, because for the case cited here, the individual would have completed three years of schooling without the project.

For this analysis, the case just described would add the full benefit of six years of primary school in 1991, and subtract the value of a third grade education from 1988. Since the project transforms early grade dropouts into graduates, negative values appear in the early years. All values given in the chart are discounted to their present values for the year in which they are shown.

Worksheet Calculations:

Quality Benefit = Increase in Annual Earnings of 1/6 of the between-school-level differential. This benefit accrues for each instruction-year (excluding repetition years) that the student has textbooks. Using the With-Project Cohort Analysis Table, the school-leavers in each grade provide the basis for the calculation, along with the phase-in schedule for textbooks.

Textbook Phase-in Schedule:	1988	-	First Grade	(Books last until 1992)
	1989	-	Second Grade	(* 1993)
	1990	-	Third-Fourth Grades	(* 1994)
	1991	-	Fifth-Sixth Grades	(* 1995)

Quality Differential per year of schooling for Annual Earnings:

+ First Gra	L.	23.45
+ Second Grade		21.31
+ Third Grade		24.65
+ Fourth Grade		28.79
+ Fifth Grade		33.35
+ Sixth Grade		42.89

Sample Calculation: In 1988, only first-graders will have books. There are 45,000 first-grade leavers. Assume a 30 year work life for each (the data include unemployed individuals so there is no need to factor this in.) Using a financial calculator, payment = 23.45, interest rate = 15, and years equals 30. Present value in year 0 is L.153.97. However, assume that children enter the work force at age 14. This means that on average, first-grade leavers will not work until 1994, so we must discount again. Thus, present value in 1988 of first-grade leavers lifetime quality benefit is L.76.55. L.76.55 times 45,000 first-grade leavers equals L.3,444,846. This is the quality benefit in year 1988. Note that first-graders who stay in school will be picked up in subsequent project years when they leave school

Note also that benefits are properly discounted but included in the table for the year the student leaves school, not for the year in which they occur. This method of presentation shortens the table and simplifies the calculations. The disadvantage is that it makes calculation of the internal rate of return impossible.

This method misses a small proportion of the beneficiaries who repeat grades and thus do not leave the system during the time-frame of the analysis. Total book-years were calculated and compared with book years counted in this analysis to determine the number of missing students (still in the system). An adjustment factor based on this estimate was calculated and added to benefits in the last years.

Benefits for each student appear in the year he leaves the school system. The actual years in which these benefits accrue are those over his assumed 30 year span in the work force.

COMPONENT: Management Information System

SCHOOL YEAR → 86 87 88 89 90 91 92 93 94

ACTIVITY

PROJECT YEAR → 1 2 3 4 5 6 7 8

A. Staff Training

1. 5 programmers
2. 3 system operators
3. Word processing supervisors
4. 3 system analyst
5. Staff of research unit
6. Statisticians (description & inferential)
7. Data gathering instrument design

User Training

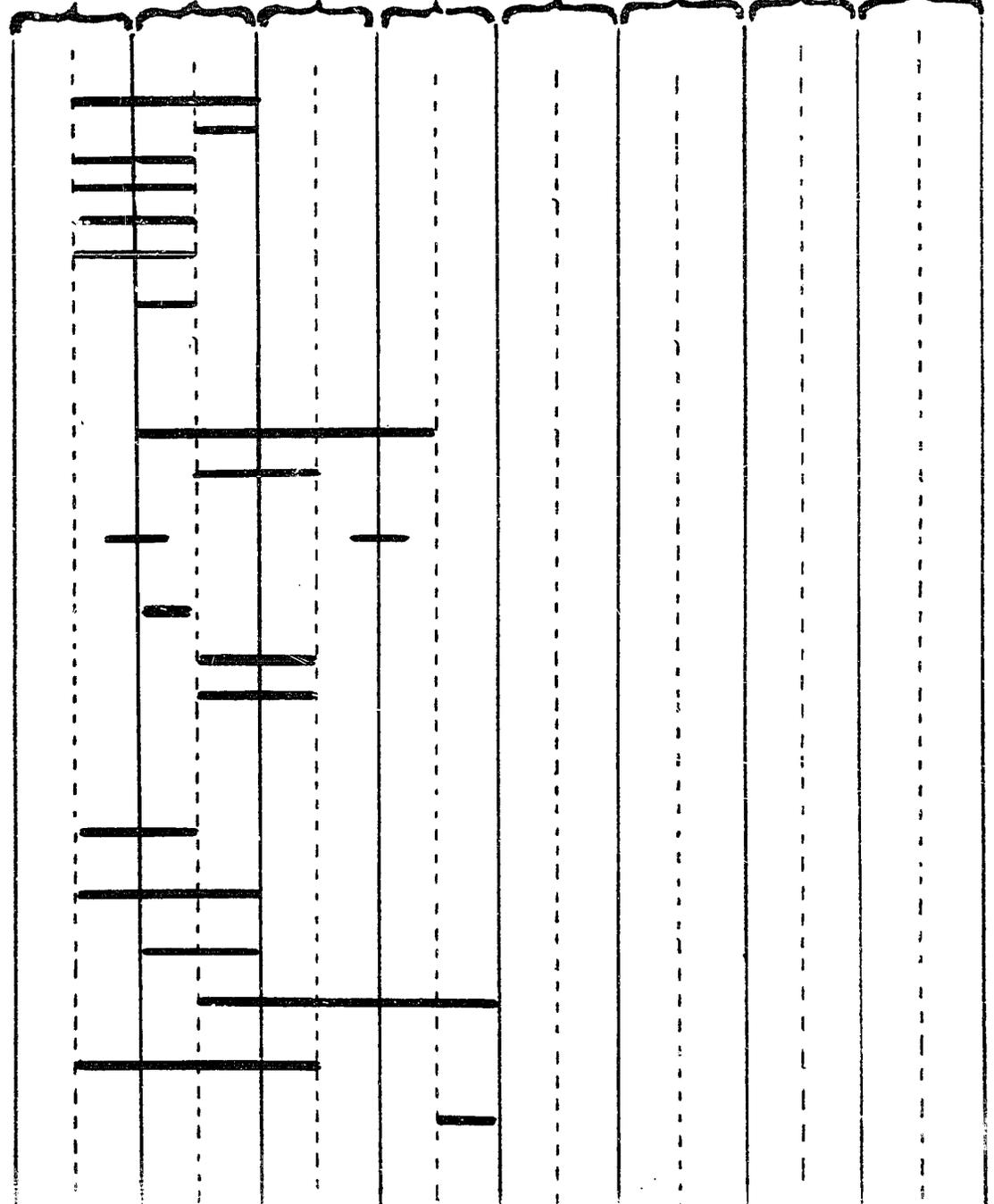
1. MOE executives - introduction to MIS
2. Work processing*
3. Workshop on application of statistical data to policy & planning
4. Training of General Directorate Staff
5. Upgrading of existing users
6. Training of selected departmental supervisors in microcomputer use

C. EQUIPMENT

1. Procurement/installation of equipment
2. Procurement/installation of software
3. Staff training in operation & maintenance
4. Maintenance Contract

D. Develop user manuals

E. Evaluation



SCHOOL YEAR → 86 87 88 89 90 91 92 93 94

ACTIVITY

PROJECT YEAR → 1 2 3 4 5 6 7 8

A. Core Staff Selection

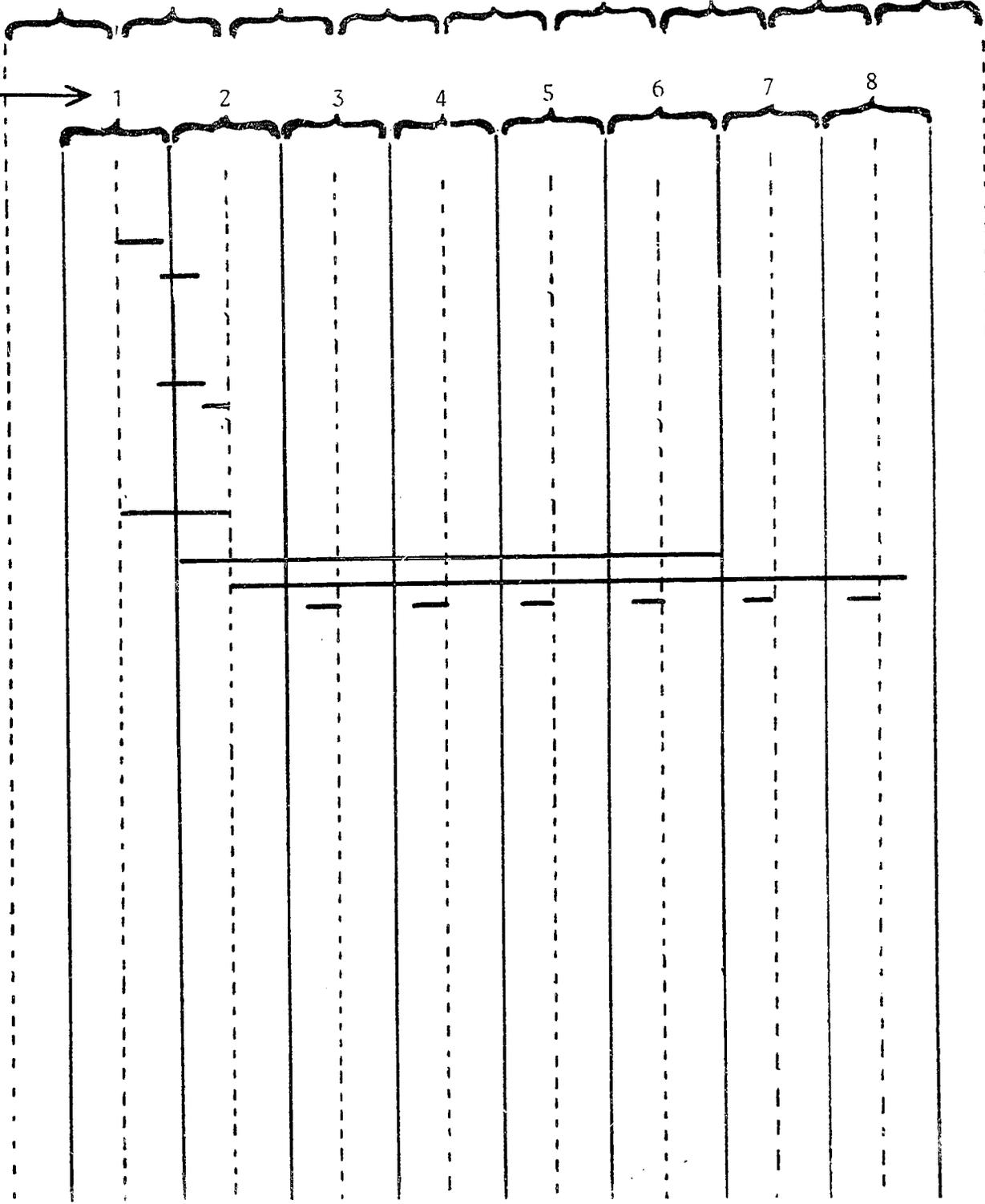
- 1. Define & publish selection criteria
- 2. Review, screen & select core staff

B. Technical Assistance

- 1. Contractor selection
- 2. Contract field services

C. Field Studies & Research Dissemination

- 1. Determine & negotiate research agenda
- 2. Field studies
- 3. Analysis, reporting of results
- 4. Dissemination workshops



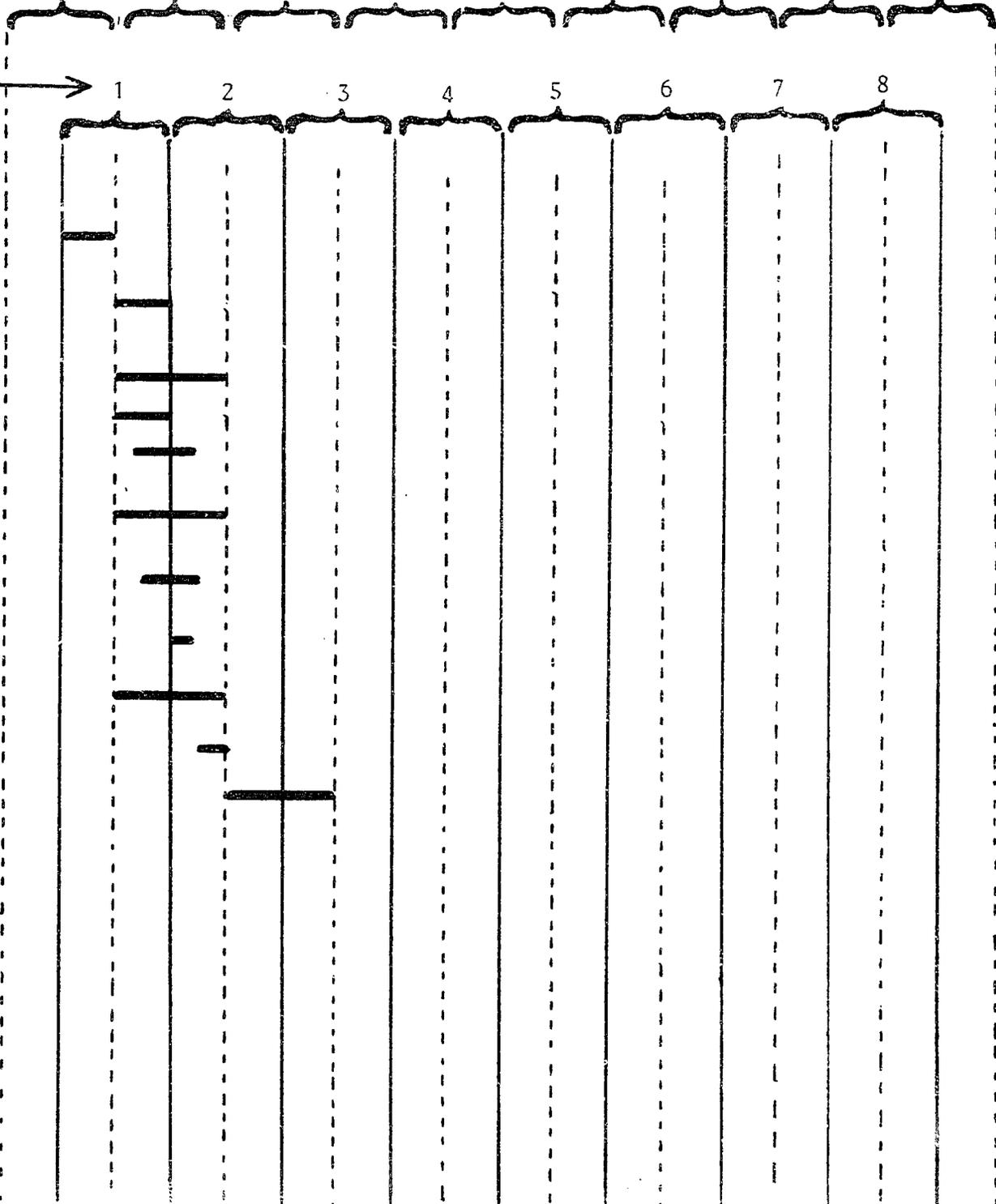
SCHOOL YEAR → 86 87 88 89 90 91 92 93 94

ACTIVITY

PROJECT YEAR → 1 2 3 4 5 6 7 8

A. Design & Development Activities

1. National Workshops to define instructional objectives
2. Develop, install software for tabulation & analysis of test results
3. Staff training in evaluation, testing & analysis
4. Develop initial item bank
5. Field test & item analysis, 1st grade items
6. Test formats developed & field tested
7. Model tests developed in collaboration with textbook component
8. First grade tests incorporated into teacher guide drafts
9. Test forms developed for academic achievement assessment
Baseline tests administered to national sample of 1st graders
10. Field study of teachers' pass/fail decision criteria



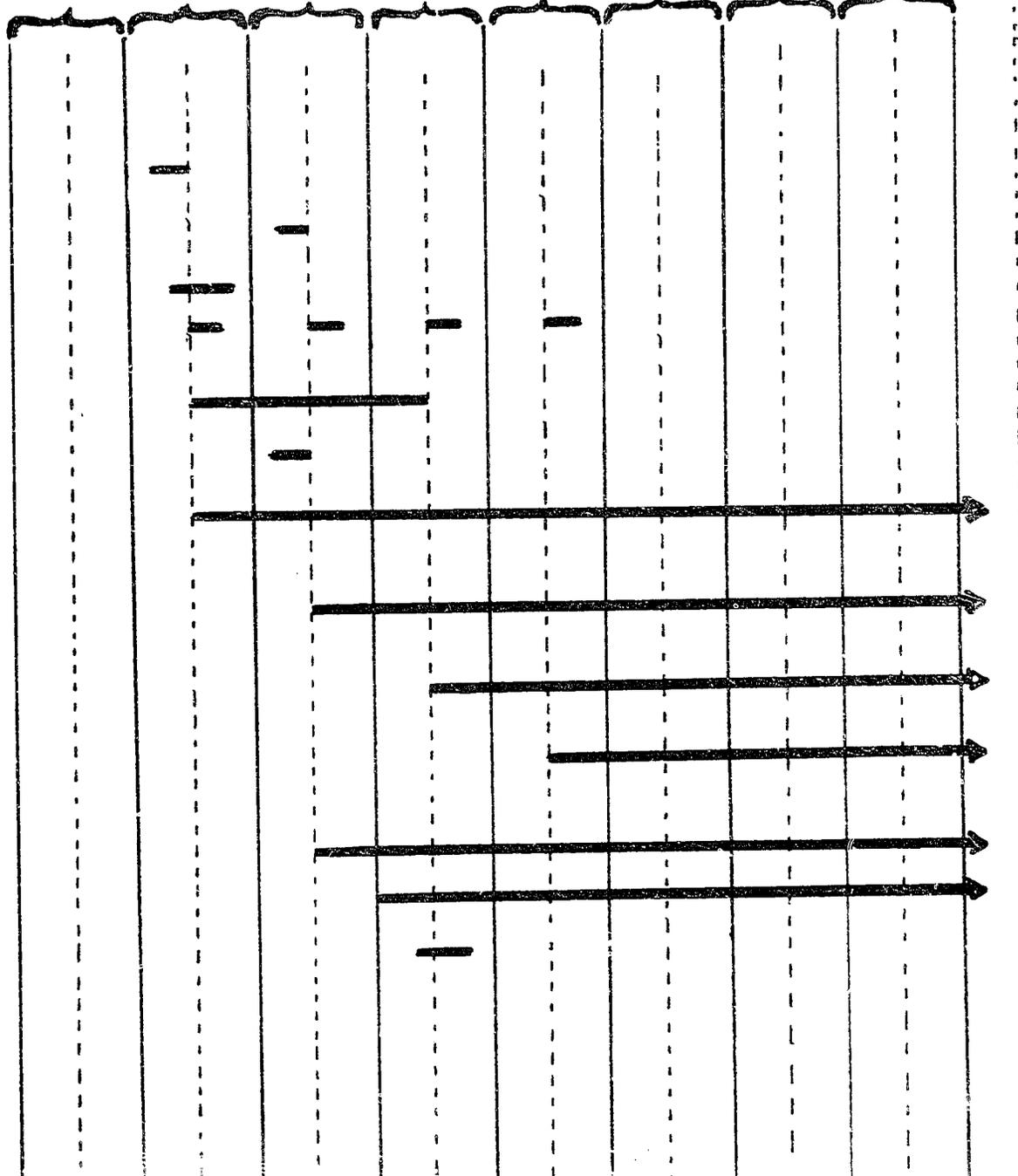
SCHOOL YEAR → 86 87 88 89 90 91 92 93 94

ACTIVITY

PROJECT YEAR → 1 2 3 4 5 6 7 8

B. Operational Activities

1. Baseline tests administered to national sample of 1st Graders
2. 1st Grade national sample post-test
3. Analysis of results; National achievement evaluation workshop
4. Teacher training in testing & evaluation
5. Develop items, field test, item analysis, Grades 2-6
6. Baseline tests administered to national sample; Grades 2-6
7. Voluntary utilization of student tests by Grade 1 teachers
8. Voluntary utilization of student tests by Grade 2 & 3 teachers
9. Voluntary utilization of student tests by grade 4 & 5 teachers
10. Voluntary utilization of student tests by grade 6 teachers
11. Post-tests administered to national sample, Grades 1-6
12. Analysis of national results, Grades 1-6
13. 2nd National Academic Evaluation Workshop



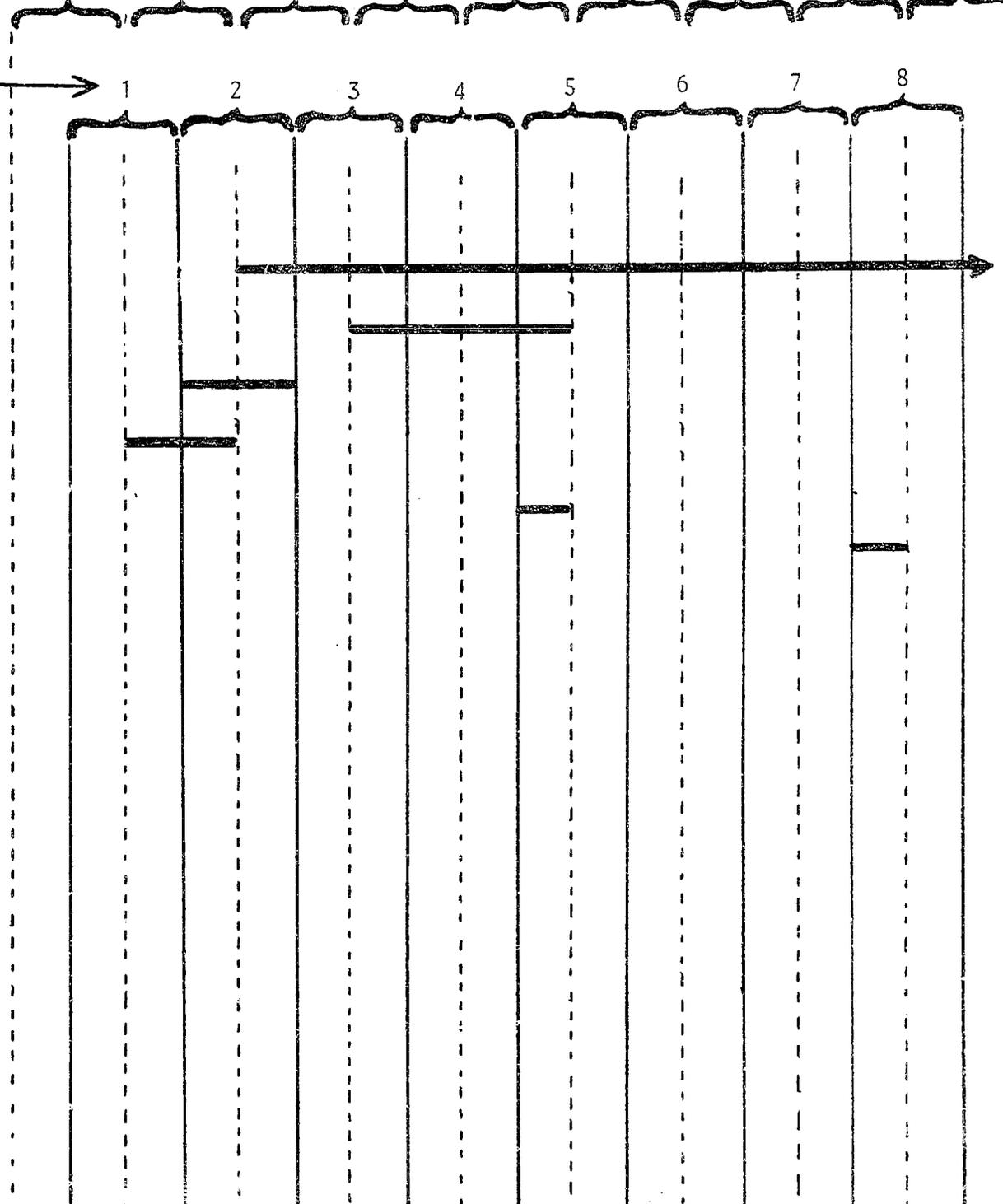
SCHOOL YEAR → 86 87 88 89 90 91 92 93 94

ACTIVITY

PROJECT YEAR → 1 2 3 4 5 6 7 8

C. Project Evaluation Activities

1. Academic Achievement testing program
2. Field surveys of dropout, repetition and academic failure
3. Study of economic cost of primary education inefficiency
4. Develop & install tracking system for critical project indicators
5. Major mid-term project evaluation
6. Final project evaluation



SCHOOL YEAR → 86 87 88 89 90 91 92 93 94

A C T I V I T Y

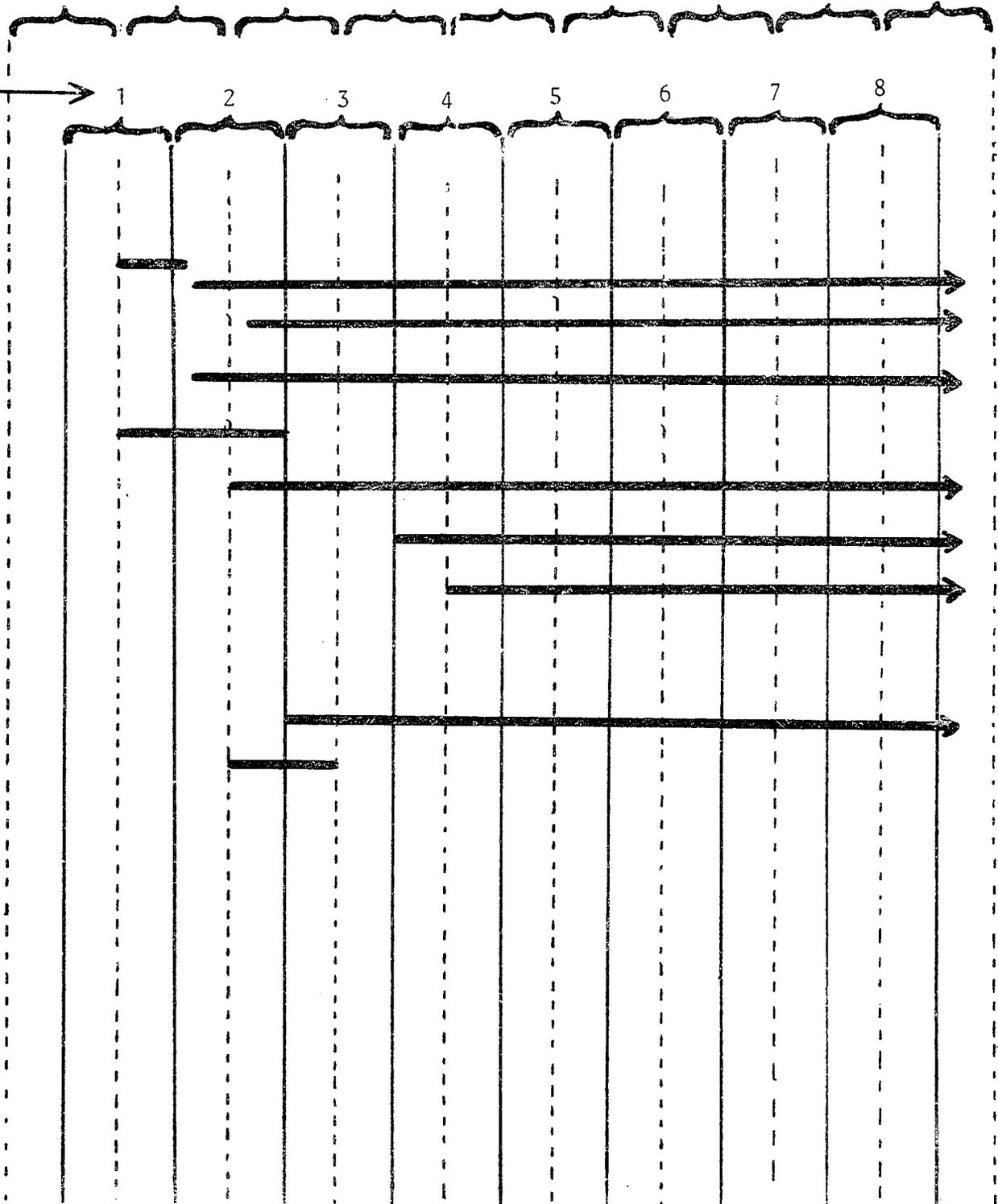
PROJECT YEAR → 1 2 3 4 5 6 7 8

E. Print Media Activities

1. Installation Printing Press
2. In-house printing of EL AGRICULTOR
3. Marketing of low-cost ed. printing service
4. Marketing commercial printing service
5. Adaptation of campesino library series
6. Publication & sale of campesino library
7. Publication & sale of farmer's almanac
8. Development & sale of series "fotonovela"

F. Other experimental media activities

1. Production & copying of cassette programs for local radio stations
2. Pilot evaluation of SONOESTUDIO system for literacy training



SCHOOL YEAR → 86 87 88 89 90 91 92 93 94

ACTIVITY

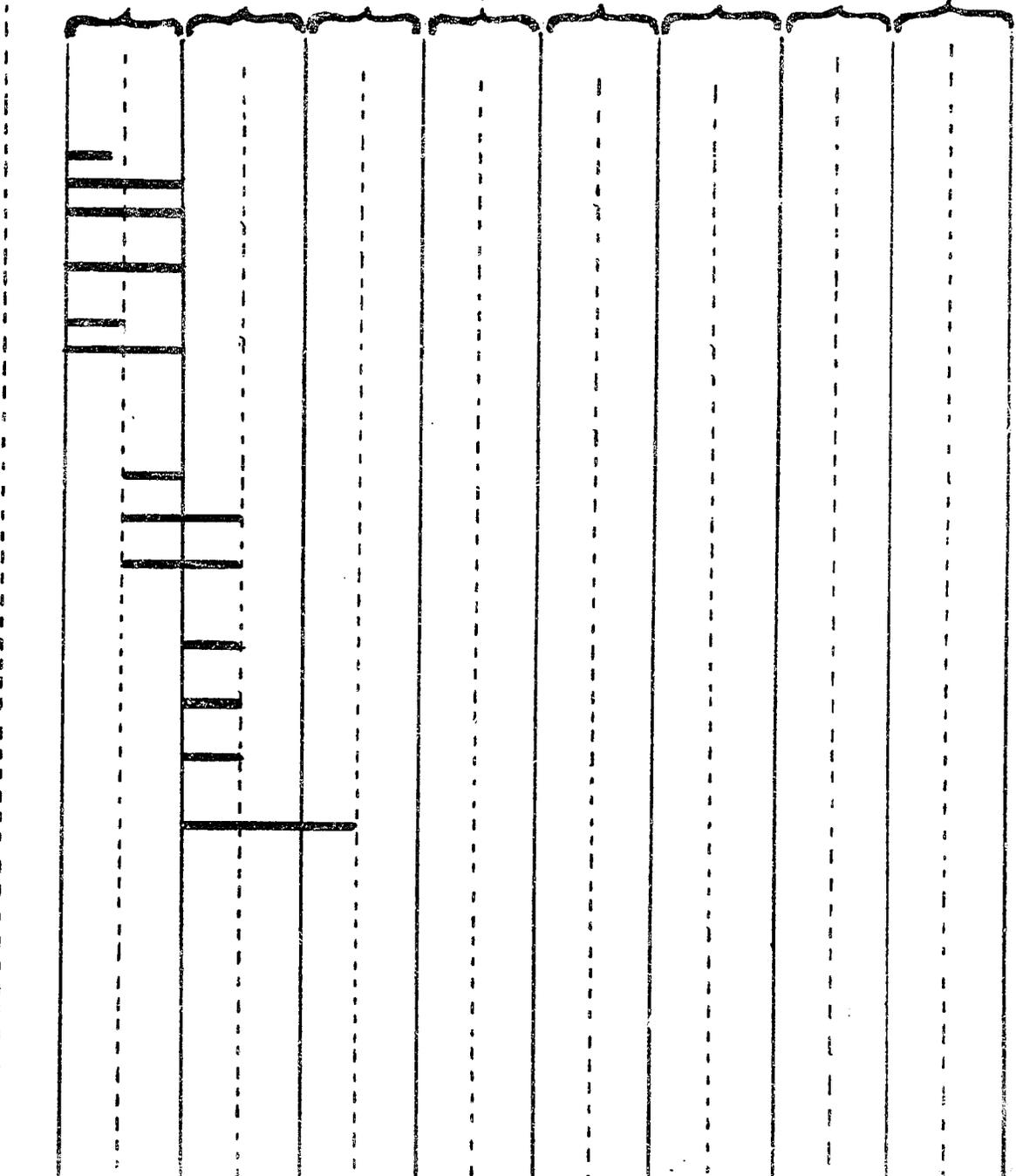
PROJECT YEAR → 1 2 3 4 5 6 7 8

A. Preparatory Activities

1. Technical Assistance Procured
2. Radio Team Recruited & Trained
3. Building designed & Constructed
4. Commodities
procured-production, equipment,
printing press, radios, etc.
5. Five year master plan developed
6. Develop marketing strategy

B. Design & Development Activities

1. Production & Taping of pilot programs
2. Field testing of pilot programs
3. Develop & test logistics network to reach schools with radios & newspapers
4. Write scripts & print support materials for 1st grade
5. Draft print materials for teacher training
6. Evaluate & strengthen production staff
7. Mass Media Promotion - 1st Grade Service



SCHOOL YEAR → 86 87 88 89 90 91 92 93 94

ACTIVITY

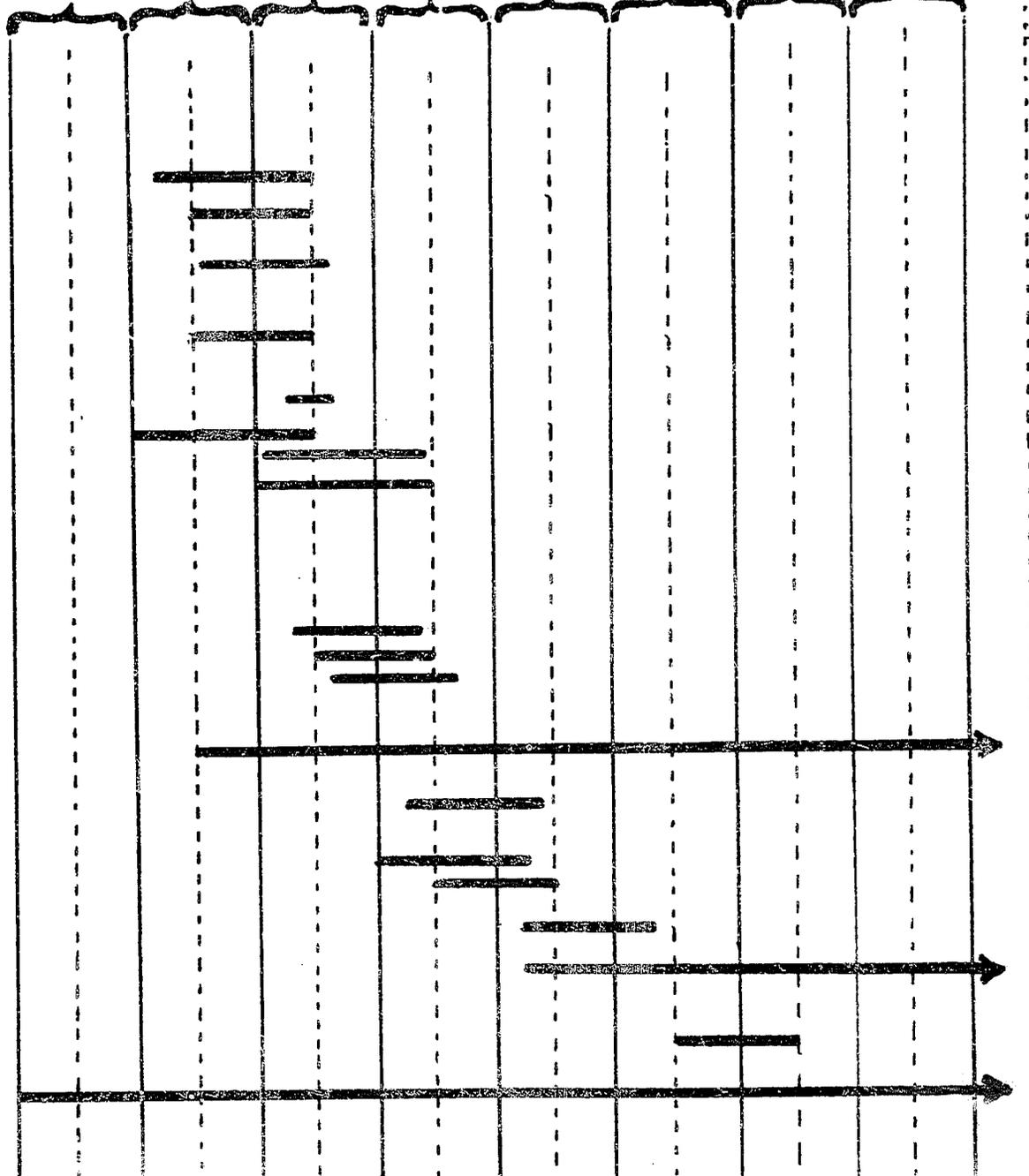
PROJECT YEAR → 1 2 3 4 5 6 7 8

C. Initial Production & Evaluation

1. Production 1st Grade Programs
2. Transmission & field evaluation 1st Grade Programs
3. Review, revise, retape 1st Grade Programs
4. Print & distribute newspaper to participating first grade teachers
5. Evaluate 1st Grade services
6. Master Plan for Grades 2-6
7. Write scripts for Grade 2
8. Media Promotional Campaign, Grade 2 service

D. Operational Activities

1. Production, Grade 2 Programs
2. Transmission, Grade 2 Programs
3. Evaluation, retaping, Grade 2 Programs
4. Production, distribution of newspaper for school
5. Scripting, production, Grades 3-4
6. Media Promotion, Grades 1-4
7. Transmission, Grades 3-4
8. Scripting, production, Grades 5-6
9. Media Promotion, all Grades
10. Transmission, Grades 5-6
11. Overall evaluation, interactive radio
12. EL AGRICULTOR - build circulation & revenue base



ANNEX H

TEXTBOOK COMPONENT
SUMMARY BUDGET
PROJECT YEAR (\$000)

	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	TOTAL
BOOK PRINTING/DISTRIBUTION		2418	1771	2493	1609				8291
LOCAL SALARIES	400	400	400	400	313.5	142.5	120.5	120.5	2297
TECHNICAL ASSISTANCE	24	24	24	24	24				120
TRAINING	24	18	18	18	6				84
COMMODITIES	162	70	70	60	20				382
TOTAL	610	2930	2283	2995	1972.5	142.5	120.5	120.5	11174

TEXTBOOKS: PHASE I
 TARGET COVERAGE 1991
 (4 books/student-teacher @ \$2/book)

GRADE		1991 CATEGORY SCL. POP.	NO. OF BOOKS	COST
FIRST	STUDENTS	294000	1176000	2352000
	TEACHERS	8205	32820	65640
	SUBTOTAL	302205	1208820	2417640
SECOND	STUDENTS	214000	856000	1712000
	TEACHERS	7346	29384	58768
	SUBTOTAL	221346	885384	1770768
THIRD	STUDENTS	167000	668000	1336000
	TEACHERS	7261	29044	58088
	SUBTOTAL	174261	697044	1394088
FOURTH	STUDENTS	131000	524000	1048000
	TEACHERS	6362	25448	50896
	SUBTOTAL	137362	549448	1098896
FIFTH	STUDENTS	100000	400000	800000
	TEACHERS	5376	21504	43008
	SUBTOTAL	105376	421504	843008
SIXTH	STUDENTS	91000	364000	728000
	TEACHERS	4742	18968	37936
	SUBTOTAL	95742	382968	765936
GRAND TOTALS	STUDENTS	997000	3988000	7976000
	TEACHERS	39292	157168	314336
	TOTALS	1036292	4145168	8290336

TEXTBOOK COMPONENT
 TA, TRAINING, COMMODITIES
 (\$000)

	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	TOTAL
TECHNICAL ASSISTANCE									
- Short-Term TA/Asistencia Corto Plazo	24	24	24	24	24				120
TOTAL	24	24	24	24	24	0	0	0	120
TRAININGS									
- Observation Tours/Viajes Observacionales	12	6	6	6	6				36
- Technical Workshops/Seminarios Tecnicos	12	12	12	12					48
TOTAL	24	18	18	18	6	0	0	0	84
COMMODITIES									
- Vehicles (2)/Vehiculos	32								32
- Computers, Word Proc (4)/Computadores	20								20
- Office Furniture/Equip/Mobiliaric-Equipo	50	10	10						70
- Operating Expenses/Others/Gastos	60	60	60	60	20				260
TOTAL	162	70	70	60	20	0	0	0	382

TEXTBOOK COMPONENT: LOCAL SALARIES
 COMPONENTE DE LIBROS: SUELDOS LOCALES
 (\$000)

	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	TOTAL
Component Administrator	12	12	12	12	12	12	12	12	96
Curriculum Content Spcl (4)/Esp. de Curriculum	44	44	44	44	22	22			220
Authors (16)/Autores	176	176	176	176	176	44	44	44	1012
--Teachers (12)/Maestros									0
--Curriculum Experts (4)/Expertos de Curriculum									0
Primary Ed. Spcl (1)/Esp. Educacion Primaria	10	10	10	10	10				50
Textbooks Design Spcl (1)/Esp. Diseno de Libros de	10	10	10	10	10				50
Evaluation Advisors/Asesores en Evaluacion	20	20	20	20	10	10	10	10	120
Field Observers/Observadores de Campo	44	44	44	44	5.5	5.5	5.5	5.5	198
Illustrator/Artist/Ilustrador-Artista	16	16	16	16	8	8	8	8	96
Layout Specialist/Esp. Diseno de Documentacion	16	16	16	16	8	8	8	8	96
Education Psychologist/Psicologo en Educacion	10	10	10	10	10				50
Secretaries (5)/Secretarias	15	15	15	15	15	6	6	6	93
Clerk/Conserje	3	3	3	3	3	3	3	3	24
Administrative Assistant/Asistente Administrativo	5	5	5	5	5	5	5	5	40
Warehouse Staff/Personal de Bodega	8	8	8	8	8	8	8	8	64
Inventory Programmer/Programador de Inventarios	7	7	7	7	7	7	7	7	56
Drivers/Conductores	4	4	4	4	4	4	4	4	32
TOTAL	400	400	400	400	313.5	142.5	120.5	120.5	2297

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TRAINING SUMMARY/RESUMEN CAPACITACION
(0000)

DESCRIPTION/DESCRIPCION	1	2	3	4	5	6	7	8	TOTAL
I. SALARIES/SALARIOS	400.0	400.0	400.0	390.0	390.0	390.0	390.0	0.0	2,760.0
II. TECHNICAL ASSISTANCE/ASISTENCIA TECNICA	204.0	204.0	54.0	54.0	54.0	24.0	0.0	0.0	594.0
III. OPERATING EXPENSES/COSTOS DE OPERACION	38.0	190.8	190.8	191.8	191.8	80.8	86.8	0.0	970.7
IV. GOODS AND SERVICES/BIENES Y SERVICIOS	181.5	276.5	191.5	51.5	63.0	63.0	43.0	0.0	870.0
V. TRAINING/CAPACITACION	105.8	605.8	735.8	735.8	737.9	165.0	158.0	0.0	3,243.8
TOTALS	929.3	1,677.0	1,572.0	1,423.1	1,436.6	722.8	677.8	0.0	8,438.5

TECHNICAL ASSISTANCE/ASISTENCIA TECNICA
(\$000)

DESCRIPTION/DESCRIPCION	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	TOTAL
Long Term Advisor/Asesor de Largo Plazo	150.0	150.0							300.0
Short-term Assistance (2 persons/months per year)/ Asistencia a Corto Plazo (2 meses/hombre por ano)	24.0	24.0	24.0	24.0	24.0	24.0	0.0	0.0	144.0
60 Persons/Months National Counterpart Technics/ 60 Meses/Hombre Contraparte Tecnicos Nacional	30.0	30.0	30.0	30.0	30.0	0.0	0.0	0.0	150.0
TOTAL	204.0	204.0	54.0	54.0	54.0	24.0	0.0	0.0	594.0

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DESCRIPTION/DESCRIPCION	TRAINING/CAPACITACION (\$000)								TOTAL
	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	
Observational Trips/Viajes Observacionales	20.0	20.0							40.0
Training for 30 Updaters (3 wks. of training/yr. (Capacitacion de 30 Actualizadores (3 semanas de capacitacion por ano))	5.8	5.8	5.8	5.8	7.8	9.0	0.0	0.0	30.8
Training of 300 supervisors and/or directors and/or leading teachers (3 wks. of training per year at TTC) (Capacitacion de 300 supervisores y/o directores y/o maestros lideres (3 semanas de capacitacion por ano en el CAM))	80.0	80.0	80.0	80.0	80.0	35.0	35.0	0.0	470.0
Training of 6000 teachers per year (2 wks. of training per year) (Capacitacion de 6000 maestros por ano - dos semanas de capacitacion al ano)	0.0	500.0	500.0	500.0	500.0	0.0	0.0	0.0	2,000.0
Scientific-Methodological Training by Distance of 4000 teacher per year (Capacitacion cientifica-metodologica a distancia de 4000 maestros por ano)	0.0	0.0	150.0	150.0	150.0	130.0	123.0	0.0	703.0
TOTAL	105.8	605.8	735.8	735.8	737.8	165.0	158.0	0.0	3,243.8

GOODS AND SERVICES/BIENES Y SERVICIOS
(\$000)

DESCRIPTION/DESCRIPCION	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	TOTAL
Printing Materials (Paper, Ink, Staples, Ribbon) (Materiales para Impresion (Papel, Tinta, Grapas, Cintas))	15.0	25.0	25.0	25.0	25.0	20.0	15.0	0.0	150.0
Didactic Materials for training (Material didactico para capacitacion)	5.0	10.0	10.0	10.0	10.0	7.5	7.5	0.0	60.0
Equipment for Sciences Laboratory (Equipo para Laboratorio de Ciencias)	20.0	25.0	5.0	0.0	0.0	10.0	10.0	0.0	70.0
Equipment for Workshops/Equipo para Talleres	20.0	25.0	5.0	0.0	10.0	10.0	0.0	0.0	70.0
Materials for Laboratories and Workshops (Equipo para Laboratorios y Talleres)	1.0	1.0	1.0	1.0	2.5	2.5	2.5	0.0	11.5
Office Materials (Materiales de Oficina)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	3.5
Complement to Printing Equipment (Complemento de equipo de impresion)	0.0	30.0	30.0	0.0	0.0	0.0	0.0	0.0	60.0
Furniture and General Equipment (Mobiliario y Equipo)	100.0	100.0	100.0						300.0
Books for Library (Libros para Biblioteca)	15.0	50.0	5.0	5.0	5.0	2.5	2.5	0.0	85.0
Supplies (Suministros)	5.0	10.0	10.0	10.0	10.0	10.0	5.0	0.0	60.0
TOTAL	181.5	276.5	191.5	51.5	63.0	63.0	43.0	0.0	870.0

OPERATING EXPENSES/COSTOS DE OPERACION
(#000)

DESCRIPTION/DESCRIPCION	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	TOTAL
Perdies for 30 Updaters for 21 days annually for training of supervisors (L.15.00/day) (Viaticos para 30 Actualizadores por 21 dias al ano para capacitacion de supervisores (L.15.00/dia))	15.8	15.6	15.8	15.8	15.8	0.0	0.0	0.0	78.8
Perdies for 15 days for 300 supervisors and/or directors for training of teachers (L.40 per day) (Viaticos por 15 dias para 300 supervisores y/o directores para la capacitacion de maestros (L.40 por dia))	0.0	90.0	90.0	90.0	90.0	0.0	0.0	0.0	360.0
Perdies for supervising trips and updating 700 Days/Persons per year (L.50/day) (Viaticos para giras de supervision y actualizacion 700 Dias/Hombres por ano (L50/dia))	0.0	17.5	17.5	17.5	17.5	17.5	20.0	0.0	107.5
Perdies for training of leading teachers 500 Days/Persons per year (L40/day) (Viaticos para capacitacion de maestros lideres 500 Dias/Hombres por ano (L40/dia))	0.0	10.0	10.0	10.0	10.0	10.0	10.0	0.0	60.0
Perdies for Drivers (Viaticos para Motoristas)	1.5	2.5	2.5	2.5	2.5	2.5	2.3	0.0	16.5
Transportation for teachers to and from training places (Transporte de maestros hacia y desde los lugares de capacitacion)	3.5	7.5	7.5	7.5	7.5	5.0	5.0	0.0	43.5
Gas and Lubricants (Combustible y Lubricantes)	5.0	15.0	15.0	15.0	15.0	15.0	15.0	0.0	95.0
Maintenance and Repairment of Vehicles (Mantenimiento y Reparacion de Vehiculos)	0.0	10.0	10.0	12.5	12.5	12.5	15.0	0.0	72.5
Equipment Maintenance (Mantenimiento de Equipo)	0.0	2.5	2.5	3.5	3.5	3.5	4.5	0.0	20.0
Electric Energy (Energia Electric)	1.0	1.3	1.3	1.3	1.3	1.0	1.0	0.0	8.0
Water (Agua)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	3.5
Telephone (Telefono)	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	5.3
Maintenance of TTC (Mantenimiento del CAM)	5.0	5.0	5.0	7.5	7.5	7.5	7.5	0.0	45.0
Contingencies (Imprevistos)	5.0	12.5	12.5	7.5	7.5	5.0	5.0	0.0	55.0
TOTALS	38.0	190.8	190.8	191.8	191.8	80.8	86.8	0.0	970.5

SALARIES/SALARIOS

NO.	PUESTO	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	TOTAL
1	DIRECTOR/DIRECTOR	13.0	13.0	13.0	13.0	16.3	16.3	16.3	0.0	100.8
1	ACADEMIC SUB-DIRECTOR/SUBDIRECTOR ACADENICO	11.1	11.1	11.1	11.1	13.7	13.7	13.7	0.0	85.2
1	ADM. SUB-DIRECTOR/SUBDIRECTOR ADMINISTRATIVO	11.1	11.1	11.1	11.1	13.7	13.7	13.7	0.0	85.2
1	GENERAL SECRETARY/SECRETARIO GENERAL	10.4	10.4	10.4	10.4	13.0	13.0	13.0	0.0	80.6
4	TYPIST SECRETARIES/SECRETARIAS ESCRIBIENTES	7.8	7.8	7.8	7.8	10.4	10.4	10.4	0.0	62.4
30	UPDATERS/ACTUALIZADORES	292.5	292.5	292.5	292.5	351.0	351.0	351.0	0.0	2,223.0
4	DRIVERS/MOTORIZAS	7.8	7.8	7.8	7.8	10.4	10.4	10.4	0.0	62.4
2	MESSENGERS/COMSERJES	2.6	2.6	2.6	2.6	3.9	3.9	3.9	0.0	22.1
9	WATCHMEN/VIGILANTES	17.6	17.6	17.6	17.6	23.4	23.4	23.4	0.0	140.4
3	PRINTING OPERATOR/OPERADOR DE IMP. RENTA	5.9	5.9	5.9	5.9	9.8	9.8	9.8	0.0	52.7
2	SORTER/COMPAGINADORES	2.6	2.6	2.6	2.6	3.9	3.9	3.9	0.0	22.1
5	CLEANING LADY/ASEADORAS	6.5	6.5	6.5	6.5	9.8	9.8	9.8	0.0	55.3
5	COOKS/COCINEROS	9.8	9.8	9.8	9.8	13.0	13.0	13.0	0.0	78.0
5	WASHING LADY/LAVANDERAS	6.5	6.5	6.5	6.5	9.8	9.8	9.8	0.0	55.3
4	WAITRESS/MESERAS	5.2	5.2	5.2	5.2	7.8	7.8	7.8	0.0	44.2
2	MAINTENANCE/MAINTENIMIENTO	3.3	3.3	3.3	3.3	5.9	5.9	5.9	0.0	30.6
2	WAREHOUSE WORKER/BODEGUERO	3.9	3.9	3.9	3.9	5.2	5.2	5.2	0.0	31.2
1	ADMINISTRATOR/ADMINISTRADOR	6.5	6.5	6.5	6.5	8.5	8.5	8.5	0.0	51.4
1	ACCOUNTANT/CONTADOR	5.2	5.2	5.2	5.2	6.5	6.5	6.5	0.0	40.3
1	LIBRARIAN/BIBLIOTECARIO	5.2	5.2	5.2	5.2	6.5	6.5	6.5	0.0	40.3
2	WORKSHOP OPERATORS/OPERADORES DE TALLERES	6.5	6.5	6.5	6.5	9.1	9.1	9.1	0.0	53.3
2	AUDIOVISUAL OPERATOR/OPERADOR AUDIOVISUAL	6.5	6.5	6.5	6.5	9.1	9.1	9.1	0.0	53.3
2	LABORATORY OPERATOR/OPERADOR DE LABORATORIO	6.5	6.5	6.5	6.5	9.1	9.1	9.1	0.0	53.3
	PERSONNEL PER HR./PERSONAL POR HORA	10.0	15.0	15.0	15.0	15.0	10.0	10.0	0.0	90.0
	TOTAL	463.7	468.7	468.7	468.7	584.4	579.4	579.4	0.0	3,613.0

MANAGEMENT INFORMATION SYSTEM
EL SISTEMA DE INFORMATICA
(\$000)

	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	TOTAL
I. COMMODITIES/ARTICULOS									
- Hardware/Ferreteria	100.0	50.0	50.0	50.0					250.0
- Software/Programas	70.0								70.0
- Furniture/Mobiliario	10.0	15.0							25.0
TOTAL	180.0	65.0	50.0	50.0	0.0				345.0
II. TECHNICAL ASSISTANCE/ASISTENCIA TECNICA									
- Long Term, 2 years	50.0	200.0	150.0						400.0
- Short Term, 6 mo.	24.0	24.0	24.0						72.0
TOTAL	74.0	224.0	174.0	0.0	0.0				472.0
III. LOCAL SALARIES/SALARIOS LOCALES									
- Researchers (8) - 1,100 Lps./Mo. (Investigadores (8) - 1,100 Lps./mes)	57.0	57.0	57.0	40.0	32.0				243.0
- Statisticians (10) - 900 Lps./Mo. (Estadisticos (10) - 900 Lps./Mes)	58.0	58.0	58.0	40.0	40.0				254.0
- Programmers (5) - 1,000 Lps./Mo. (Programadores (5) - 1,000 Lps./Mes)	33.0	33.0	33.0	25.0	25.0				149.0
- Analyst (1) - 1,800 Lps./Mo. (Analista (1) - 1,800 Lps./Mes)	12.0	12.0	12.0	12.0	12.0				60.0
- Coordinator (1) - 2,300 Lps./Mo. (Coordinador (1) - 2,300 Lps./Mes)	15.0	15.0	15.0	15.0	15.0				75.0
- Secretaries (2) - 800 Lps./Mo. (Secretarias (2) - 800 Lps./Mes)	10.0	10.0	10.0	10.0	10.0				50.0
TOTAL	185.0	185.0	185.0	142.0	134.0				831.0
IV. TRAINING/ENTRENAMIENTO									
- In-Country Training/ (Capacitacion dentro del Pais)	10.0	20.0	20.0	5.0	5.0				60.0
- Observation Tours, U.S. Courses (Tours de Observacion, Cursos en U.S.)	10.0	10.0	10.0	10.0	10.0				50.0
TOTAL	20.0	30.0	30.0	15.0	15.0				110.0
V. OPERATING EXPENSES/GASTOS DE OPERACION									
- Computer Maintenance/ (Mantenimiento de la Computadora)	40.0	40.0	40.0	40.0	40.0				200.0
- Materials, Supplies/Materiales, Suministros	15.0	15.0	15.0	15.0	15.0				75.0
- Transportation and Per Diem for Field Research (Transporte y Viaticos para Investigadores de Campo)	10.0	10.0	10.0	10.0	10.0				50.0
TOTAL	65.0	65.0	65.0	65.0	65.0				325.0
GRAND TOTALS	524.0	569.0	504.0	272.0	214.0	0.0	0.0	0.0	2,083.0

LEARNING OBJECTIVES/EVALUATION COMPONENT
(0000)

POSITION	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	TOTAL
I. LOCAL SALARIES/SALARIOS LOCALES									
- Coordinator/Coordinador	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	104.0
- Testing & Measurement Staff (8)/ (Personal de Analisis y Medicion (8))	88.0	88.0	88.0	88.0	88.0	88.0	44.0	44.0	616.0
- Computer Technician (1)/ (Tecnico en Computacion (1))	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	64.0
- Statistician/Estadístico	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	96.0
- Key punch Operators/Operadores de Tarjetas	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	48.0
- Secretary/Secretaria	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	16.0
- Driver/Motorista	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	16.0
TOTAL	131.0	131.0	131.0	131.0	131.0	131.0	87.0	87.0	960.0
II. TECHNICAL ASSISTANCE/ASISTENCIA TECNICA									
- Testing/Evaluation Specialist (Analisis/Medicion Especialista)	150.0	75.0							225.0
- Short-Term Technical Specialists (Especialistas Tecnicos a Corto Plazo)	24.0	24.0	24.0	24.0	24.0				120.0
- Local Training/Entrenamiento Local	5.0	5.0	5.0						15.0
- Observational Travel/Viajes Observacionales	10.0	10.0							20.0
TOTAL	189.0	114.0	29.0	24.0	24.0				388.0
III. COMMODITIES/ARTICULOS									
- Office Furniture, Supplies (Mobiliario de Oficina, Suministros)	10.0	30.0	10.0						50.0
- Word Processor/Microcomputers (2) peripherals, software (Procesadora de Datos/Microcomputadoras (2) perifericos, programas)	10.0	20.0							30.0
- Vehicles (6 x \$15,000)/Vehiculos (6 x \$15,000)	60.0					30.0			90.0
- Optical Scanner/Registro Optico					9.0				9.0
TOTAL	80.0	50.0	10.0	0.0	9.0	30.0	0.0	0.0	179.0
IV. OPERATING EXPENSES/GASTOS DE OPERACION									
- Office Rental/Arrendamiento de Oficina	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	80.0
- Vehicle Operation & Maintenance/ (Operacion de Vehiculos y Mantenimiento)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	40.0
- Per diem for Field Activities/ (Viaticos para Actividades de Campo)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	24.0
- Learning Objective Workshops (24 x \$5,000) (Talleres de Aprendizaje Objetivo (24 x \$5,000))	60.0	40.0	20.0						120.0
- Supplies, Paper, Printing Services/ (Suministros, Papel, Servicios de Impresion)	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	120.0
- Observation Trips/Viajes de Observacion	10.0	5.0	5.0	5.0					25.0
- Evaluation Workshops/Talleres de Evaluacion	10.0	10.0	10.0	10.0					40.0

PROJECT MANAGEMENT
 MANEJO DEL PROYECTO
 (\$000)

	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	TOTAL
Project Liaison/Oficial de Enlace	35	35	35	35	35	35	35	35	280
Technical Assistant/Asesor Tecnico	25	25	25	25	25	25	25	25	200
Logistics Technician/Tecnico de Logistic	20	20	20	20	20				160
Engineer/Ingeniero	30	30	30	15					105
MBO Sessions/Sesiones de MBO		3	3	3	3	3			15
Audits/Auditaje		10	10	10	10	10	10	10	70
TOTAL	110	123	123	108	93	73	70	70	770

EDUCATIONAL MEDIA COMPONENT SUMMARY
 RESUMEN DEL COMPONENTE DE LOS MEDIOS EDUCACIONALES
 (\$000)

	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	TOTAL
COMMODITIES/MOBILIARIO-EQUIPO	1748	1670	710	660	160	60	60	60	5128
TA-TRAINING/ASISTENCIA TEC-ENTRENAMIENTO	427	547	359	76	71	71	71	71	1693
LOCAL SALARIES/SUELDOS LOCALES	422	422	422	422	245	245	183	183	2544
EXPERIMENTAL MEDIA/MEDIOS EXPERIMENTALES	50	50	50	100	100	100	50	50	550
TOTAL	2647	2689	1541	1258	576	476	364	364	9915

EDUCATIONAL MEDIAS--RADIO/PRINT LOCAL STAFF SALARIES
 MEDIOS EDPROYECT YEAR-RADIO/PRENSA ESCRITA SUELDOS
 PROJECT YEAR/ANO DEL PROYECTO (\$000)

POSITION	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	TOTAL
ADMINISTRATOR (1)	13	13	13	13	17	17	17	17	120
TEAM COORDINATORS (2)	22	22	22	22	27	27	27	27	196
CONTENT SPECIALISTS (4)	44	44	44	44	27	27	27	27	284
FIELD OBSERVERS (2)	11	11	11	11	13	13	13	13	96
SCRIPT WRITERS (4)	44	44	44	44	52	52	26	26	332
RADIO PRODUCER (1)	11	11	11	11	13	13	13	13	96
DIRECTOR (1)	11	11	11	11	13	13	13	13	96
EDITOR (1)	4	4	4	4	5	5	5	5	36
MUSICIANS (4) PART-TIME	8	8	8	8	12	12	6	6	68
ADULT ACTORS (4) PART-TIME	28	28	28	28	32	32	16	16	208
CHILD ACTORS (4) PART-TIME	12	12	12	12	16	16	8	8	96
TYPISTS (2)	4	4	4	4	6	6	3	3	34
DRIVERS (2)	4	4	4	4	6	6	3	3	34
ELEC EQUIP MAIN COORDINATOR	6	6	6	6	6	6	6	6	48
OPERATING EXP-NOSS RADIO	200	200	200	200					800
TOTAL	422	422	422	422	245	245	183	183	2544

EDUCATIONAL MEDIAS—TA AND TRAINING
 MEDIOS EDUCACIONALES—ASISTENCIA TECNICA/ENTRENAMIENTO
 (\$000)

INPUT	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	TOTAL	TIME (PER/MO)	RATE
LONG-TERM TA											
instructional design/ and scriptwriting specialist	75	150	75						300	36	12.5/mo
radio production, directing, editing	75	75	75						225	24	12.5/mo
radio equipment specialist	37.5	75	37.5						150	24	12.5/mo
printing press speci/trainer	37.5	75	37.5						150	24	12.5/mo
SHORT-TERM TA	72	72	72	36	36	36	36	36	396	39	12.0/mo
MISCELLANEOUS TRAINING											
print equipment o/m	30	30	12						85		
observational	30	20	10	5	5	5	5	5	85		
special courses	40	30	20	15	10	10	10	10	145		
in country workshops	30	20	20	20	20	20	20	20	170		
TOTAL	427	547	359	76	71	71	71	71	1693		

ANNEX I

Local Cost Financing Honduran Procurement Justification
Textbooks and Teacher Guides

Reasonableness of Costs

A comparison of the costs of procuring textbooks from local Honduran sources and U.S. sources was carried out with the help of the Academy for Educational Development (AED), under an AED field support contract with the S&T Bureau. AED contacted several textbook publishers in the United States to determine U.S. cost estimates. The USAID/Honduras textbook consultant obtained cost estimates from several sources in the Honduran private sector, and because of uncertainties concerning the local cost estimates, the Mission HRD/E Education Officer independently verified the local cost estimates.

Four representative textbook printing runs from among the project total of 62 runs were selected for the purposes of this cost comparison. The sample of print runs was selected to represent different size books and different size print runs, the major factors that influence costs. Costs from U.S. sources included estimates of international shipping, insurance, port charges, local shipping, storage and distribution. Honduran source costs include only local shipping, storage, and distribution. All suppliers contacted, both U.S. and Honduran, emphasized that these are rough estimates, and that actual bid costs could be considerably different. This point is further discussed below. Estimates do not include the costs of contract negotiation and monitoring, which would be somewhat higher in the case of U.S. procurement.

The results of the cost comparison are the following:

<u>Dimensions of Book</u>	<u>Number to Print</u>	<u>Pages per Book</u>	<u>U.S. Unit Cost</u>	<u>Honduras Unit Cost</u>
6 1/4 x 8	85,000	382	\$3.10	\$3.07
8 1/2 x 11	300,000	88	\$1.21	\$1.26
8 1/2 x 11	110,000	344	\$4.00	\$4.81
6 1/4 x 8	300,000	58	\$.48	\$.64

While printing costs alone are somewhat lower in the United States, it appears that the cost of textbooks delivered to schools in Honduras from the two sources is not substantially different. This is because the additional costs of international shipping, port fees, and insurance must be added to the cost of U.S.-produced books. On the average, the cost differential in this analysis is 10% in favor of U.S. books. This differential is within a reasonable margin of error for these estimates, leading to the conclusion that the cost advantage of U.S. procurement is not substantial enough to warrant procurement from U.S. sources.

This conclusion is supported by two additional factors. First, the largest Honduran private sector printing firm is in the final stages of installing modern, high-speed U.S. printing presses which will reduce printing costs by approximately 40%. The costs for Honduran printing used in the above analysis were based on the existing installed capacity. As a result, the above cost estimates for Honduran production

can be regarded as very conservative. The new capacity, which will be in place before project procurement begins, should make local procurement significantly cheaper than U.S. procurement.

A second consideration is the fact that a secondary objective of the project is to provide an economic stimulus to the Honduran private sector, which is suffering from a prolonged economic recession and a chronic shortage of foreign exchange. Local procurement will support overall U.S. objectives of promoting private sector economic growth and generating employment. Even if U.S. procurement were 10% to 15% higher, this corollary economic objective of the project would justify the local procurement approach proposed in this project paper.

In conclusion, a determination is made that the costs of the textbook production component of this project in the Honduran market are reasonable, and procurement from local sources is approved.

Local Cost Financing Determination

I, Anthony J. Cauterucci, the Principle Officer of the Agency for International Development in Honduras, have determined in accordance with the guidance set forth in Handbook 1B, Chapter 18, that local suppliers have the capability to produce the textbooks in the required amounts, that the cost of such services from local suppliers is comparable with the provision of similar services from U.S. suppliers and that the procurement of the required services locally will avoid time delays in project implementation.

Anthony J. Cauterucci
Director, USAID/Honduras

Date

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ANNEX J

Lessons Learned from the Rural Primary Education Project (522-0167)

The AID Rural Primary Education has operated in Honduras for six years. Both the formal evaluation of the project and the accumulated experience with implementation have helped orient the design of the Primary Education Efficiency Project. Although references are made to relevant experiences throughout this paper, this section summarizes some of the lessons from the previous project that directly influenced the approach that has been designed for the new project.

a. Centralized MOE Project Administration. The Rural Primary Education project used a single coordinator to manage the activities of the different MOE units involved with different project components. This overall project coordinator proved to be a bottleneck and a power center that often impeded implementation rather than facilitating it. The new project will delegate most responsibility for MOE implementation to the different functional units that coincide with project activities. The overall coordinator will not have project management or policymaking responsibilities but will be mainly a paperwork expediter for the different components.

b. In-service Teacher Training. The old project demonstrated on a pilot scale that in-service teacher training can be a powerful mechanism for promoting change in the educational system, even in the absence of other inputs. This impact, not well-documented in the education research literature, provided the basis for designing a major in-service teacher training component in the new project.

c. Construction Costs. The old project constructed thousands of excellent, sturdy classrooms, but the costs were high as a result of depending almost entirely on the Ministry's construction unit and on private construction contractors for supplies and labor. In an effort to reduce costs, the new project will look to a different, "self-help" model to take greater advantage of local labor and materials.

d. Implementation Units. The old project created separate implementation units for project-funded construction and maintenance. These units, while functioning efficiently for project purposes, have not strengthened the Ministry's permanent institutional capability to undertake activities on its own. The new project will try to absorb these separate units back into the structure of the Ministry, and will implement all project activities through existing units rather than creating new, independent implementation units. While this approach will probably impede expeditious achievement of project objectives in the short run, in the long run it will help improve the capability of the Ministry to institutionalize new services and run programs on its own.