

AGENCY FOR INTERNATIONAL DEVELOPMENT
PROJECT IDENTIFICATION DOCUMENT
FACESHEET (PID) ISN 68755

1. TRANSACTION CODE
A = Add
C = Change
D = Delete
Revision No.

DOCUMENT CODE
1

2. COUNTRY/ENTITY
ECUADOR

3. PROJECT NUMBER
518-0080 *Do Test Radio*

4. BUREAU/OFFICE
LAC A. Symbol B. Code
05

5. PROJECT TITLE (maximum 40 characters)
Radio Learning

6. ESTIMATED FY OF AUTHORIZATION/OBLIGATION/COMPLETION
A. Initial FY 910
B. Final FY 914
C. PACS 914

7. ESTIMATED COSTS (\$000 OR EQUIV. LENT. \$1 =)	
FUNDING SOURCE	LIFE OF PROJECT
A. AID	2,500
B. Other	
U.S.	2
C. Host Country	850
D. Other Donor(s)	
TOTAL	3,350

8. PROPOSED BUDGET AID FUNDS (\$000)							
A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. 1ST FY 90		E. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) EHR	600	636				2,500	
(2)							
(3)							
(4)							
TOTALS						2,500	

9. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)
640 634

11. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)
A. Code BR TECH

12. PROJECT PURPOSE (maximum 430 characters)

To improve the quality of basic education in rural areas through dissemination of locally-adapted interactive radio curricula in language and math in target provinces.

13. RESOURCES REQUIRED FOR PROJECT DEVELOPMENT
Staff: Mission Staff - 4 wks.
S&T/RLP - 12 wks.

Funds: PD&S - \$35,000 - \$50,000
OE \$5,000

ACTION:	DIR	D/D	RLA	ROO	EXO	CONT	PPD	OTD	ANN	PHD	RHDD	RP	MT	EM	WAM
							25								

14. ORIGINATING OFFICE CLEARANCE
Signature: Frank Almaguer
Title: Mission Director, USAID/Quito

15. DATE DOCUMENT RECEIVED BY AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION
Date Signed: 018/19/89

16. PROJECT DOCUMENT ACTION TAKEN
S = Suspended CA = Conditionally Approved
A = Approved DD = Decision Deferred
D = Disapproved

17. COMMENTS

18. ACTION APPROVED BY
Signature
Title

19. ACTION REFERENCE III-25
20. ACTION DATE

RADIO LEARNING

518-0080

PROJECT IDENTIFICATION DOCUMENT

Table of Contents

	<u>Page</u>
I. <u>PROGRAM FACTORS</u>	
A. Conformity with Government of Ecuador Strategy and Programs	1
B. Relationship to Mission Country and Sector Strategies and to Other Donor Programs	1
1. The CDSS and USAID/Ecuador's Education Sector Assessment	1
2. Other Donor	2
II. <u>PROJECT DESCRIPTION</u>	
A. Perceived Problem	4
B. Project Goal and Purpose	6
C. Expected Achievements/Accomplishments	7
D. Project Outline and Implementation Strategy	7
III. <u>FACTORS AFFECTING PROJECT SELECTION AND FURTHER DEVELOPMENT</u>	
A. Social Considerations	9
B. Institutional/Administrative Considerations	9
C. Financial and Economic Considerations	10
D. Relevant Experience with Similar Projects	10
E. Proposed Grantees and Implementing Agencies	11
F. AID Support Requirements and Capability	11
G. Estimated Costs and Methods of Financing	11
H. Design Strategy	12
I. Recommended Environmental Threshold Decision	14
J. Issues	15

ATTACHMENTS

- (A) Preliminary Logical Framework
- (B) Environmental Examination
- (C) PIO/T for Design Activities - Scope of Work

B

I. PROGRAM FACTORS

A. Conformity with Government of Ecuador Strategy and Programs

Ecuador is one of the countries in the LAC region with the largest percentage of total government expenditures in education. In 1970 23.2% was spent on this sector, while in 1984 this percentage rose to 33.3%. However, current estimates have this indicator falling off sharply to 19.6% (1988) as a result of the financial and economic crisis which began in the early 1980's. Even at this level, Ecuador's expenditures for education continue to be among the highest in the region. The Government of Ecuador's (GOE) commitment to the provision of educational services is further reflected by the gross primary school enrollment rate of 117% in 1987, again among the highest in the region, which demonstrates widespread access to basic education facilities.

While these indicators reflect a high level of commitment to the sector, they also give rise to concern. The drop in the absolute value of investment in education by over 10% in seven years and the over-enrollment of the total school-age cohort are paralleled by a lowering of overall performance on the system as a whole. Repetition rates have risen and it is currently estimated that over nine years of schooling are required for Ecuador to produce a sixth grade graduate. The substantial cost of this process is apparent.

In recognition of these trends, the Ministry of Education (MOE) has actively sought donor support for improvement in the quality and efficiency of basic education focusing on those sectors most affected by scarce resources, such as rural areas and one- and two-teacher schools. In response to the lowering of educational performance among low-income groups, the Borja government has repeatedly expressed its concern for improvement in the quality of education at this critical juncture of the country's development. Recently the Mission has received a letter from the Ministry of Education indicating the priority the GOE places on distance education in support of the improvement of educational quality.

In addition, the GOE Social Front Strategy has identified geographic areas of critical poverty in order to focus improvement of social services such as health, education, and employment. To target better the most needy beneficiaries in the present situation of dwindling public sector resources, they have drawn up a "poverty map" which reflects areas of high risk areas which are to be targeted in the project proposed herein. The National Development Plan which has been approved by the President places high priority on the use of distance education for all sectors, focusing specifically on underprivileged population groups.

B. Relationship to Mission Country and Sector Strategies and to Other Donor Programs

1. The CDSS and USAID/Ecuador's Education Sector Assessment

In recognition of the relationship between basic education levels and performance of other sectors, the Mission's recently-approved Country Development Strategy Statement (CDSS) for FY 1990-94 included improvement of

educational opportunities as one of the objectives of the country strategy of Ecuador. The CDSS proposes two specific targets in the CDSS timeframe in the effort to improve educational opportunities, namely, (1) to reduce the gap in the quality of basic education between rural and urban schools and (2) to enable more effective use of multilateral donor agency funding for distance education activities.

A PD&S-funded assessment of the education sector completed in October 1988 identified a series of major problem areas with regard to performance of the education system. The study found basic inefficiency in the system as indicated by high drop-out, repetition and over-age rates. Wastage was found to be characteristic of all schooling from primary through university levels. In addition, the assessment noted the lack of coherent policies for the system as a whole and a high level of politicization in the decision-making process. The lack of rational allocation of budgetary resources, random organization and anarchic administration were also cited in the report.

On the basis of the education assessment and preliminary findings of a PD&S-funded Radio Learning pilot activity in selected provinces in Ecuador, the Mission's General Development Office (GDO) elaborated a "Draft Strategic Framework for Human Resource Development" which recommended: a) a radio learning project to be developed on the basis of AID experience worldwide in distance education and the Mission's experience with the pilot activity; b) a program of research to fill information gaps regarding other donor activities, GOE interests in the sector, quality/efficiency constraints, and human resource outputs as they relate to the current job market, and c) policy dialogue with "clear benchmarks against constraints to measure performance and determine continuity or expansion." At a review meeting of the draft HRD strategy, questions were raised about the feasibility of focusing on a radio learning project to address the major constraints affecting the sector, especially in light of the Ministry of Education's poor record in implementing educational reforms previously recommended by other donors (e.g., UNESCO). Given the scope and depth of the problems affecting basic education in Ecuador, e.g., funding constraints, political sensitivity, information gaps, the Mission decided it was not prepared to posit a specific strategy for the sector. Nonetheless, as stated in the CDSS, which drew upon the sector assessment and the draft HRD strategy, the Mission recognized that an opportunity did exist to make use of AID's experience in basic education to introduce low-cost, efficient technologies to address a critical need and proposed that assistance in such areas as distance education be utilized to facilitate greater access to the decision-making process within the MOE.

Based on the strategic framework proposed in the CDSS and on the positive findings of the evaluation of the pilot radio learning activity, the Mission decided to proceed with the design of the Radio Learning Project (RLP) in coordination with joint analysis of the sector with other donors and development of a policy matrix to make dialogue based on the RLP experience relevant to the Ministry's multi-faceted constraints.

2. Other Donors

A substantial Inter-American Development Bank (IDB) loan to support improved quality of basic education is now being developed with the Ministry of

Education, primarily for the development of a nine-year basic education curriculum and for textbook production. The role of the RLP as a complement to the IDB loan was discussed with two design teams in October 1988 and March 1989. USAID/Ecuador has shared the results of its Radio Learning pilot efforts, as well as the sector constraints analysis, with the IDB design team and expects to continue discussions to coordinate AID and IDB interventions. To date the IDB has requested rather than provided information on sector efforts so that meaningful coordination is problematic. An IDB evaluation team which visited AID in May reported that the loan request for the Bank/MOE basic education project was meeting with difficulties and that the approval process could take up to two years.

Meetings have also been held with the World Bank (IBRD) to discuss perspectives on working within the sector and project design will involve continued coordination with major donors in the sector. The World Bank also requested that the Mission provide funding to permit two key actors in the process, one from the MOE and one from Centro Regional para la Educación en la Región Amazónica (CRECERA), to attend an IBRD-sponsored conference in April 1989 in Bogota, Colombia on educational technologies where they were asked to present papers on Ecuador's efforts and experience in interactive radio instruction. The Mission financed the participation of the two participants who continue to be involved in the process of designing the new project.

II. PROJECT DESCRIPTION

A. Perceived Problem

Based on the recent USAID assessment, the major constraints to human resource development in Ecuador can be grouped as follows: politics and policy, performance, budget and organization/administration. Politics has come to dominate policy in the education sector, especially considering the role of the Marxist-dominated teacher's union. Between 1970 and 1980, education expenditures as a percentage of total GOE expenditures grew from 23.2 percent to 33.6 percent. Although it dropped to 19.6 percent in 1988, it is still among the highest in the region. Unfortunately, sound investment strategies have consistently been ignored. Teaching jobs are perhaps the major source of political patronage, which has led to an increase in the number of unqualified teachers for new schools in areas where school construction was not necessarily called for, excessive school construction with no rational planning, and proliferation of expensive secondary, university and technical training facilities with no cost-benefit analysis.

Teachers' salaries consume the lion's share of the budget. In 1988, 90 percent of the education budget was spent on operating costs, mainly salaries. Distribution of the budget and the setting of clear priorities to address critical problems is an issue. When comparing 1988 budget figures for primary and secondary levels, investment levels are almost the same in spite of the large difference in enrollment and coverage. In Quito alone, the 77 different departments and agencies of the Ministry are housed in 25 different buildings. The MOE's organization is a complex structure of legally-recognized and decentralized organizations, each responding to its agenda and priorities. There is no integrated planning process and little inter-communication.

In higher education, universities and institutes have proliferated in an irrational manner. Between 1980 and 1987, 11 state university and 3 private university branches were opened. All secondary cities and provincial capitals have either a public or private university or extension branch, or a combination of the above. The proliferation of universities and branches is equaled only by that of the 59 "superior institutes," again all state-financed, in the areas of education, industrial arts, agriculture, commerce, and languages and fine arts. This, coupled with free tuition policies, no or limited admission requirements and the increase in the number of unqualified teaching personnel, accounts in large measure for the tremendous flux of students in and out of the higher education system and between disciplines, which generate a great cost to the government and society. Another factor for the flux of the students in the system is the high level of unemployment among youth and the prestige associated with university education which keeps otherwise unqualified students in the system. In addition, the high percentage of non-teaching personnel (45 percent of total staff) is a budget constraint that impacts directly on efficiency.

Performance constraints are those related to the efficiency and quality of the education system. Their negative impact varies by levels in the education sector and the nuances or characteristics of the system's inefficiency may

differ from primary school to the university. The major efficiency-related problems are the repetition, drop-out, and over-age rates at all levels, as well as the out-of-school population in Ecuador resulting in lingering illiteracy. In 1987, 28 percent of primary-age children from rural areas were outside the system.

In looking at primary enrollment data, coverage or access does not appear to be as much of a cause for this high percentage as efficiency and quality. Of children entering first grade in urban areas, 75 percent complete primary school. In rural areas, only 42 percent complete primary school. At the secondary level, the first three years continue to show high levels of wastage. Another critical element of internal efficiency is the student-teacher relationship. Whereas at the primary level in 1986-87 it was 33.1 students per teacher in urban areas and 30.7 in rural areas, at the secondary level it dropped to 15.8 urban and 10.8 rural. This relationship could be viewed as positive at the secondary level, were it not for the lingering wastage and the disproportionate increase in unqualified teaching staff with no preparation for the area of speciality to which they are assigned.

Even greater concern was raised in an article in El Comercio of July 16, 1989, citing increasing drop-out and repetition rates and indicating that rural schools produce less than half as many sixth grade graduates as urban schools do (36 out of 100 rural school enterers versus 73 out of 100 urban). These obvious deficiencies of basic education, particularly in rural areas, cost the GOE approximately \$82 million per school year. The obvious message is that quality and efficiency interventions aimed at rural schools have a greater probability of impacting on the performance of the system as a whole. The gap between urban and rural performance is a reflection of allocation of resources which impacts severely on the quality of what happens in the classroom.

The proliferation of one-, two- and three-teacher schools (75 percent of all schools), as opposed to multi-grade, has had a serious impact on educational quality, especially in rural areas. Each teacher must handle several grades simultaneously without the necessary support materials or specialized training. Teacher quality is an issue at all levels: between 1982 and 1987, the percent increase in non-titled primary teachers (15.8 percent) was almost as great as that of titled teachers (16.8 percent). At the secondary level this an even greater problem.

Whereas in the U.S. \$220 per annum is spent per student enrolled on classroom materials and other recurrent investment, in Ecuador the investment is \$9.43 for the same purpose. Because recent World Bank studies maintain that this investment is the single most important factor in educational quality, it can be inferred that in Ecuador the low level of expenditures (outside teachers' salaries) has a negative impact on the quality of education.

A recent IBRD report on education sector lending highlights the need for policy changes and increased resources to reverse the trend of negative impacts wrought by the global slowdown in economic growth and the international debt crisis on many LDCs' human capital base. While recognizing that each country must develop a specific policy package, the report cites three themes which should guide the development of educational policies and

strategies universally, namely, improving the quality of basic education, improving science and technology education and establishing effective teacher training systems. Quality improvements may be sought with budget allocation for additional resources (e.g., in-service training, books, facilities) but improvements to improve the effectiveness of education require, the report states, "(i) instituting a policy framework that sets clear performance standards; (ii) taking advantage of new and traditional technologies that make teaching and learning more effective and more efficient delivery systems; and (iii) establishing incentives to use available resources well."

USAID/Ecuador has carefully considered the distinct options open for leveraging quality and efficiency improvements in basic education, considered to be a critical constraint to development. The decision to proceed with design of the RLP is based on the intervention's technical strength, relatively low cost, and its capability to generate a degree of access and exposure to major policy issues affecting the sector. Important progress has been made to date in this last regard. From a limited low-key pilot effort, a gradual but increasing interest in the project and its potential impact has been generated through key technical and decision-making points of the GOE (MOE and CONADE). The Mission has received a certification by CONADE that the RLP is in keeping with the priority placed in the National Development Plan for quality improvement in education using distance education. At the same time as the interactive radio instruction (IRI) process and its methodology are being discussed, important information related to sector constraints and policy is being generated. This two-pronged pre-design strategy will permit the use of key information to be fed into these critical access points throughout project implementation. It is considered that the attractiveness of the IRI intervention, combined with the access it provides to policy level discussions warrants the use of AID resources for basic education improvement.

B. Project Goal and Purpose

The purpose of the project is to improve the quality of basic education in rural areas through dissemination of locally adapted interactive radio curricula in language and mathematics in target provinces. This purpose contributes to the sector goal of improving educational opportunities. The project will also improve the capabilities of the teachers to teach certain subjects. Improved instruction will help curb the increase in school drop-out and repetition rates and the project will also test the feasibility of reaching out-of-school children and illiterate youth and adults. The project is particularly targeted at one- and two-teacher classrooms in rural areas which make up between 30-40% of all educational facilities in Ecuador. The Mission previously implemented a pilot activity which provided data and feedback on methodology and institutional performance.

Five principal objectives have been identified for the radio education project, namely, development of radio curricula in mathematics and language, implementation of radio lessons, teacher and supervisor training, enhancement of Radio Voz de Upano's and CRECERA's ability to manage a permanent basic education program, and achievement of policy changes for the improvement of educational efficiency and quality at the central and decentralized levels as a result of broad-based policy dialogue with the MOE. The target population

will consist of 3,000 teachers and 100,000 students in rural areas. The provincial and area supervisors as well as parents will also be directly involved in project training activities.

The half-hour radio classes will be produced for grades 2 to 6 in math and for grades 2 to 4 in language. Each day the lesson will be transmitted in the project classrooms and the students interact with the content as it develops. The lessons involve music, games, mental problem-solving, and written exercises. Upon the conclusion of the radio class, the teacher will spend an additional half-hour with follow-on exercises and activities. Process evaluation, learning gains measurement, and ongoing teacher supervision are complementary components of the IRI process.

C. Expected Achievements/Accomplishments

Specific targets for the four-year project are:

- Reduce the gap in the quality of basic education between rural and urban schools
- Enable more effective use of multilateral donor agency(ies) funding for distance education activities.

Indicators of achievement are maintenance of grade level by radio learning students, increase in student and teacher attendance rate, increase in radio learning students' completion rates and availability of didactic materials. Rates of increase expected will be established during intensive review.

D. Project Outline and Implementation Strategy

1. Project Components

- a. Curriculum development and adaptation, to include curriculum revision, production of radio tapes, and adaptation of instructional materials.
- b. Establishment of a system to produce and distribute materials, including radios, didactic guides for teachers, workbooks for mathematics and language instruction and replacement materials.
- c. Teacher training in the technology to be utilized, on the teachers' roles in the implementation of daily lessons, and in evaluation.
- d. Radio broadcasts by CRECERA by arrangement with Radio La Voz de Upano and other stations with a commitment to educational broadcasting.
- e. Evaluation activities to include formative evaluation to assess the technical quality of the educational programs and to serve as a basis to improve the quality of instruction, as well as summative evaluation to include both pre- and post-testing to measure learning impact.
- f. Ongoing policy dialogue in coordination with other donors, on the basis of policy matrix developed during project design.

2. Implementation Strategy

a. Implementation Plan

The project is scheduled for FY 1990 authorization with a proposed initial obligation of \$1.8 million in grant funds. Funds will be incrementally obligated through a Project Agreement with the Ministry of Education (MOE) and with CRECERA, an autonomous agency of the MOE. Incremental funding, up to a total of \$2.5 million, will be made available the second year of the project. During PP development, a preliminary four-year operational plan and budget will be prepared, which will be further refined at the initiation of the project. The MOE and CRECERA will prepare annual plans and budgets during project implementation for USAID approval. Technical advisors will assist the MOE and CRECERA in the development and periodic revisions of the operational plan as conditions warrant.

b. Procurement/Contracting Procedures

All grant-funded goods and services for this project will be procured from the host country and AID Geographic Code 000. To the extent other commodity sources are identified, waivers will be included in the Project Authorization. USAID is studying the option of including procurement activities within the technical assistance contract.

A technical assistance contract will be let through a buy-in to the central S&T Radio Learning Project. The contract will provide both long- and short-term advisors (approximately one and five, respectively) and, as noted above, procurement assistance. Additional complementary short-term TA may be obtained through "buy-ins" to other S&T centrally-funded projects. =

c. Monitoring Requirements

It is anticipated that the USAID/Ecuador staff who will provide overall Mission monitoring of this project will include a USDH Human Resources Officer and an FSN Education Officer.

d. Evaluation Plan

In addition to project monitoring and periodic special studies to measure progress towards purpose achievement, a mid-term and end-of-project evaluation will be conducted. The MOE, with the assistance of AID and other donors, will host an annual program review with all provincial and area directors participating. All evaluation activity will be coordinated with the Mission's evaluation officer. During intensive review, indicators will be developed to best measure progress and project impact in reducing the urban/rural disparity and in achieving policy changes.

III. FACTORS AFFECTING PROJECT SELECTION AND FURTHER DEVELOPMENT

A. Social Considerations

One-, two- and three-teacher schools constitute 75% of the total number of educational establishments nationwide. The gap between rural and urban schools is a major focus of the RLP which will target three beneficiary groups in an attempt to close this gap: students (male, female), teachers/supervisors, and parents.

Issues related to one- and two-teacher schools and to the rural-urban gap must be analyzed during intensive review as well as the three target groups and their specific participation in project activities, the motivation and commitment of each group to improving educational quality, and the flexibility of the system in responding to pressure from these groups will be examined.

Background information is contained in the AID-financed Human Resources Assessment conducted by Aida Moncayo and in the CDSS Strategic Framework for Human Resources Development. In addition, CRECERA is currently developing information on a series of indicators considered critical to project design including GOE policies, rural primary school target population, educational quality and efficiency (including the roles of teachers, parents, and supervisors). An analysis of these documents will contribute to the social soundness analysis to be undertaken during intensive review.

Although MOE data do not clearly disaggregate school attendance, drop-out, and repetition by sex, the importance of the level of basic education attained of girls, women and mothers as a variable for other development indicators (infant mortality, agricultural productivity, etc.) has been recognized extensively in the literature on what determines development's success or failure. The evaluation component of the project should be designed carefully to disaggregate data by sex and differentiate project impact on girls and boys. Clear parameters should emerge on whether girls are pulled out of school because of poor school quality, because of parents' attitudes, because of a combination of both, or as a result of other factors.

B. Institutional/Administrative Considerations

The following issues will be addressed to determine the institutional and administrative options for implementation of the proposed project:

- the relevant structures, policies, and personnel of the Ministry of Education and affiliated institutions such as CRECERA, capability to implement the project, constraints to effective implementation, and how to address these constraints,
- the necessity or desirability of establishing any new units (e.g., a project implementation unit),
- an appropriate institutional setting for the project that will most likely lead to (a) maximum government support during the implementation phase (b) Ministry support and funding when AID participation is terminated, and (c)

acceptance of policy issues to help insure improvement of quality and educational efficiency,

- given the institutional capability, the most appropriate contractual mechanism between AID and the MOE,
- an implementation strategy that takes into account the Ministry structure and authority among the national, provincial and local levels, and
- a strategy that will help to ensure that there is quality control in the implementation of the project throughout the country.

C. Financial and Economic Considerations

One of the most attractive elements of interactive radio instruction and the major reason for AID support of this basic education intervention worldwide, is its cost-effectiveness and replicability in contrast with other interventions in this sector. A recent World Bank report on the efficiency of basic education interventions rated radio education as second only to textbooks in efficiency. It also noted that based on cost factors, radio interventions are the most replicable.

During intensive review it will be important to collect information which will focus on these elements of the RLP in Ecuador. To this end, the following issues will be addressed:

- identification of policy change areas and monitoring points, i.e., how to monitor/measure if progress is being made on economic and financial efficiency issues,
- development of a project budget including a breakdown between local costs and costs for technical assistance. Costs will be specified for: (a) developing the instructional materials including adaptation, script writing, recording, evaluation, research, etc. (development costs) (b) implementing the project on a national basis (implementation costs), and (c) maintaining the project once it has been established on a national basis (recurrent costs), and
- identification of measures of educational efficiency that should be monitored such as dropout and repetition at each grade level, total years of schooling to obtain a primary school graduate, etc. These measures initially applied in target schools would have implications for system-wide change and would serve as a basis for the continuing policy dialogue with the MOE.

D. Relevant Experience with Similar Projects

AID has supported Interactive Radio Instruction (IRI) projects in Nicaragua, the Dominican Republic, Kenya, Thailand, Lesotho, Honduras, Bolivia and Costa Rica and through a centrally-funded project with S&T/Education, math, language, and science education activities have been developed involving both in-school and out-of-school programs. Currently five other AID Missions are designing IRI projects. Experience with IRI worldwide to date has been favorable. On the side of actual learning gains, the results have been

impressive. A system of pre- and post-tests has verified superior performance of children involved in IRI projects as opposed to control groups (an average of 10% superiority in the radio learning groups). Teacher, student, and parent participation and motivation have risen categorically as a result of the radio classes. School systems as a whole have adopted the methodology and expanded upon it. In sum, the projects have proven appropriate for low-income countries, their basic education requirements and management capabilities, and have proven viable over the long term. As a result of these positive experiences based on measureable results, and growing interest on the part of AID Missions, S&T/ED is planning a continuation of the centrally-funded project.

From September to December 1988, USAID/Ecuador carried out a pilot exercise in IRI to validate its applicability for Ecuador. The pilot was carried out in 21 schools in 7 provinces and 40 second grade math lessons were tested. The quality and production process for the lessons was judged as excellent. A pre-test and post-test indicated significant learning gains and CRECERA demonstrated its capability to carry out project implementation responsibilities. Additional schools picked up on radio transmissions and by the end of the pilot, it was estimated that over 100 schools were using the lessons daily. This had the negative effect of invalidating the control group but at the same time was indicative of demand for quality improvements in the classrooms.

E. Proposed Grantees and Implementing Agencies

The primary grantee under this project will be the Ministry of Education (MOE). The implementing agency will be CRECERA, an autonomous agency of the Ministry of Education, through its agreement with the Radio La Voz de Upano. The MOE will be a signatory to the project agreement. The Mission has been engaging discussions with the GOE administration for several months and MOE and CRECERA personnel are participating in designing the new project.

F. AID Support Requirements and Capability

The project will be managed by USAID's General Development Office. The Deputy Chief, a USDH, is the project manager, assisted by an FSN Project Coordinator, who will co-manage the project.

The project will be supported by the Controller, Program and Project Development, and Regional Contracts Offices within the Mission. Technical assistance contracts will include procurement and support costs so that no direct Mission support for office space or assistance will be required. AID/W backstopping will be provided by LAC/DR/EHR.

G. Estimated Costs and Methods of Financing

The four year US\$3.35 million project will involve a funding level of US\$2.5 million based on an investment of approximately US\$830,000 ~~million~~ in DA annually over a three-year period, with the equivalent of an additional US\$850,000 ~~million~~ required as counterpart for local currency costs. Funds will be obligated in a bilateral Project Agreement with the MOE with CRECERA as the implementing agency and counterpart will be provided by the MOE through the CRECERA budget and "in kind." An estimated breakdown by budget category follows:

	FUNDING LEVEL (US\$000)		
	AID FX	LC	Counterpart LC
1. <u>Technical Assistance</u> (long- and short-term)	1,000	70	
2. <u>Commodities</u>	250		
3. <u>Training</u> (long- and short-term)	50	250	
4. <u>Studies</u>		40	
5. <u>Personnel</u>			459
6. <u>Support Costs</u>		90	306
7. <u>Evaluation/Audits</u>	50		
Contingency	150	50	85
TOTAL	1,500	500	850

AID's FY 1989 Program was presented to Congress as an all grant program and the FY 1989 appropriations bill was signed into law without any provisions stipulating minimum loan floors. The objective underlying this shift away from loans is to reduce the debt burden of our programs on LDC governments. Consequently, it is now AID policy to obligate funds as grants with loans being the exception.

H. Design Strategy

1. Overall Strategy

A New Project Description (NPD) was submitted in the FY90-91 Action Plan for an FY 90 project on the basis of which the Mission requested and received LAC Bureau concurrence and delegation of authority to the Mission Director to approve the Project Identification Document (PID) and Project Paper (PP). The NPD provided an estimated PID approval date of January 1990 with PP approval scheduled for May 1990. A collaborative design process has already begun with regular meetings being held with CRECERA, the proposed implementing agency. Contacts have also been made with regular MOE officials (CRECERA, while entirely staffed with MOE personnel and funded from the MOE budget, is an autonomous agency) as well as with other donors involved in the sector. In order to meet the schedule proposed in the NPD, actions have been taken to develop the policy matrix as well as to identify further information needs for preparation of the PP. Information gaps exist regarding gender-specific data and the process to gather such data could begin as soon as possible to provide data for PP inputs. The technical office (GDO) has also identified design assistance needs in radio education, education economics, and institutional development and a PIO/T for a buy-in to the central S&T Radio Learning Project has been prepared for provision of such assistance. The particular steps to be taken during intensive review are as follows:

a. Development of a policy matrix. While this could conceivably be done in-house, it was agreed that CRECERA take a "first crack" at this task. In preliminary design meetings, AID has explained its interest in the RLP as a way to address broader issues in education, particularly long-term quality and efficiency factors, and involvement by CRECERA in development of the matrix would result in a greater understanding and acceptance on their (and the MOE's) part on the policy implications of investments by both the government and donors in distance education.

To strengthen the collaborative aspect of the project design process, and to ensure that the GOE/MOE understands and "buys into" the policy implications of efforts to improve educational quality and efficiency, CRECERA has proposed that it develop (probably by sub-contracting to others) a policy matrix which analyzes the potential areas of quality and efficiency in basic education to be addressed by the RLP. To this end, the Mission has executed a Limited Scope Grant Agreement (LSGA) to CRECERA in April 1989 for development of a preliminary policy matrix which will provide information to incorporate into the design of the project. CRECERA is working closely with AID throughout the process but further work, in terms of AID review and any request for further elaboration, may be required after CRECERA has analyzed the issues and prepared the matrix.

As part of CRECERA's two-track approach mentioned earlier, a series of regional and provincial seminars are being conducted to discuss both the RLP process as well as the relationship of project assistance to policy dialogue and change. Supervisory and technical personnel as well as teachers have participated in these events and recognized that the changes implicit in the project go beyond daily radio transmissions. Parallel to this CRECERA has developed a Request for Proposal (RFP) for information gathering on critical indicators which will be the background for the policy matrix. This local contract is about to be awarded. The advantage of this transition phase is that CRECERA and the MOE are achieving a greater understanding of USAID's expectations in supporting the RLP and a better sense of the policy context of their specific endeavors.

b. Bridge activities to maintain the momentum of the RLP pilot activity. Two activities are currently contemplated, namely, motivational seminars for teachers and provincial supervisors who participated in the pilot and participation by CRECERA and MOE officials in an IBRD-sponsored conference on educational technologies. On the latter, in response to an IBRD request, the Mission identified two persons who were asked to contribute by presenting papers on Ecuador's experience in interactive radio instruction and invitational travel orders were issued to permit their participation in the regional conference. Regarding the former, CRECERA submitted a proposal to the Mission for funding of an evaluation/motivation seminar and a limited number of provincial workshops. CRECERA was requested to expand the scope of that effort to provide a series of pre-implementation seminars to ensure teacher/supervisor involvement throughout the design process. Such activities were included within the scope of the LSGA to provide a single obligation mechanism and management unit for Mission monitoring.

c. Identification of technical assistance needs for PP inputs. The technical office had suggested that assistance from the S&T/RLP contract was necessary to define better proposed project components. Given the deadlines for submission of PIO/Ts to AID/W (SER/OP) for action on buy-ins, as

noted above a PIO/T has already been submitted to AID/W. Assistance will be required from an educational economist and from a specialist in institutional development with experience in policy formulation in ministries of education. Further assistance may be required on technical aspects of interactive instruction as well. Such assistance will be obtained through a buy-in to S&T/RLP (see Attachment C) and/or the new TEEM project.

2. Project Development Schedule

<u>Action</u>	<u>Target Date</u>	<u>Responsible for Action</u>
Bridge Activities	April 89- March 90	CRECERA
PID Review	August 89	GDO, PPD, DIR
PID Approval	August 89	GDO, PPD, DIR
Specialized Studies	Sept-Dec.	Contractors/Proj. Comm.
Instit. Analysis	Sept. (3 wks)	RLP
Social Soundness	Oct. (3 wks.)	RLP
Technical Analysis	Oct. (3 wks.)	RLP
Procurement	Sept.-August	RCO/Contractor
Economic Analysis	Sept.-August	RLP
Training Plan	August (2 wks)	Fulbright
Project Design	Sept.-Dec.	Project Committee & MOE
Preparation of Document	December	GDO, PPD, Others
PP Review/Approval	January 90	Project Committee, DIR
Pro Ag preparation	February 90	PPD, RLA, GDO
Pro Ag (GOE) signed	March 90	AID, GOE

3. Resource Requirements

Given the timeframe for PP submission, the Mission's projected workload, and the number of analyses to be done, the Mission has concluded that external assistance will be necessary. Approximately \$35,000-50,000 in EHR PD&S is available to finance the expertise for the specialized studies identified above. These consulting services will be procured through buy-in to the centrally-funded Radio Learning project.

The Mission project committee responsible for project development is composed of representatives of the General Development Office, Program and Project Development Division, Office of the Controller and the Regional Contracting Officer and Legal Advisor.

The Mission has received a delegation of authority to approve the PID and PP in the field.

I. Recommended Environmental Threshold Decision

A categorical exclusion of environmental assessment is recommended because none of the Project activities have direct environmental impact and are exempt from the environmental requirements under 22 CFR 216.2(c)(2)(i). The "Environmental Examination" is included as Annex B to this document.

J. Issues

1. Sectoral Policy Environment and Project Focus/Sustainability

The issue affecting primary education in Ecuador is not one of access, as evidenced by a high enrollment rate (gross rate of 117% in 1987) but rather one of poor quality and low efficiency which severely restrict the accomplishments gained by increased enrollments. Various assessments and studies on educational performance attempt to identify causes of poor quality and low efficiency, causes which are often more properly symptoms of the problem, as evidenced in Table 1 (see determinants/indicators columns). Also policy dialogue issues are often little more than a "wish list" of desired results with limited analysis, if any, of the changes, structural or otherwise, required to achieve such results. Furthermore, AID and other donor documents often refer to the critical lack of resources in LDCs as the most limiting factor in seeking improvement in the performance of the educational sector. While the percentage of total government expenditures in education has recently dropped sharply in Ecuador, expenditures for education are still among the highest in the LAC region, which indicates that performance in the sector may be limited more by inefficiencies in the use and distribution of financial resources than by the availability of such resources. Is further information and analysis required on the structure of GOE resources for education? Specifically, what is the relationship between allocations for and expenditures in the sector at present and over the past decade? What trends or patterns emerge from such an examination and what do they reflect about government priorities for education? While the GOE political platform clearly highlights the importance placed on improving basic education, are the policy changes necessary for such improvement feasible given the country's political/institutional structure and the vested interests this structure represents? The policy matrix to be developed during project design should identify the Ecuador-specific policy changes necessary to effect improved performance and a preliminary review of analyses to date indicates that changes are necessary in political spheres, e.g., redistribution of resources from higher to primary education and de-politicization of the teaching profession in terms of appointments and assignments. Is achievement of such policy changes feasible? Is there sufficient evidence of GOE commitment and political will to effect necessary changes? What impact would the proposed radio learning intervention have in the absence of GOE action on needed policy changes? While limited resource transfers are needed for the implementation of radio learning programs, what provisions can or should be made for the sustainability of project efforts in the absence of AID or other donor contributions? These issues will be addressed in the course of intensive review and continued Mission support will be predicated on a continuing assessment of GOE commitment to address the concerns and to effect necessary policy changes.

2. Cross-Sectoral Concerns

The Strategy for LAC Investment in Basic Education states that "emphasis will be placed on linking investments in basic education with other key sectoral investments where it is known that basic education plays an important supporting role." In the case of Ecuador, studies and analyses conducted for the development of a Mission-specific Child Survival Strategy found that the

BASIC EDUCATION IN THE LAC REGION

MATRIX FOR CHANGE

CHARACTERISTIC/PROBLEM	DETERMINANTS	INDICATORS	DESIRED RESULTS (LAC Strategy Policy Dialogue)	CONSTRAINTS	POSSIBLE INTERVENTIONS
I. Quality/Poor Quality (definition: material inputs and non-material characteristics of schools which have been shown to improve learning)	1. School Instruction	1. a. textbooks/materials b. infrastructure i. quantity ii. quality/school characteristics (e.g., physical condition, maintenance) c. ratio of students to teachers d. educational level of teachers	1. a. appropriate curriculum and textbooks b. incorporation of innovative low-cost programs, e.g., radio learning c. pre- and in-service teacher training	1. a. resources b. politicization in career of teaching c. role of the universities in def'n of teaching	1. a. development of national capacities for textbook writing, production and distribution b. radio learning for mathematics, language, science & health c. revision of textbooks and teaching and supervising methodologies to adapt to linguistic/cultural background of students d. revision of pre-service training curricula e. in-service teacher training
	2. School Management	2. a. authority of local officials to resolve problems b. data on the basis of which to resolve problems c. access to research on solutions d. community and parent involvement in school management	2. a. delegation of authority to local levels b. parent and community involvement c. management information systems and data analysis to help resolve educational and planning problems	2. a. political interests b. lack of data	2. a. assessment of feasibility of decentralization b. activities to educate parents & other community members to take an active role in school affairs c. development of information systems
	3. School Financing	3. a. total expenditures for recurrent cost e.g., teacher salaries	3. a. increase public funding for primary education (increase total budget or shift from higher to primary)	3. a. resources b. political interests re distribution of resources	3. a. assistance to ministries of finance & education to study allocation of resources

CHARACTERISTIC/PROBLEM	DETERMINANTS	INDICATORS	DESIRED RESULTS (LAC Strategy Policy Dialogue)	CONSTRAINTS	POSSIBLE INTERVENTIONS
		<ul style="list-style-type: none"> b. private resources c. community resources 	<ul style="list-style-type: none"> b. allocation of sufficient MOE resources for learning materials c. private funding, e.g., private schools (reduce restrictions) d. community participation 	<ul style="list-style-type: none"> c. Lack of data 	<ul style="list-style-type: none"> b. identification of legal changes necessary to sustain private school systems c. establishment of private sector foundation to develop private sector financial support for education

II. Efficiency/
Low Efficiency

(definition: relationship between inputs and outputs with a view toward achieving the desired level of output at minimum cost)

1. Organization of human resources	<ul style="list-style-type: none"> 1. a. teacher attendance b. teacher task definition c. pupil attendance in school and grades completed successfully (input avge. pupil yrs of attendance; output avge pupil grades completed successfully) d. promotion rate (opp: repetition rate) e. completion rate (% of students entering first grade who complete final grade) f. coverage/enrollment rate 	<ul style="list-style-type: none"> 1. a. opportunity cost to families of children in school vs. working b. cultural characteristics c. lack of familial environment of support d. individual poor nutrition and health (usually seen as beyond the reach of school policy)
2. Management of physical resources	2. See 1. b. above	
3. Administration of financial resources	3. See 3. above	

level of formal education attained by mothers is one of the factors exhibiting greatest impact on infant and child morbidity and mortality (Rutstein, 87) as well as on the contraceptive prevalence rate (CEPAR, 88). Similarly, assessments of performance in the agricultural sector have found high correlations between educational levels attained and agricultural technology and productivity. While the proposed project is admittedly a limited intervention for the dissemination of interactive radio instruction technologies in rural areas, could the intervention be more specifically linked to Mission efforts in child survival and agriculture? Can IRI be targeted to reduce female drop-out rates? Is further study needed to ensure that adaptation of radio lessons is undertaken to seek impact in other areas where the Mission is focusing its attention? While the increase in attendance due to IRI across the board is expected to result in positive impacts for other key sectors in the long term, these issues will be examined further during intensive review as part of the social soundness analysis and in the development of evaluation indicators.

3. Mission Resource Constraints

In a time of shrinking budgets and staff to support AID program and project activities, does RLP represent a new effort which the Mission can adequately support? Is the expected project pay-off sufficiently high to warrant diverting Mission financial and staff resources to this effort? Current assessment is that the RLP will provide both access to decision-makers to conduct policy dialogue on needed changes as well as the information to use such access adequately.

(2376M)

PRELIMINARY
LOGICAL FRAMEWORK

ANNEX A
From FY 90 to FY 94
Total U.S. Funding \$2,500,000
Date Prepared: July 14, 1989

Project Title & Number: Radio Learning (518-0080)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<u>Goal: The broader objective to which this project contributes</u>	<u>Measures of Goal Achievements</u>	<u>Concerning long term value of program/project:</u>	
To improve educational opportunities in Ecuador	- National drop-out rate reduced from ___ in ___ to ___ in ___ - National repetition rate reduced from ___ in ___ to ___ in ___	Surveys and evaluations MOE statistics	Political stability Debt repayment on schedule Annual certification on GOE re drug control authorized by USG No mayor natural disasters

NARRATIVE SUMMARY**OBJECTIVELY VERIFIABLE INDICATORS****MEANS OF VERIFICATION****IMPORTANT ASSUMPTIONS**

PurposeConditions that will indicate purpose has been achieved
End of project statusAffecting purpose-to-goal link:

To improve the quality of basic education in rural areas through dissemination of locally adaptive interactive radio curricula in language and mathematics in target provinces

- __% of radio learning students maintain grade level by _____
- radio learning student daily attendance rate increases from ___ in ___ to ___ by ___
- teacher attendance in radio learning classrooms increases from ___ in ___ to ___ by ___
- __ % radio learning students complete established academic programs
- didactic materials availability

GOE provides resources required for radio learning programs.

Increases in student attendance rates in target provinces affect national rates significantly

Increases in teacher attendance affect student attendance positively

Radio learning programs increase student/teacher attendance

NARRATIVE SUMMARY

OBJECTIVELY VERIFIABLE INDICATORS

MEANS OF VERIFICATION

IMPORTANT ASSUMPTIONS

Outputs

Magnitude of Outputs

Affecting output-to-purpose link

1. Radio curricula in mathematics and language developed
2. System established for production and distribution of radios and didactic materials
3. Teachers and supervisors trained
4. Radio lessons broadcast
5. Policy changes implemented to support improvements in quality and efficiency

- 4 yrs. of math and 2 yrs. of language lessons produced, distributed, and broadcast with active involvement of 5 radio stations
- 3,000 teachers trained
- 100,000 students and parents actively participating in radio classes and follow-on activities
- 80% of policy matrix objectives achieved and regulating education sector activities

- Progress reports
- Direct supervision
- Evaluation and studies

Continued support from local radio stations on use of air time and production studios.

Continued support from provincial directors and supervisors

Procurement procedures in place for radios, tapes and other support materials

Timely support from MOE and CONADE on policy changes