

PD-AAB-557-B1

Proj. No 5980 558-2

AGENCY FOR INTERNATIONAL DEVELOPMENT  
**PROJECT PAPER FACESHEET**  
 TO BE COMPLETED BY ORIGINATING OFFICE

TRANSACTION CODE (FIX APPROPRIATE BOX)  
 ORIGINAL  CHANGE  
 ADD  DELETE

PP 67p  
 DOCUMENT CODE 3

2. COUNTRY/REGIONAL ENTITY/GRANTEE  
 Latin America Regional

3. DOCUMENT REVISION NUMBER  
 ----

4. PROJECT NUMBER  
 598-15-960-558

5. BUREAU  
 A. SYMBOL LA B. CODE 3

6. ESTIMATED FY OF PROJECT COMPLETION  
 FY 79

7. PROJECT TITLE - SHORT (STAY WITHIN BRACKETS)  
 [ Radio Schools of Latin America ]

8. ESTIMATED FY OF AUTHORIZATION/OBLIGATION  
 A. INITIAL MO. YR. [ 2 | 76 ] B. FINAL FY [ 6 | 78 ]

9. SECONDARY TECHNICAL CODES (MAXIMUM SIX CODES OF THREE POSITIONS EACH)  
 640 248 670

10. ESTIMATED TOTAL COST (\$000 OR EQUIVALENT, \$1 = ---)

A. PROGRAM FINANCING	FIRST YEAR			ALL YEARS		
	B. FX	C. L/C	D. TOTAL	E. FX	F. L/C	G. TOTAL
AID APPROPRIATED TOTAL	56	14	70	458	345	803
(GRANT)	( 56 )	( 14 )	( 70 )	( 458 )	( 345 )	( 803 )
(LOAN)	( )	( )	( )	( )	( )	( )
OTHER 1. CET/FSU				155.3		155.3
U.S. 2.						
HOST GOVERNMENT						
OTHER DONOR(S) ACPO					124.3	124.3
TOTALS	56	14	70	613.3	469.3	1,082.6

11. ESTIMATED COSTS/AID APPROPRIATED FUNDS (\$000)

A. APPROPRIATION ALPHA CODE	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE	FY 76		FY 77		FY 78		ALL YEARS	
			D. GRANT	E. LOAN	F. GRANT	G. LOAN	H. GRANT	I. LOAN	J. GRANT	K. LOAN
EH	526	611	70		200		320			803
	(515)									
TOTALS			70		200		320			803
ESTIMATED EXPENDITURES			70		175		315			

12. PROJECT PURPOSE(S) (STAY WITHIN BRACKETS)  CHECK IF DIFFERENT FROM PID/PRP

[ To provide systematically-developed guidelines for effective utilization of radiophonic learning systems in promoting improved health and agricultural practices of campesinos. ]

13. WERE CHANGES MADE IN THE PID/PRP FACESHEET DATA NOT INCLUDED ABOVE? IF YES, ATTACH CHANGED PID AND/OR PRP FACESHEET.  
 YES  NO

15. ORIGINATING OFFICE CLEARANCE

SIGNATURE: *Stanley Applegate*

TITLE: Stanley Applegate, Chief, Education, Science & Technology

DATE SIGNED: MO. DAY YR. [ 2 | 24 | 76 ]

16. DATE RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION  
 MO. DAY YR. [ ] [ ] [ ]

AID 1

## TABLE OF CONTENTS

<u>Parts</u>	<u>Page</u>
I. <u>Summary and Recommendation</u>	
A. Recommendation	1
B. Description of the Project	1
C. Interrelationship with other AID programs	3
D. Summary Findings	6
E. Project Issues	7
II. <u>Project Description</u>	
A. Background	7
B. Detailed Description	10
III. <u>Project Analysis</u>	
A. Technical Analysis	20
B. Financial Analysis and Plan	22
C. Social Soundness Analysis	25
D. Economic Analysis	27
IV. <u>Implementation Arrangements</u>	
A. Administrative Arrangements	28
B. Implementation Plan	29

C. Evaluation Arrangements	30
D. Condition, Covenants and Negotiating Status	31

Annexes

Synthesis of Justification for Projects Presented by ACPO to A.I.D. (ACPO Plan)	Annex A
Tentative Outline of Final Report	Annex B
Budget Estimate	Annex C
CET Cost Sharing Contribution	Annex D
Project Performance Tracking Chart	Annex E

Exhibits

FSU- The Instructional Systems Development Center	Exhibit 1
Memorandum from ACPO Director to AA/LA	Exhibit 2
Financial Statement of CET	Exhibit 3

## Radio Schools of Latin America

### Part I. Summary and Recommendation

#### A. Recommendation

It is recommended that a grant not to exceed \$803,000 be provided to the Center for Educational Technology of Florida State University to carry out this project.

#### Description of the Project

At least 16 Latin American countries currently utilize some form of non-formal learning-by-radio, in efforts largely directed to improving, in one way or another, the lives of their (rural) poor majority. However, while much is known about technical and process characteristics of radio broadcasting, very little is actually established about the behavioral effects of educational broadcasting, especially among rural audiences in Latin America. The use of radio broadcasting in non-formal educational programs has been put forth as the most probable approach that is available and within the constraints of the developing nations for dealing with those problems associated with rural development. There is, however, a lack of sound, empirically established knowledge about the use of radio for educational purposes that can be used to provide guidance and direction to assist Latin American countries in improving the effectiveness and efficiency of the use of radio. This project will help provide that knowledge, by evaluating the effectiveness of the various components in the comprehensive educational model used by the longest-established learning-by-radio system in this hemisphere, Accion Cultural Popular (ACPO), in terms of the behavioral effect on the rural audience. Through this evaluation, the project will assist in indicating what might be done to increase the instructional effectiveness of radio for use in non-formal education for rural adults in Latin America. The methodology employed will examine the effectiveness of radio messages, as utilized exclusively, as reinforced by varieties of printed material (cartillas and newspaper), correspondence, and volunteer leaders, singly and in combination, for producing desired changes in the behavior of rural villagers. The project will measure not only knowledge gains and attitudinal changes, but also focus on isolating behavioral changes that are associated with the use of radio and other components in the educational model of ACPO.

Accion Cultural Popular, located in Colombia, was selected for this evaluation on the basis of several factors. ACPO is the oldest of the continuing non-formal educational projects built around radio. Founded in 1947, ACPO has been in existence over a quarter of a century. The large majority of the other projects throughout Latin America which use radio in non-formal education have been patterned directly after the ACPO model. ACPO is also a prime member of the Association of Latin American Radio Phonic Schools (ALER) and the majority of the members systems throughout Latin America have followed ACPO's lead in adopting innovations and policies. Another factor influencing the selection of ACPO was the comprehensiveness of its educational model. ACPO uses several different types of radio programming including formal radio schools, radio drama, music, news, and interviews. In addition to the radio, extensive use is made of printed materials including the largest circulating newspaper in rural Latin America "El Campesino," five basic cartillas (health, agricultural, reading and writing, arithmetic, and spirituality), and a number of volumes in the Campesino library on various topics of interest to the rural audience. Local volunteers are used in the community to supplement the radio broadcast and printed materials. There is also a more limited use of records and audio visual materials. A large number of people, estimated at over a quarter of a million annually, are participating in programs of ACPO.

This project will be operational over a two and a half year period during which time evaluative data on knowledge, attitudinal and behavioral changes associated with the various components of ACPO's educational program, will be collected in various areas throughout the country of Colombia. Analysis of the data will provide for assessment of the effectiveness of the various components of the ACPO educational program in producing stable and lasting improvements in the quality of life of rural villagers, as well as knowledge gains in the five areas of primary interest (health, agriculture, arithmetic, reading and writing, and spirituality.) Indicators of the quality of life of the Campesinos will be constructed so that comparisons can be made between those who actively participate in a specific fashion in ACPO educational programs, those who participate in various ACPO programs in specific fashions, those who do not participate but do listen to Radio Sutatenza, and those who neither participate nor listen. Data on numerous demographic characteristics of the target population will be collected and analyzed to determine if there are certain conditions or characteristics which are differentially associated with the effectiveness of the ACPO educational program. Primarily, however,

data analyzed will provide indications of what means and manners of using various learning-by-radio techniques are most effective (and cost-effective) in producing stable, long-standing results, in terms of behavior effects. Results anticipated from this evaluation project reflect the desire to obtain data from a stable, ongoing project as contrasted to evaluative data from experimental projects which may be contaminated with start up difficulties and Hawthorne effects, so that conclusions based solely on such projects may be biased by extraneous effects.

Principal activities to be funded include the elaboration of an evaluation strategy, training of evaluation specialists, the analysis of the goals and target population served by ACPO, specification of the detailed evaluation design and methodology, construction and validation of necessary instrumentation, data collection in several different geographic areas, and analysis of such data. Through development of such analysis, object-effective techniques for using radio for non-formal education will be identified, a manual describing recommendations for effective use of radio in non-formal education will be prepared, and results of the evaluation and its methodology will be disseminated among radiophonic schools and Ministries of Education, Communication, and Agriculture throughout Latin America, through, inter alia, a series of seminars and follow-up visits.

#### C. Interrelationships With Other A.I.D. Programs

This project is expected to advance a number of A.I.D.-supported programs which also utilize some type of learning-by-radio. Among currently funded country projects which both complement and are likely to benefit from this effort are the Non-formal Education program in Guatemala, the IDEI project in the Dominican Republic, the proposed NFE program in Paraguay, and the bi-lingual education projects in both Peru and Bolivia. In addition, the Non-formal Rural Education program in Colombia, which will directly utilize ACPO's capabilities, will be substantially affected by this program, since ACPO's effectiveness in creating positive behavioral change among its rural audience should be greatly enhanced. ACPO, for the first time, will be able to measure significantly its impact---in terms of behavioral change---on Colombia's rural poor. Hence the organization itself should be far better equipped to contribute to overall goals of Colombia's NFE (agricultural training) projects.

This project complements several important A.I.D. efforts, both planned and underway, designed to increase the knowledge base about the use of radio for development. The Basic Village Education (BVE) program

in Guatemala is a regionally-funded experimental project aimed at investigating the effectiveness of radio, radio with a monitor, and radio with monitor and a trained agronomist in producing improved agricultural practices among rural farmers in two areas of Guatemala. Transmitting facilities and radio programs have been specifically established and developed for the purpose of this project. The BVE project is a highly structured, carefully controlled experimental investigation using restricted subject area, agricultural practices, primarily to answer the question about the relative effectiveness of the three treatment groups presented. Data collected in the proposed project, however, while complementing that of BVE, will reflect a much wider range of knowledge, attitude, and behavioral changes that may have occurred due to the several components in the educational model. The proposed project will reflect stable, long standing effects associated with on-going operational projects, as opposed to the data obtained from the controlled and newly established conditions in the BVE project. Establishment of a stable knowledge base regarding the use of radio requires careful collection and analysis of evaluation data from both ongoing projects and experimental projects created and controlled for that purpose.

Another country project operating in Latin America which uses radio for educational purposes is the mathematics project in Nicaragua. This project focuses primarily on development of a mathematics curriculum for the primary schools. Radio lessons are broadcast by means of radio to students in the lower elementary grades of formal schools. The primary question addressed in this project is, "can radio be an effective means of improving the mathematics teaching in the primary grades of formal schools?" The radio mathematics project differs in several ways from the proposed project. The most obvious difference is in the target population, primary school students versus rural adults. There is also the difference in the setting. The radio mathematics project focuses solely on in-school use in the elementary level. The proposed project examines the use of radio in non-formal education for rural adults. The radio mathematics project deals only with the restricted curricular offering of elementary mathematics, while the proposed project focuses on a wide variety of subjects aimed at improving the quality of life for the campesinos. Again, as in the case with the BVE project, the radio mathematics project was established and is controlled specifically for the experimental purposes. It would also be classified as an experimental project, as opposed to an evaluation project such as the proposed project. The products from each project will be complementary rather than overlapping in any aspect, and, in effect jointly contribute to furtherance of our knowledge about the use of radio in developing countries.

It is significant that the Paraguay project (mentioned above) is predicated on several assumptions which are based largely on the experience of ACPO. These are that (1) radio can be used successfully for instruction, (2) supplemental planning materials must be used in conjunction with the radio, (3) a monitor is necessary to work with the students, (4) there is need for a supervisory system to oversee and manage the program and a feedback system to indicate how the program is functioning. While these assumptions appear to be reasonable they are, nevertheless, assumptions and not yet sufficiently established and documented through evaluation data. Our data in the proposed project will be

collected systematically to examine the empirical basis of these assumptions. Thus, information from the proposed project can be fed directly into the operation of the Paraguay project, and similar projects.

In considering replicability or utility of results anticipated from this project, it is necessary to examine those facets differentiating it from other projects attempting to evaluate learning-by-radio technique. In all other cases, transmission facilities and various treatment combinations have been established within the operations of the project specifically to investigate the variables under consideration. It would not be possible in any of these projects to collect data on the stable long-term behavioral effects attributable to various elements in a comprehensive program. Only in the proposed project will this type data be collected and evaluated. This is not to say that each project is not valuable in its own right. However, the proposed project will definitely complement each of these efforts, rather than overlap or duplicate any of the them. It is strictly an evaluation project rather than an experimental project.\*

Significant comparisons will be made by examining the data and conclusions of the several experimental programs alongside the evaluation data to be collected in the proposed project. If certain variables and treatment conditions turn out to be significant across these projects, future projects could be designed to incorporate them. Any differences in results which may appear will be equally interesting. It may be that different conditions are affected for different target populations, for different subject matters, for different settings (in school versus out-of-school) or for other reasons. Factors which may be effective in experimental projects with a relatively short life may not be so important in a project that is operational over long periods of time. It is also important to isolate temporary immediate gains due to novelty and Hawthorne effects. In sum the proposed project will help identify techniques and instrumentation for long-range evaluation that can be incorporated to enhance the effectiveness of ongoing and proposed projects which include radio as a means of communication.

There will also be close coordination between this project and the proposed regional project for testing radio to teach school subjects in the Caribbean area. The proposed contractor is the same for both, and though the Caribbean project is designed to contribute significantly to our knowledge of how to optimize effectiveness of an instructional system built around radio for use in formal school programs, experiences with this project will reinforce the other.

\* In research (experimental) projects, temporary treatment conditions are established and researchers attempt to control all variables which may be associated with these conditions to determine what effect they may have. Research is usually conducted with relatively small sample sizes and have relatively brief exposure of the people to treatment conditions. Such research is quite valuable in advancing the state of knowledge yet it is no substitute for nor identical with a carefully controlled systematically designed evaluation of the effectiveness of a long established and operating comprehensive educational program as in the proposed project.

#### D. Summary Findings

The project and its overall technical and methodological implications are appropriate and timely. Because of its long-established recognized influence in radio-phonetic education in Latin America and its lengthy operational history, ACPO offers a sound base upon which to develop the study. In addition, ready availability of a significant amount of already-collected data (on ACPO's rural audience and their fundamental behavior patterns) will result in a certain amount of cost-saving from using ACPO as the site in contract to other potential sites.

Regional funding of this project is indicated because of its implication for utilization by learning-by-radio systems throughout Latin America. By concentrating the evaluation and analysis on the methodology, and not on the country-specific circumstances in which ACPO operates, the potential application of recommendations for increased effectiveness should be much greater than otherwise.

The proposed contractor for this project is the Center for Educational Technology at Florida State University (CET). CET has been quite active throughout the Latin American region in the area of educational technology over the past decade. This work has included providing technical assistance to ministries of education and other agencies throughout Latin America in the broad area of educational technology. CET has trained numerous Latin American educators in areas such as research methodology, instructional development, and educational project management. They have held short-term training seminars in Spanish in the host country on specific topics and provided consultation on a wide range of issues in educational development. CET has assisted governments in conducting feasibility analysis and in the planning of new projects. CET personnel have worked with ACPO people on several specific projects of limited scope. The project director of this proposed project has travelled frequently to ACPO and is very familiar with their organization and operation. The State University System of Florida, composed of nine universities, has entered into a bilateral agreement with Accion Cultural Popular which provides for mutual cooperation and support between the university system and ACPO. CET has been designated by the Chancellor of the State University System as the official organizational interface with ACPO for the system. Under this agreement CET has prepared an evaluation design for ACPO to enable them to assess the effectiveness of an experimental program of literacy training. This project uses printed material and volunteers of ACPO in conjunction with phonographic records in lieu of radio broadcasts to provide basic literacy training. This literacy effort is supported by the World Bank which is interested in exploring the educational model of ACPO for use in developing nations in Africa. The formal school portions of literacy training that have been broadcast by ACPO are distributed by this project in the form of records. If this proves effective, many countries who do not have the initial capital to establish elaborate radio broadcasting networks and facilities will be able to participate in widespread literacy training by adapting the ACPO model to the local circumstances and using records rather than the radio. The evaluation design for the literacy program was prepared by the project director of this proposed project.

## E. Project Issues:

This project has already undergone one review at the DAEC level. Issues identified at that time include: (a) the feasibility of the project, or how it can be accomplished; (b) its replicability, or utility, especially in relation to other radio-evaluation projects; (c) the "place" of this project, in both the proposed contractor's (CET) institutional framework, and its relationship to other projects involving ACPO; (d) sufficiency of the process of dissemination of expected results, in terms of assuring adoptions and utilization by Latin America educational radio systems, and (e) budgetary implications of the above, especially in terms of needs to minimize costs. The PP has been revised to more fully address these issues. Treatment of each is noted in the issue memorandum accompanying this revised PP.

## II. A. Background

### Proposed Contractor and the State of the Art

As noted the likely contractor for this project is the Center for Educational Technology (CET) at Florida State University. CET has established as one of its first priorities the investigation, development, and expansion of the use of low-cost intermediate technologies as a response to the educational and training problems of developing countries. The first step was taken by CET two years ago when they completed an exhaustive review of the literature on the use of radio in educational programs throughout the world. This review included published material available through UNESCO, the ERIC System, journals, and books. In addition to reviewing all of these sources for published materials, CET spent a year locating and communicating with persons throughout the world who have been involved in research and development projects related to the use of radio as well as agencies which have sponsored projects including radio as a key element. Thus, the review included considerable amounts of unpublished and uncirculated material as well as personal conversations and correspondence with people scattered throughout the world who have been actively engaged in work related to radio. The picture that emerges from this review is that radio is indeed the communications medium of the developing nations and that one cannot locate a place in the world so remote that it remains untouched by the penetration of radio. A pervasive sight in even the most remote corner of the world is the field worker, housewife, or youngster listening to their inexpensive but dependable transistor radios. Given the widespread use and acceptability of radio throughout the developing world, one would expect to find many

examples of research studies or systematic evaluations of the effectiveness of radio. However, the opposite is true. Virtually all persons who have reviewed educational usages of radio have reported that very little, if anything, is known in a substantial way about what brings about the effectiveness of radio in producing new knowledge, modifying attitudes, and changing behavioral practices of the people who listen. It would be accurate to sum up the current state of knowledge about radio by saying a great deal is known about the technical aspects of establishing radio stations and networks and distributing radio signals throughout the world, while at the same time, very little is known about the effects of radio on the audience or the requirements for using radio and other low-cost media to improve the quality of lives of people living in developing countries. We know how to get a radio signal around the world and beyond, yet we know little about how to arrange the content of the signal, how to coordinate this with other instructional resources, and the effect that all this might have upon the person on the receiving end of the message.

#### Contribution of the Project

As noted earlier, the specific contribution of this project to the understanding of what brings about the effectiveness in learning-by-radio concerns the long-range, stable effects produced by non-formal radio learning, as reinforced by a variety of media. Production of those long-term effects associated with variety of media will be analyzed in terms of knowledge gains, attitudinal change and behavior (practice.) This analysis will look to the varying demographic conditions of ACPO's audiences, but will be fully concentrated on the rural poor, as this is ACPO's audience itself. The results from the data analysis and evaluation should, then, add uniquely to A.I.D.'s knowledge of the long-range, stable effects of continuing learning-by-radio, as reinforced by variety of media, on the target groups. The anticipated design of the final report illustrates this; it is attached as Annex B.

Both at appropriate times during the analysis and following preparation of the report, intensive efforts will be made to acquaint managers and executives of other Latin American educational radio systems,\* with implications for them of the project's results.

---

\*and other appropriate officials

This will be done through numerous visits, a series of seminars, publications of a "manual" incorporating the projects methodology and results, plus consultation and follow-up by ACPO officials, to systems located in other countries. The purpose of these visits and consultation will be to help those systems utilize, through appropriate adaptations, the results of this project.

#### Other ACPO Programs

As noted, ACPO is an appropriate focus for this evaluation because of its unique long-life and comprehensiveness. By the same token, ACPO is also an expected collaborator with A.I.D. in several other projects, involving assistance to the rural poor, and/or potential transfer of technique to other developing countries. Specifically, ACPO currently hopes to receive A.I.D. support in the following projects and programs: (a) a long-term loan, primarily to provide equipment and adaptation of facilities to increase ACPO's capacity for expanding its radio, printing, and record-producing activities in Colombia; (b) this project, which will provide needed insights and guideposts both for increasing still further ACPO's effectiveness in Colombia and for adapting its successful techniques and methodology, as appropriate, in other countries and regions with potential for non-formal education by radio; (c) a development program grant, to provide a capacity to offer intensive, carefully-focussed training to developers of radio education in other areas throughout Latin America (and possibly other regions.)

ACPO has been asked to provide a definitive plan illustrating how the projects described above relate to its current operations, anticipated projects, and to each other. This plan is outlined in a memorandum (in Spanish) of December 15, 1975, entitled "Synthesis of the Justification for Projects Presented by ACPO to A.I.D." The memorandum itself is attached as Annex A. Basically, ACPO has developed an interrelationship between its current operations, future programs and proposed projects that consists of three dimensions. These are: (a) maintenance of current operations, (b) (domestic) expansion or institutional development, (c) international projection. While each of the proposals to some extent supports all three dimensions, it is clear that each is principally directed toward one major dimension, or, better said, may act as a bridge or link allowing ACPO to assure development from one dimension to another. Thus the loan project will help assure present operation but, more importantly, will provide the means for greatly increased domestic capability and institutional development, which should result in ACPO being able to provide significantly greater benefits to Colombia's rural poor. The present project, while obviously contributing to ACPO's domestic effectiveness, is clearly designed to assist principally in the international

"projection," as helping provide a "synthesis" of the ACPO model capable of influencing other country radio systems. Finally, the DPC is focussed almost exclusively on the international dimension, providing a direct service to other country personnel. The latter two programs, consequently, are noted by ACPO as part of its international "projection," (pg.6 of Annex A .)\*

### B. Detailed Description

The detailed description is presented in the context of a logical framework.

#### Project Goal (A-1)

This project, in accord with A.I.D.'s mandate, hopes to contribute to improvements in the health and agricultural practices of rural villagers in Latin America. It could be said that this is an ultimate objective. However, it is recognized that realization of this ultimate objective cannot be accomplished by a single project operating for two years. Therefore a more realizable, focussed project goal (which in turn will help contribute to A.I.D.'s objective) can be described as follows: to utilize radiophonic learning efficiently in providing improved health and agriculture knowledge, attitudes and practices of campesino families. To attempt to analyze how such learning may be used (more) efficiently, the project will empirically examine the effectiveness of ACPO, the most complete model in Latin America for providing out-of-school educational services to rural villages. ACPO's overall aim is to enable isolated peasants to participate in the economic, cultural, and social activities of the nation.<sup>14</sup> Its educational program focus on five areas: (a) literacy, (b) mathematics, (c) health, (d) economy and work, including agricultural productivity, and (e) spirituality. The communications system of ACPO is very complex and includes radio transmission, five specially designed booklets (each on one of the major areas of the educational system), a newspaper "El Campesino," the Campesino library, records and magnetic tapes, direct correspondence between ACPO and the Campesino, and interpersonal contacts on a local level with trained volunteers.

<sup>14</sup>It should be noted that the above description is not a translation of the ACPO name, but is meant as an interpretation of the concepts presented by ACPO in that name.

Since the model and programs of ACPO were developed on the basis of practical experience rather than through systematic evaluation and empirical studies, the overall effectiveness of the total ACPO model and the various media mixes within the model are not known. In order to examine the effectiveness of the model and the various components of the model in changing the lives of the rural peasants, an evaluation study is necessary. Although the study would be conducted in one country Colombia, the impact would be throughout the Latin American region. Since virtually every radio program in the area builds upon and utilizes the ACPO model, any changes and perfections would prove helpful not only in Colombia, but throughout Latin America.

#### Measures of Goal Achievement (A-2)

The goal of efficiently utilizing radiophonic learning can be said to have been achieved in any given area when this type of learning system is contributing significantly to changes in rural villagers (a) knowledge of, (b) attitude toward, or (c) practice of modern appropriate farming and health techniques. Significant change, in terms of this project, is defined as a 10% change in any of the three behavioral components. It should be possible to compare pre-radio learning with post-radio learning data, in given locations, to determine realization of that change. In the case of ACPO itself, data can be gathered to indicate the number and proportion of campesinos who improve their farming techniques, and their health practices, as a result of participation in the educational program of ACPO. Baseline data on control groups can be compared with data from those groups who participate in the educational programs of ACPO, to help isolate and identify those changes that are directly attributable to the educational programs of ACPO.

#### Means of Verification of Goal Achievement (A-3)

As noted above, surveys of sample populations in representative rural communities will provide the indicators. In addition, interviews with radiophonic learning systems managers will supplement this, both to help determine the spread effect of the recommendations for effective utilization of learning-by-radio and to help assess its impact on the ultimate receivers. In order to assess the degree of changes of a campesino, structured interviews and field observational techniques will be used. Primary techniques for measures of goal achievement are surveys of sample populations in representative communities, using structured interviews and criterion-referenced measures. Criterion-referenced assessment instruments are prepared to measure increases in the campesino's knowledge-level in regards to health and agricultural practices. These techniques will furnish baseline data on the overall effectiveness and impact of the educational services on the lives of the campesinos.

One of the major features of this project that distinguishes it from other projects is the emphasis on empirical data-gathering to assess the impact of education from the standpoint of behavioral change. There is considerable existing data on the incidence of listening to radiophonic schools in Latin America. To a much lesser degree there exists some data from experimental studies that indicate radio is a successful means for conveying information. That is to say, after listening to a broadcast participants are able to identify what information was presented in the broadcast. However, noticeably lacking from our knowledge about educational radio is any indication of the behavioral changes on the part of the target population for whom the programs were prepared.

#### Assumptions for Achieving Goal Targets (A-4)

The essential assumptions for achieving the goal target are that: (1) increased knowledge concerning effective methodologies of learning-by-radio will help lead to adoption of those methodologies, and (2) resources to support that adoption or utilization of the improved methodologies would be available, either through the respective host government or from some other source.

Another area that might have been included in the assumptions relates to the capability of ACPO through its multimedia programs to deliver a message to the campesino and the willingness of the campesino to participate in or to attend to the message. Previous work completed by ACPO clearly documents that the message indeed is reaching the campesino population through the radio coverage of the country and through the circulation of its periodicals and booklets. Several preliminary studies also indicate the willingness of campesinos to attend and participate in such programs. Thus there is the indication that the message will reach the campesino and that the campesino will choose to attend to the message.

Another major premise underlying this (and any similar) project is that education contributes not only to national growth, but also to the growth and economic development of the individual. This premise is mentioned because of its importance in this project. However, it should not be treated as an assumption for two reasons: (a) there is a fairly substantial body of evidence to indicate the benefit of education in terms of individual and national growth, and (b) in the course of the project, the specific contribution of the educational programs of ACPO will be measured in terms of impact on and benefit to the campesino,

#### Project Purpose (B-1)

The overriding purpose, then, is to provide empirically-based, systematized guidelines for effective utilization of learning-by-radio, as applicable in assisting rural audiences toward the project goal.

Development of those guidelines will be based, of course, on the analysis of ACPO methodology effectiveness. Project sub-purposes, consequently, are to: (a) systematically analyze the educational model of Accion Cultural Popular for providing out-of-school education services for campesinos, (b) to identify and analyze aspects which prove to be most successful in carrying out learning objectives and are cost effective and (c) develop recommendations based on that analysis which can be applied in other places in Latin America.

This evaluation will be a very comprehensive analysis of all phases of the ACPO model. which includes the use of radio broadcasts, textbooks, personal correspondence with campesinos, leadership training programs, periodicals, extension courses, records, audiovisuals, and an especially prepared library for the campesino. It will be based on results of those media influencing the knowledge, attitude and behavior of ACPO's audience. Primary technique will be surveys of sample populations in representative communities using structured interviews and criterion-referenced measures. Stratified sampling techniques will be used to obtain representative samples of the target population. Criterion-referenced assesment instruments will be prepared to measure increases in the campesino's knowledge in regards to health and agricultural practices. These instruments will be based directly on specific lesson objectives contained in the programs of ACPO. The instruments will be designed to be given orally. In order to assess the degree of behavioral changes of campesinos, structured interviews and field observational techniques will be used. These techniques will furnish the essential data on the overall effectiveness and impact of the educational services on the lives of the campesinos.

Analysis of this data will provide material for the conclusions resulting from the project. These conclusions will form the basis not only for the report of this evaluation but also for dissemination of the projects implications among radio learning systems in Latin America. The categories of expected conclusions are shown in a Tentative Outline of a Final Report, Annex B.

The ultimate aspect of the project sub-purpose involves dissemination and utilization of results of the evaluation. A portion of this will be accomplished by preparation of a manual, which describes the coordinated use of mass communication media and volunteer leaders for providing out-of-school educational services to campesinos throughout Latin America, based on successful practices indentified in the evaluation phase. The manual will be written, for use throughout the Latin American region, by persons interested in the development and management of educational programs centered around the use of radio for reaching literate and pre-literate populations

in Latin America. The manual will present the results of this project in practical terms, to describe how best to use the components of the ACPO model to achieve a variety of educational purposes.

However, while the manual will represent a concrete accumulation of knowledge, utilization of that information will be furthered by a series of activities designed to assist other radio systems in improving their effectiveness by adaptation of lessons learned from this project. A seminar will be held for key radiophonic school personnel. Visits will be made by ACPO personnel to interested radiophonic systems, and ACPO will provide intensive follow-up consultation, on continuing bases, to systems desiring to adapt aspects of the project's results. (This will also be coordinated with training programs being developed by ACPO, in part through a potential DPG mentioned earlier)

End of Project Status (B-2)

E-O-P will be marked by (1) the analysis having been completed, and (2) results and concepts of the analysis and recommendations disseminated to indicated communicators and educators in Latin America.

Given the regional nature of this project and the desire for the project to have an impact not only in Colombia but throughout the Latin American region, it is essential that adequate means of dissemination of the findings of the project be utilized both during the project and following its completion. Means of dissemination include (a) face-to-face contact with persons involved in radio education throughout Latin America, (b) seminars (to be conducted by ACPO) for key radiophonic school personnel to describe the model and results of the study of the model; (c) written dissemination prepared by CET and ACPO to be circulated throughout Latin America, to Ministries of Education, radiophonic schools, and A.I.D. missions, and (d) follow-up consultation with radiophonic systems wishing to adapt lessons learned from this project.

Several important conditions on the sub-purpose level will be achieved by the end-of-project status. These include: (1) systematic evaluation studies of the effectiveness and efficiency of the ACPO model will be completed and reports will be available indicating these results; (2) several Latin American specialists will have been trained in the skills of scientific evaluation of educational programs and will be available to assist in carrying on evaluation activities; (3) recommendations will have been developed regarding strategies found to be most effective for providing

educational services to campesinos; (4) programs for training persons in evaluation skills will have been completed, revised, and ready for additional use and dissemination; (5) ACPO will be routinely conducting evaluation studies and incorporating findings of these studies for the purpose of improving the overall effectiveness of their operation.

While these are the major results from this project, one area should also be mentioned. This relates to strengthening the capability of several institutions to provide training and technical assistance throughout Latin America in the area of out-of-school education, particularly focusing on the mass of communications media. These institutions include ACPO itself, FSU, Stanford, University of South Florida, and Florida Institute of Technology. Invaluable experience will be gained by all these institutions during operation of the project. These experiences can lead to additional impact throughout the Latin American region in future years.

#### Verification of Conditions Expected at End of Project (B-3)

Several sources of evidence will be used to verify conditions that mark the success of the project. A sample of these sources is listed below:

1. Examination of the evaluation design and methodology used in the project
2. Analysis of evaluation data collected during the operation of the project.
3. Analysis of the assessment instruments and data collection forms used in the project.
4. Examination of documents and conversations with ACPO personnel.
5. Examination of the documentation of the training program, including description of the goals, objectives, target population, and data on the effectiveness of the training program.
6. Follow-up survey of ACPO and site visitation.
7. Conversations with key Latin American educators involved in providing out-of-school education via radio who participated in the seminars offered in this project and who have reviewed the documentation prepared by the project.

#### Assumptions for Achieving Project Purpose (B-4)

It is assumed that: (1) all institutions and agencies involved in this project will cooperate and coordinate their efforts to achieve the project purpose; (2) ACPO will provide broadcast time and will assign key persons to the project (commitments to this effect have been received from Monsignor Salcedo of ACPO); (3) there will be no political or nationalistic obstruction that will prevent the project from being realized; (4) there will be approval by host country officials.

### Project Outputs (C-1)

Outputs from this project will include: (1) baseline data on the effectiveness of the radiophonic educational program of ACPO; (2) production of instructional material for the training of evaluation specialists; (3) training of Latin American personnel in the area of evaluation skills and instructional development skills; (4) data on the effectiveness of various combinations of radio, instructional materials and leaders; (5) evaluation data on the impact of radio schools on the target population; (6) seminar(s) conducted to disseminate the results of this project throughout Latin America; (7) manual prepared and available that documents the educational model of ACPO, reports on its effectiveness, and gives concrete indication of how to adopt/adapt this model in other Latin American countries; (8) consultation (by ACPO) with radiophonic systems desiring to utilize lessons learned from the project.

### Magnitude of Outputs (C-2)

1. Data on the educational model of ACPO.
2. Seven instructional modules for training in evaluation skills (each module includes goals, objectives, instructional materials and resources, and test items.)
3. At least three Latin American evaluation specialists trained at CET/FSU.
4. A report prepared presenting the results of the analysis of the effectiveness of alternative mixes of media (radio supported with print, graphics, peer tutors, etc.).
5. A report of the finding from the evaluation model. (Reports will be completed by host country with assistance of the Florida State University Systems.)
6. Evaluation team trained in Latin America by evaluation specialists.
7. Seminar(s) attended by at least 15 Latin American representatives of radio schools and ministries of education.
8. Follow-up visits to at least two Latin American radiophonic systems.

### Verification of Outputs (C-3)

There are several sources of data that can be used for verifying the magnitude of the output indicated. These include: (1) a review of reports by AID/W, FSU, Stanford; (2) site visitation; (3) survey data; (4) documentation of training programs including student performance data; (5) attendance at the seminar, and (6) participation in follow-up consultations.

Assumption for Achieving the Outputs (C-4)

There are several assumptions that must be made in order for these outputs to be realized. These are:

1. The evaluation specialists will participate in the project upon their return following training.
2. Adequate facilities and backup staff will be provided by ACPO.
3. Cooperation of ACPO, A.I.D. missions, and host government.

Project Inputs (D-1)

Inputs to the project include technical assistance provided by FSU, University of South Florida, and Florida Institute of Technology. (2) Training in the area of evaluation provided by FSUS; (3) Financial resources requested from AID/W; (4) Key ACPO staff members; and (5) Financial resources from ACPO.

Implementation Target (D-2)

<u>Activity</u>	<u>Month Completed</u>
Staffing & initial coordination	3
Plan evaluation strategy	4
Develop special training program	6
Train seminar staff	7
Analyze goals & target population of ACPO	9
Identify variables	9
Complete evaluation design and methodology	10
Select sample	10
Validate instruments	11
Hire and train field staff	13
Collect initial data (1 area)	15
Analyze data	16
Hire & train subsequent field staff	19
Collect data in other areas	25
Analyze data	27
Prepare manual and conduct seminar	29
Additional reporting	30
Follow-up consultation by ACPO (will be continuing activity)	30-36

The analysis phase will begin early enough that preliminary results should begin to emerge within a year-and-a-half from project initiation. This should not only facilitate further refinement of analysis but should also aid the dissemination process.

Budget Summary

<u>Category</u>	<u>Amount</u>
Salaries	\$308,390
Consultants	10,500
Travel and Transportation	50,363
Materials and Supplies	8,200
Other Direct Costs	24,000
Subcontract	265,925
Overhead	135,800
Total:	<u>\$803,178</u>

Part of A.I.D. support (up to \$100,000) will be furnished by reliance on the TAB utilization funds, which would be available during the dissemination phase.

Assumptions for Providing Input (D-4)

There are two assumptions related to the inputs: (1) that there are competent staffs at Florida State, ACPO, university of South Florida, and Florida Institute of Technology available to work on the project,\* and (2) that project funding is supplied by AID/w.

\*Indication of competency on the part of FSU is strengthened by a description of the work of its Instructional Systems Development Center, including CET, attached as Exhibit 1.

CET Contribution\*

Personnel	95,455
Consultants (non-FSU)	3,000
Travel and Transportation	1,500
Materials and Computer Services	6,500
Facilities	7,500
Overhead	<u>41,325</u>
	\$155,280

ACPO Contribution

Personnel	62,000
Facilities	20,000
Transportation	15,500
Reproduction and Printing	6,500
Instructional Material	3,500
Radio Programming	<u>5,500</u>
	\$113,000

Overhead (10%)	<u>11,300</u>
Total:	\$124,300

Verification of Inputs (D-3)

The inputs to this project can be verified by an analysis of the grant document between AID/W and FSU, and Letter of commitment from ACPO.

\*It should be noted that the CET and ACPO contributions represent support provided through utilization of existing personnel, facilities, et cetera. This is not additional funding and therefore is not included in budgeting schedules, although it does represent support to the total project cost, of course. In the case of CET, the personnel costs represent time of FSUS facility (largely non-CET hire) who will devote portions of their work to the project. In no case is that cost included under the A.I.D. financed budget. The detailed breakdown of CET support is attached as Annex D.

### III. Project Analysis

#### A. Technical Analysis

The evaluation and analysis proposed for this project---which is its major thrust---is thoroughly in keeping with the latest technology applicable to behavioral science measurement. Utilization of statistical random sampling techniques to obtain indicators of behavior patterns and causal factors related to behavioral changes are, of course, well accepted methods. Application of those methods to measurement of behavior among Latin American rural audiences affected by learning-by-radio is a new element. In this regard, however, the likely contractor is uniquely experienced in such efforts. The Florida State University System furnished the statistical evaluation team for AID's Basic Village Education (BVE) project, perhaps the most successful---from evaluation viewpoints---experimental learning-by-radio project developed to date. For the BVE project, the FSUS personnel developed rigorously-designed analytic models, trained teams of data collectors, supervised actual obtaining of data, developed analytic procedures, and prepared and distributed detailed description of results and program implications of the statistical analyses. It is anticipated that personnel from the same institution (University of South Florida) will provide some of the principal evaluative design and implementation for this project, thus guaranteeing the requisite technical competence.

Further assurance of adequate technical provision comes from FSU's lengthy history of furthering development of educational technology specifically designed for Latin America. FSU has successfully managed an AID contract for specific training of Latin American educational leaders in the application of country-focussed technologies to educational problems. In part based on that effort, FSU has also successfully managed a 211(d) research grant for development of innovative educational technology methods and analysis. For over six years FSU has offered continued training of Latin Americans in various aspects of educational technology under contract with OAS. The reports and reviews of the process of the 211(d) grant provide assurance that the CET/FSU institution now possesses a very high degree of capability and familiarity with analysis of the impact of modern technology in non-formal settings.

In addition, FSUS's overall capability in the field of instructional systems is well attested to. (See Exhibit 1, for a description of their activities in that regard).

ACPO itself offers particular appropriateness as the focus for analysis of this type at this time. Its staff is highly experienced. There exists both a very sound base of operation and considerable operational data on which to found the analysis. ACPO is actively pursuing re-direction of its program content, toward greater emphasis (than in the past) on increasing agricultural productivity. It is also consciously reviewing the effectiveness of its methodology, and is fully prepared to adjust its operation to accord with results indicated from this project. At the same time, ACPO is actively seeking to strengthen its ties to, and influence with, similar learning-by-radio systems and with interested Ministries of Education in other countries and areas of the hemisphere. There are sound indicators that, through ALER channels and ACPO's own contact with individual systems

and Ministries, the results and methodologies developed in this project will find wide-spread utility.

There is a distinct technical question as to whether this project is actually "do-able," this is, whether the factors bearing on knowledge increases, attitudinal change, and behavior patterns, can be sufficiently identified among ACPO's audience to produce indications of significant meaning. For this reason, an outline of the anticipated final results has been prepared. (This is attached as the Tentative Outline of Final Report, Annex B.) From that outline, it is seen that the ACPO model has six major components in addition to radio, (as well as mix of three components if viewed strictly from an ACPO participant point of view.) Results to be obtained can be broken into six categories, but focus principally on knowledge gain, attitudinal change, behavioral change, and audience characteristics, plus the interaction of these elements. While each category of results can be further broken down (by regions, et cetera) it is clear that correlations to be developed between, for example, changes in knowledge or attitude and the use of certain specific components, should produce some extremely significant indications for other radiophonic systems attempting to adapt aspects of the ACPO methodology. The question of whether this data can be adequately collected and analyzed is relatively sure, since (1) ACPO has collected a certain amount of data over the years, (2) FSU is very familiar with the ACPO setting and is taking both its opportunities and limitations into account, and (3) development of data collecting and testing instruments will be of prime concern in the project's first phase, which A.I.D. can and will monitor very carefully. In sum, while details of the contemplated data analysis must still be refined, there is sufficient indication of what will be produced, to warrant technical confidence in the project's feasibility.

A related technical question concerns the potential utility (or even replicability) of results of the project. This has been discussed at considerable length. (See section on Relationship to Other A.I.D. Projects.) The conclusion can be drawn that if results are significant, and if dissemination of those results (including explanation and promotion of the project methodology) is well managed, the lessons learned will have widespread utility throughout the hemisphere, not only for A.I.D.-sponsored projects but also for many other radiophonic programs and projects.

While there will be practically no immediate environmental impact connected with this project, there is a distinct possibility that, over the long-run, improved agricultural and environmental practices can be fostered among Latin America's rural population, through more effective use by learning-by-radio methodologies.

BUDGET SUMMARY

CATEGORY	AMOUNT
Salaries	\$308,390
Consultants	10,500
Travel and Transportation	50,363
Materials and Supplies	8,200
Other Direct Costs	24,000
Subcontract	265,925
Overhead	<u>135,800</u>
TOTAL:	\$803,178

A detailed summary is attached as Annex C, Budget Estimate. The cost estimate has been reviewed, particularly in the light of the past experience of FSU's personnel involvement in the BVE project, and appears both reasonable and technically feasible for accomplishing the project purpose. The sub-contract budget estimate includes life-of-project salaries of employees of the evaluation unit of ACPO which will be established as part of this project. On termination of the project, salaries of such employees will be picked up by ACPO, which is also prepared to increase its resources for financial independence. (See following Section, Financial Analysis.) The sub-contract budget estimate also includes travel and transportation between Colombia and other Latin American countries. Considerable portions of this item will be used to facilitate visits of ACPO personnel to facilitate adaptation of lessons learned by other learning-by-radio systems, other portions will be used to finance a seminar for education and communication officials, to help disseminate and promote the results of the evaluation. Dissemination of those results is, of course, one of the essential criteria for the project.

In sum, the project appears technically sound and feasible, and in accord with Section 611 of the FAA.

B. Financial Analysis and Plan

1. Financial Rate of Return/Viability

This project is, of course, non-revenue-producing. Total and timing of the resources required involve not only AID financing (as explained above and in Annex D) but also contributions on the part of ACPO and the Florida State University Systems. ACPO is contributing a total of \$124,300, represented by use of its facilities and equipment, previously-developed material, staff personnel other than those forming the evaluation unit,

transportation, and the communication network already developed by ACPO. The Florida State Universities will also be contributing to the project, in the approximate total of \$155,280, representing use of university (rather than CET) personnel, library, laboratory and research facilities.

The steady development of ACPO during the past 28 years---from a small local broadcaster to the country's and region's largest mass communicator---has required a continuing high-quality financial management competence. ACPO has never been exceedingly "wealthy," but has managed to steadily capitalize its operation in accord with its expansion. The most recent Colombian education sector assessment noted that ACPO's annual budget amounts to some \$3 million, and that expenditures are financed mainly from sales of educational materials, earnings and investments, (e.g. rent from buildings) and income from its commercial enterprises (printing, production of phonograph records, and radio broadcasting). A minor portion of ACPO's financing comes from donations from the Colombian government, and foreign donors. ACPO has plans for expanding its commercial enterprise capacity; it has applied to AID for loan financing to obtain equipment needed to bring about that expansion. If that expansion occurs, ACPO will be assured of full financial independence. The additional income availability would also completely assure that, following the life of this project, ACPO could fully maintain the field evaluation unit which will be established under this project, without reducing other operations. Even if that expansion does not take place, however, ACPO plans to incorporate the field evaluation unit as part of its normal operation, although this may require some commensurate reduction in operations of other departments.

As noted earlier, ACPO hopes to receive support from A.I.D. for a total of three projects, including this. As also stressed, ACPO does not view these as isolated endeavors, but has instead developed a plan emphasizing gradual increase of its own dimensions, passing from "maintenance" of current domestic operations to strengthening these, to full-scale international "projection." This plan is attached as Annex A, and has already been commented upon. (See section II.A.).

As a base for the gradual expansion, however, there must be certainty that ACPO's current financial position is sound. In addition to the indicators noted above, ACPO's director has recently provided a memorandum reviewing ACPO's financial position, illustrating that conclusion. This is attached as Exhibit 1.

For its part, the Florida State University system has amply demonstrated its financial management competence in connection with the AID projects previously noted. (See previous section). FSU's effective management of AID funds have resulted in successful projects, both in the case of contracting and as a 211(d) grantee.

In sum, there is sufficient evidence to warrant the conclusion that the principal recipient entities will be fully able to discharge their financial implementation responsibilities.

While the overall financial statements of OFF is also attached (Exhibit 3), more important to the analysis of financial viability is the time-phased budget summary for this project, particularly that related to utilization of A&D funds.

To more properly ascertain the cost effectiveness of the project as proposed, it should be read in conjunction with the implementation schedule (Annex E) and the logical framework. This also provides further indication of output unit costs. For example, by the end of the ninth month of the project, it is anticipated that ADFG evaluation specialists will have received training (as FSI) and that eleven instructional modules on evaluation skills will have been developed. While there will be other activities taking place simultaneously, of course, but assuming a certain percentage of effort directed toward the two principal outputs, it is possible to derive an estimated "crude" unit cost figure for the modules. Thus, by the end of the ninth month, the combined expenditure figure will be \$221,000. Since it is expected that approximately 60% of such expenditure will be utilized in the design of modules, (and design and conduct of training), it can be said that the anticipated trained manpower and module development will cost approximately \$91,000. Regarding further the allocation of cost involved in the two principal activities, a proportion of 6 to 3 (for module production versus training) can be arrived at. Applying this to the \$91,000 figure, it can be estimated that training will account for \$52,000, with module development costing \$39,000. Dividing the module development figure by the number of modules to be produced, gives an admittedly very "crude" figure of \$3,536 per module. Technical experts in the fields of similar type module development\*\* have supplied an approximate figure of \$2,500 as an average production cost per module. Based on this comparison, this unit cost appears cost-effective. This judgment is reinforced by comparison with FSI's own experience with development and production of evaluation modules for the IWE project. There the initial production estimation was in excess of \$12,000, with subsequent module development averaging approximately \$3,000. The expected lower cost associated with this project undoubtedly reflects FSI's increased knowledge and experience with such production.

The remainder of the budget has also been reviewed for similar comparisons and, from a technical standpoint, appears to offer sound evidence of cost effectiveness.

\* Estimation arrived at by comparison with other concurrent activities shown in implementation activity plan.

\*\* Olinch and Associates, estimation provided as of 10/15/76.

### C. Social Soundness Analysis

As noted earlier, utilization of ACPO as the base for this study is particularly appropriate to AID's primary targets for change. In Colombia, better than half (approximately 12 million) the population lives in small towns and rural areas, where lack of steady remunerative employment, social services and transportation is more characteristic than not. ACPO itself was developed as one of the first private organizations to specifically employ mass media to reach isolated rural people. While initially its main focus was on literacy training, through the years this has broadened greatly, to encompass community development, home economics and nutrition, marketing and administration, health and family planning, and most recently, a concentration on increasing agricultural productivity. Current figures show that this year ACPO has more than 15,000 radiophonic school groups in operation, with over 132,000 students from rural areas. Its five radio stations, covering all provinces in the country, broadcast 19 hours daily.

ACPO's radiophonic schools are cultural centers, usually operating within a rural home. They require a radio receiver to carry the teacher's voice, an assistant serving as intermediary between radio teacher and students, five basic education booklets, the newspaper "El Campesino", a blackboard, chalk, pencils, and notebooks. Assistants are young adults selected from rural communities and trained to act as facilitators in the radio classrooms.

To help train community leaders, ACPO has also developed three education centers, in the department of Boyaca, Caldas and Antioquia. Since 1962, this program has trained nearly 10,000 young people to work in community action programs, cooperatives, and related programs throughout the country. ACPO publishing efforts include a weekly newspaper, El Campesino (with a reported circulation of 70,000 copies, the sixth largest in Colombia), and primers in five subject areas. Studies have shown that on the average each copy of El Campesino is read by or read to ten persons, thus the newspaper audience is 700,000. ACPO also sponsors campesino speaking facilities, extension programs, and mobile units for educational programs.

With this background of assisting Colombia's rural poor in self-improvement efforts, ACPO has served as the pioneer for utilization of mass media toward similar ends in many other Latin American countries. It was the result of this which led to the formation of the Association of Radiophonic Schools of Latin America (ALER) in which most of the systems participate, and in which ACPO quite naturally is one of the stronger influences.

As might be expected, ACPO itself has been the subject of several studies. As the 1973 Colombia education sector assessment (pg. 80 C) points out, however, the studies have shared a commonality in indicating difficulties of conducting a meaningful (effective) evaluation of a program of such type and magnitude, given limitations of inadequate baseline data, insufficient feedback from the rural audiences, and numerous unaccountable variables. While, therefore, results of previous studies have been inconclusive in terms of indicating most effective methodologies, there is a demonstrated desire for this knowledge on the part of ACPO's executives and managers, plus a commitment to continued improvement. As the 1973 assessment noted, (pg. 80 C) "ACPO hopes to be able to undertake significant studies of effectiveness of its education programs." (This project will provide the support for realization of that effort). Given that background, then, the feasibility of conducting the project in accord with the socio-cultural framework appears sound.

Social effects of the project may be considered two-fold. The most immediate result, of course, will be the probable impact on ACPO itself. With increased knowledge of what factors can be utilized most efficiently toward increased effect on its audience, ACPO should be able to modify its programs toward achieving both a broader impact (for more people) and more effective behavioral change, in terms of more dramatic, longer-lasting economic and social improvements for Colombian's rural poor. One facet of this should be increased effectiveness in ACPO's recent emphasis on increasing agricultural productivity. The consideration of sound knowledge upon which to base programming decisions, coupled with ACPO's policy-decision to accent agricultural productivity, can help produce marked improvements in productivity of ACPO's own rural audience.\*

However, the expected longer-range impact of this project is what prompts funding as a regional project. Results of the analysis of ACPO's methodology effectiveness will form the central core for potential improvement in the operation of many of the 16 radiophonic networks which currently operate in Latin America. Many of these have as their principal

---

\* ACPO's decision to "re-focus" its message toward increased productivity is supported by Mission-funded technical assistance.

audience(s) segments of the rural poor which are similar to ACPO's listenership. It is anticipated that the "spread effect" on this project will be concentrated in the analysis and recommendations for increasing effectiveness of learning-by-radio methodologies. Adoption of such recommendations by other radio systems can have an extremely widespread benefit incidence on audiences of what is the widest-used mass media in the continent. For this reason, the communication - utilization phase of this project is of particular importance. Special stress will be devoted to this. (See section on Implementation). As noted, ACPO's active membership in ALER and its marked acceptability with Ministries of Education and Communication will assist greatly in this phase.

#### D. Economic Analysis

Since this project consists principally of technical assistance and training leading to an evaluation and analysis of an on-going operation, it is not possible to provide any quantitative analysis of the economic benefits of this project per se. However, since the principal objective is to increase the effectiveness of learning-by-radio systems, it is possible to estimate an expected intermediate rate of return, based on current expenditures of such systems. Looking at ACPO (as the most directly affected example), researchers at FSU have estimated that effectiveness of ACPO's overall programming should be increased by a minimum of at least 3%.\* Applying this to ACPO's annual expenditure figure of more than \$3 million gives a figure in excess of \$90,000. For the approximately 2½ year life-of-project, this represents a total of \$235,000. Comparing this with the total AID funding figure of \$803,000 produces a rate of return figure of more than 25%. However, this figure is clearly far too low, as it does not take into account the probability of spread effects, that is, utilization of recommendations for improvements in methodology, which is actually one of the principal objectives of the project. (See preceding section for discussion on this point).

Finally, the ultimate impact of the project is designed, of course, to be felt by the audience of rural poor of enrolled "ACPO listeners". Using only the current figures, the 110,000 annual number and applying to that a minimum annual wage figure of \$410/per year, \*\*an improvement of only 1% in

---

\* Actually, FSU's researchers estimate that a total life-of-project increase might reach 8 to 10%. Performing conservative division by years gives a minimal 3% annual increase.

\*\* Supplied by Sector Analysis Division (average annual income per rural worker, based on Colombian agricultural sector analysis.)

increased effectiveness caused (principally or partially) by ACPO-promoted improvement, would mean a return of more than \$400,000 yearly for ACPO-affected listeners. Over the life-of-project this would amount to far more than the total project cost. Obviously this is simply speculation, however, and should not be used as an economic indicator of success. What it does illustrate, however, is what is behind this project, that is the attractiveness of potential effective utilization of radio in development efforts, by virtue of its pervasiveness at relatively low cost.

#### IV Implementation Arrangements

##### A. Administrative Arrangements

###### 1. Recipients

As noted earlier, the key recipient organizations are (1) FSU's Center for Educational Technology (CET) and (2) Accion Cultural Popular (ACPO) in Sutatenza, Colombia. As also noted, the managerial capacity of both organizations is very sound. The past successful history of cooperation between CET and ACPO warrants assurance that the procedures proposed for this project will achieve the required functional coordination. Actually, the already - established functioning relationship between ACPO and CET helped act as a spur to development of the project.

Administratively, the only additional unit contemplated in this project will be ACPO's Field Evaluation Unit. (Plans for its financial support have already been discussed). Following training of its key personnel, this unit will be made part of ACPO's executive staff. Its principal role for ACPO will be that of feeding back into ACPO programming and procedure the results of empirical analysis and evaluation. ACPO has thoroughly recognized the desirability of such a function, and anticipates assigning several of its top-level personnel to the evaluation unit.

Administrative participatory involvement of the ultimate target population is, of course, one of ACPO's strengths. The already-developed chain of communication to and with the campesino population---through their participation as ACPO trainees, community leaders, and such efforts as El Campesino---and large monthly correspondence presents an almost ideal base for this involvement. This is perhaps the overwhelming factor for focussing the project on the ACPO system.

Finally, administrative factors involved in distribution of the analytic results and recommendation present no problems either. CET is well accustomed to providing Latin America educators with results of training seminars and studies; for this, they have at their command a remarkably thorough informal communication and administrative network, thanks to past projects. ACPO likewise has a very wide network of colleagues in radiophonic learning, as has already been stressed. Between the two, there should be no problem, from an administrative point of view, in carrying out this phase of the project.

2. A.I.D.

This project should not require any unusual administrative arrangements from A.I.D. As it is a regionally-funded project, it will be monitored by AID/W, specifically by LA/DR/EST. The Colombia Mission will also help provide administrative support, particularly in the sense of on-site tracking of project progress. In the case of both the AID/W office and the Mission, there is a great deal of almost-continual communication and coordination with both CET and ACPO. LA/DR/EST estimates that the project will require approximately 10 man-days per year of TDY, and that no additional staff will be needed for monitoring purposes for this project. The method of A.I.D. disbursements will be on a reimbursable grant basis.

B. Implementation Plan

The plan and schedule for project implementation is shown in the planned Performance Tracking Network Chart, Annex E. Reference is made to that and to the accompanying list of Key Events. It should also be noted that the PPTC contains a schedule for monitoring critical progress indicators, which will be utilized by AID/W (and/or USAID Colombia) to review the progress of the project.

Referring to the PPTC, then, the initially noted item is the relatively brief time allotted for contractual and coordination arrangement. This reflects the relatively advanced, on-going cooperation between ACPO and FSU. In effect, contract arrangements will represent confirmation of already existing plans, rather than new arrangements. AID/W (LA/DR/EST) is prepared to move rapidly on this phase.

Of particular importance in initial phases will be the initiation of plans for the Evaluation, Strategy, Design and Methodology. Especially important will be the utilization of already available data, supplied by ACPO, to form the basis of a "base-line" analysis determining the make-up and initially-determined behavior characteristics of the target audiences. From this, plus additional supplementary data (which further contact with and analysis of ACPO listenership can provide), the process for the overall evaluation design, methodology and procedure will be developed.

Since the entire purpose of this project is evaluation, initiation of that process is scheduled to take place at an early date. By the ninth month of the life-of-project, analysis of the ACPO model will be complete and variables to be stressed in the evaluation identified and described. Evaluation design will be completed during the following month, and a sample area for in-depth survey selected. Data from that area will be fully collected by the 15th month, and analysis of this done by the 16th month, so that initial results of the project will be available in less than a year and-a-half following project approval. (This will be facilitated, in part, by availability of data previously collected by ACPO).

Further in-dept analysis will proceed, with data on other areas completely collected by the end of the second year of the L-O-P, and analysis of this completed three months later. The report, as tentatively outlined in Annex B, will be completed during the 27th month, and dissemination, analysis and promotion of its results (to assure its utilization) will occupy the remainder of the L-O-P, with follow-up visits and consultation by ACPO personnel to other Latin American radiophonic systems continuing on beyond the end of A.I.D. funding.

Throughout the project, CET and ACPO personnel will work closely together. There are two principal dimensions to the project, however, and in each CET will be looked to for provision of the most crucial element, to start with. The design and conduct of training in overall evaluation methodology (for the key ACPO executives who will be the nucleus of the organization's field evaluation unit) will be CET's responsibility primarily. Almost simultaneously, and in similar fashion, initial development of plans for the evaluation, including analysis of the ACPO model, will be carried out mainly by CET personnel. As both planning and training progress, the functions will begin to merge operationally. Final preparation of evaluation instruments and training of the evaluation field staff will, in effect, be a joint operation, which will also be characteristic of the actual field collection of data, although in this phase most of the logistic support will be carried out by ACPO. The major analysis components, however, which require computer use, will be supplied by CET. Development and preparation of the analyses reports and recommendation, including the comprehensive manual, will be a joint responsibility, as will the presentation of the seminar, although this will be offered under ACPO auspices.

The appropriate grant for this project will be a contract with CET, with a sub-contract to ACPO.

### C. Evaluation Arrangements

This entire project is basically application of analytical evaluation processes. Explanation of the techniques involved has already been presented. However, evaluation of the project itself will take two forms. One will be the "normal" evaluation, or checking, upon project progress. This will be accomplished through monitoring critical progress indicators, according to the schedule shown as part of the Project Performance Tracking Chart (Annex B). As shown in the bottom portion, the monitoring required will be more intensive during the early stages of the project and less so during later stages. An evaluation committee will be formed, chaired by LA/DR/EST and including representatives of LA/DP and the Country Desk. The committee will review not only progress of the project but also advisability of changes in logical framework, performance tracing, etc. It is anticipated that results of the monitoring will be summarized in PAR(s) or other similar documents.

The other form of evaluation, however, is an attempt to evaluate the overall effect of the project. Two phases make up this evaluation. The first will be an examination of the analysis and recommendations developed in the project. Specifics of this appear as part of the logical framework as means of verification of achievement of (1) the project purpose and (2) the sub-purpose. See Annex A. The other phase is longer-range. To ultimately determine effectiveness of this project, an evaluation should be performed approximately three years following the project termination date. This evaluation should also consist of two parts. First will be on-site observation of actual practices of radiophonic systems, including ACPO's, to determine whether or not methodologies recommended as result of this project have actually been adopted, and what experience has shown regarding them. Finally, sample surveys should also be taken of campesinos within those areas where the recommended methodologies have been used (as well as in some control areas) to determine as much as possible what effect adoption of those methodologies did in fact produce on knowledge, attitude and behavior. This in, effect, would be the "proof" completing the cycle.

It should be noted additionally that long-range evaluation for at least most portions of this project will be feasible even though A.I.D. will not be associated with the project at that time. As mentioned previously, ACPO will be maintaining the project-created Field Evaluation Unit beyond the life-of-project. That unit, in light of both training and experience provided in the project, will be fully capable of carrying out the long-range evaluation.

D. Conditions, Covenant, and Negotiating Status

There are no special conditions precedent or host country actions proposed for execution prior to authorization of the Project Agreement. Actually, as has been noted, the project represents continuation and intensification of already existing cooperation between CET, ACPO and to a considerable extent, also AID/W, as well as USAID/Colombia. The essential parts of the Project Paper have been thoroughly reviewed with CET representatives and with ACPO executives. All parties are well aware of their responsibilities and thoroughly prepared to carry them out in accordance with respective time schedules, personnel, and budgetary implications.

MEMORANDO

A : Sr. James Smith  
Departamento para América Latina  
A.I.D. Washington

De: Rodrigo Cabrera G.  
Asistente Planeación  
Acción Cultural Popular

Materia:  
Síntesis de la justificación de los  
Proyectos presentados por ACPO a la  
A.I.D.

Bogotá, 15 de Diciembre de 1975

Acción Cultural Popular de Colombia, Institución Privada dedicada a la Educación Campesina desde 1.947, ha venido desarrollando sus actividades apoyada en lo financiero por sus llamadas unidades de producción (Editorial Andes, Editora Dosmil, Prensadora de Discos, Radio Sutatenza), las cuales conjuntamente con recursos provenientes de algunas Agencias de Desarrollo Internacionales han generado los recursos necesarios para el desarrollo de dicha Obra.

Ha sido una preocupación fundamental de la Institución la generación de recursos financieros denominados Recursos de Autofinanciamiento, los que son resultantes de la explotación comercial de sus llamadas unidades de producción, las cuales utilizan el tiempo "marginal" de producción cultural a trabajos de este tipo.

La demanda creciente de los servicios culturales de la Institución de parte del sector campesino y del Estado Colombiano están obligando a la Institución a desarrollar grandes esfuerzos para mantener sus actuales índices de servicios, si a esto le sumamos los cambios fundamentales que se han experimentado

en el sector económico en función de las sostenidas crisis internacionales, debemos concluir en la necesidad de que la Institución adecúe sus fuentes de financiamiento y de generación de recursos a las nuevas realidades, tanto nacional como internacional.

Es una necesidad imperiosa el de crear una mayor participación de los sectores campesinos en las tareas del desarrollo nacional, participación ésta que debe estar referida a unos cambios sustantivos en las técnicas de producción y mercadeo, grados de educación, y tecnificación de la mano de obra. Esta importante tarea que podríamos denominar "desafío" obliga y compromete a una Institución del arraigo de ACPO, en los sectores campesinos, a no solo mantener sus actuales índices de servicios, sino por el contrario, a desarrollarlos en función de los requerimientos propios del desarrollo nacional.

Creemos que experiencias tales como la de ACPO, deben necesariamente trascender las dimensiones nacionales y ser ejemplo para otros países comprometidos en la misma forma en la tarea del desarrollo, este principio nos mueve a buscar las formas de diseminación de la experiencia ACPO hacia otras naciones.

Lo anterior nos enfrenta a tres situaciones o principios diferentes, los cuales nos demuestran la interrelación existente entre cada uno de los sub-proyectos sometidos a consideración de AID. Estos tres principios son:

- A - Mantenimiento de los actuales índices de servicios.
- B - Incremento o desarrollo institucional.
- C - Proyección Internacional.

#### A - MANTENIMIENTO DE LOS ACTUALES INDICES DE SERVICIOS

La confiabilidad del mensaje de ACPO, obliga a la Institución a un mantenimiento constante de los índices de sus servicios. Si consideramos el mantenimiento de la acción en términos puramente "estáticos", esto significa el que en una economía sana una institución podría preveer fácilmente la inversión requerida y los gastos que para los efectos de esa acción son necesarios. En el caso de Colombia, país este que no escapa a los efectos de la crisis económica mundial, esta no es la realidad, sino al contrario, deben efectuarse mensualmente correcciones monetarias para que en función de los costos de las materias primas, sueldos y salarios, transportes y energía, para citar algunos ejemplos, puedan producirse en el mismo volumen los servicios.

Esta realidad va mermando progresivamente las reservas y capacidad financiera de la Institución. Para corregir esta difícil situación se ha recurrido a AID para que a través de un préstamo invertido en una nueva línea editorial, la Institución esté en condiciones de generar unos recursos "Financieros de Corrección".

En síntesis, el llamado préstamo permitirá incorporar una línea de producción editorial a las actuales que posee Editorial Andes, la cual en el empleo de su tiempo marginal o comercial generará los recursos necesarios para afrontar los mayores costos de papel, energía y mano de obra.

B - INCREMENTO O DESARROLLO INSTITUCIONAL

5

No solo el aumento vegetativo de la población nacional condiciona la mayor necesidad de servicios culturales. Creemos que estos guardan íntima relación con las prioridades del desarrollo, en el caso Colombiano donde la economía está sustentada en gran parte en lo que "pueda hacer o producir" el sector campesino, una Institución como ACPO debe permanentemente adecuar su extensión a estas tareas. La participación tan deseada del sector campesino en las tareas del desarrollo nacional, referidas estas a cambios en las técnicas de producción y mercadeo está obligando a la Institución a extender cada vez más sus servicios.

El incremento de los servicios necesariamente obligará a la Institución a una adecuación administrativa y financiera. El actual ordenamiento requiere de una fuerte "inyección" financiera que le permita responder adecuadamente no solo a la demanda de mayores servicios, sino que al compromiso que tácitamente ha asumido la Institución en el desarrollo del país.

La adecuación administrativa y financiera de la Institución solo podrá lograrse a través de un Capital de Trabajo que venga a corregir situaciones financieras tales como las derivadas de la no inclusión de los overhead de los proyectos desarrollados hasta la fecha y que tantos trastornos vienen causando, esto para citar un ejemplo, podríamos referirnos a las implicaciones del aumento de los intereses bancarios, etc. etc.

Si bien es cierto que es una condición indispensable para el desarrollo Institucional la adecuación administrativo-financiera, estamos seguros que el lograr a través de AID una donación para estos efectos, debe ser el resultado de un minucioso estudio tanto de factibilidad administrativa como de posterior inversión de los recursos.

La lógica derivada de nuestra experiencia nos obliga a preveer hoy más que nunca, unas acciones que redunden en el desarrollo de ACPO.

#### C - PROYECCION INTERNACIONAL

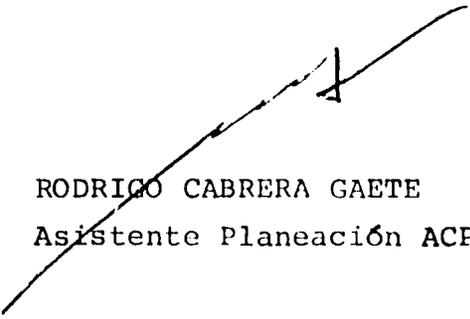
Decíamos en un comienzo que es necesario el aprovechar experiencias tales como las de ACPO, en programas de desarrollo en otros países de la región. Este convencimiento es derivado del interés demostrado por las Agencias de Desarrollo Internacional y los países de la región en nuestra experiencia. ACPO al comprometerse en esta acción que podríamos denominar de "diseminación" de su experiencia, requiere de una adecuación o más bien creación de un mecanismo para tales efectos. Este mecanismo lo hemos denominado División Internacional.

La División responsable de estos programas debe contar con un adecuado programa de Asistencia Técnica el cual está derivado del proyecto que conjuntamente con el CET de Tallahassee, se comenzará a desarrollar próximamente.

ACPO y CET buscarán el concebir una síntesis del modelo ACPO susceptible de ser diseminado a otros países de la región.

En síntesis, la acción internacional está condicionada por dos cuestiones fundamentales que a su vez originan dos sub-proyectos sometidos a consideración de AID.

1. Creación de un mecanismo institucional, el que se logrará a través del proyecto División Internacional presentado en Washington.
2. Síntesis programática y creación de un módulo denominado: Modelo ACPO, previsto en el proyecto presentado a AID por CET de Tallahassee.



RODRIGO CABRERA GAETE  
Asistente Planeación ACPO

**SUMMARY OF THE JUSTIFICATION  
OF THE PROJECT PRESENTED TO  
A.I.D. BY ACTO**

**Bogotá, Enero de 1976**

Acción Cultural Popular (ACPO) is an autonomous foundation which was chartered by the Colombian Government in 1949. It is an Institution dedicated to campesino education and has undertaken programs at a national level since 1947.

ACPO'S programs have been financed by its production units ("Editorial Andes", "Radio Sutatenza", "Editora Dosmil" and "Prensadora de Discos"), which in conjunction with funds donated by the Colombian National Government and International Development Agencies, have generated the necessary resources for the development of the task.

The generation of financial resources, "Self financing Resources", has been a fundamental preoccupation of ACPO. These resources have been a result of the commercial use of the units of production, which utilize their cultural production "marginal" time on work of this type.

The growing demand for ACPO's cultural services on the part of the campesino sector and of the Colombian state is compelling the Institution to develop great efforts in order to maintain its present services indexes. If we add to this the fundamental changes which have taken place in the economic sector in relation to the international crises, we should conclude that the Institution (ACPO) must improve its financial sources and the generation of resources in order to meet the new national and international realities.

The creation of greater participation by the campesino sector in the task of national development, commits and compels an Institution of ACPO's steadfastness and credibility to not only maintain its indexes of services but to increasingly develop them.

We believe that experiences such as ACPO's should transcend and be an example for other nations committed to the tasks of development and social change. Consequently, ACPO searches for ways in which to communicate its experience.

The preceding confronts us with three situations, which when examined together show the existing interrelationship between each one of the sub-projects submitted to A.I.D. for consideration. These situations are:

- a) Maintenance of the present services indexes.
- b) Increase in institutional services and development.
- c) International Projection.

A. Maintenance of the Present Services Indexes

ACPO's services are oriented toward a population which is in constant movement and rapid growth. These characteristics of the target population make the services more and more necessary and consequently regular production indexes cannot be maintained.

When we speak of production indexes, we refer to the printing of didactic materials, radio messages, leaders of opinion and central administration of the programs.

If ACPO's action were developed within a sound national economy, the Institution could easily foresee the investments and expenses that are required for operating purposes. In other words, it could control its financial development.

In the case of Colombia, this is practically impossible, the country being unable to escape the effects of the international monetary crisis, whose characteristics can be cited as: constant monetary adjustments, increases in natural resources, salaries, energy and transportation. This makes it impossible to produce the same volume of services with the same investments from one year to another.

This progressively decreases the reserves and financial capacity of the Institution. To correct this difficult situation an appeal

has been made to A.I.D. so that through a loan, to be invested in a new printing line, the Institution will be able to generate "Corrective Financial" resources.

In summary, said loans will make it possible to add printing production line to the ones presently owned by "Editorial Andes". This, with the use of its marginal or commercial time, will produce the necessary funds to cover the major costs of paper, energy and labor.

B. Increase of Institutional Services and Development

The rapid increase of the national population alone does not make cultural services a major need. We believe these are closely related to the development priorities in the case of Colombia, where the economy is maintained, on the most part, by what can be "made or produced" by the campesino sector. An Institution such as ACPO should constantly improve its efforts in these tasks. The desired participation of the campesino sector in these national development tasks, such as change in production and marketing techniques is compelling the Institution to extend its services more and more.

The increase in services will necessarily compel the Institution to improve administratively and financially. The present situation requires a strong financial "boost" in order to make it possible

to adequately respond not only to the demand of increase in services, but also to the commitment of the Institution to the development of the country.

The administrative and financial improvements of the Institution will only be achieved by means of a "working capital", which will correct financial situations such as those caused by the exclusion of the overhead of the projects developed to date and which are causing problems; and to cite another example, we could refer to the implications of the increase in bank interests.

Given that administrative and financial improvement is absolutely necessary for institutional development, we are aware of the fact that to obtain a donation to this effect from A.I.D. will only come as a result of a careful feasibility study of the administration and subsequent investment of the resources.

C. International Projection

We have already stated that it is necessary to take advantage of experiences, such as those of ACPO, in the development programs of other countries of the region. This belief is based on our experience of the interest shown by the International Development Agencies and the countries of the region. Upon committing itself to this action of "disseminating" its experience, ACPO requires

an improvement, or rather, a creation of a mechanism for such effects. We have called this mechanism "International Division".

The Division responsible for these programs must be able to count on an adequate Technical Assistance program, and this is derived from the joint project with CET of Tallahassee, which will be developed shortly.

ACPO and CET will try to summarize a model of ACPO which can be easily disseminated in other countries of the region.

In summary, the international action is conditioned by two fundamental questions which in turn are the basis for two sub-projects which have been submitted to A.I.D. for consideration:

1. The creation of an institutional mechanism, which will be achieved through the International Division project presented in Washington.
2. Synthesis and creation of a module called: "ACPO Model", foreseen in the project presented to A.I.D. by CET of Tallahassee.

Tentative Outline of Final Report  
FSU/ACPO Evaluation Project

I. Introduction

A. History and Setting of ACPO

- 1) Socio-cultural context
- 2) Characteristics of Colombia Campesino
- 3) Historical description of ACPO (1947-present)
- 4) Goals & objectives of ACPO

B. Description of ACPO Model from organization point of view

1) Organization

- a) organizational chart
- b) description of each unit
- c) functions of each unit

2) Components

- a) Radio
- b) Cartellias
- c) Biblioteca
- d) Newspaper
- e) Institutes
- f) Volunteers
- g) Correspondence

C. Description of ACPO Model from participants' point of view

- 1) Radio school
- 2) Use of materials and leaders
- 3) Service available

II. Evaluation Plan

A. Introduction

B. Evaluation Design and Methodology

- 1) Objectives
- 2) Design
- 3) Measured variables indicators & instruments
- 4) Sample

## II. Evaluation Plan

### C. Evaluation Procedures

- 1) data collection techniques
- 2) interviewer training
- 3) interview format
- 4) data analysis

## III. Results based on empirical data

### A. Summary of Effectiveness

- 1) Total Program
- 2) By regions
- 3) By component
- 4) Comparison of participant, listener, non-participant

### B. Data on learning gains

- 1) Total Program
- 2) By regions
- 3) By component
- 4) Comparison of participant, listener, non-participant

### C. Data on attitudinal changes

- 1) Total Program
- 2) By regions
- 3) By component
- 4) Comparison of participant, listener, non-participant

### D. Data on behavioral changes

- 1) Total Program
- 2) By regions
- 3) By component
- 4) Comparison of participant, listener, non-participant

### E. Data on characteristics of audience

- 1) Total Program
- 2) By regions
- 3) By component
- 4) Comparison of participant, listener, non-participant

### F. Interactions of audience characteristics and effectiveness

- 1) Total sample
- 2) By region
- 3) By indicator
- 4) Comparison of participant, listener, and non-participant

#### IV. Results based on observation and anecdotal evidence

- A. Changes occurring as a result of participation in ACPO
- B. Unanticipated outcomes
- C. Relationship of ACPO to development programs sponsored by Colombian government

#### V. Cost and effectiveness analysis

- 1) cost analysis
- 2) cost-effectiveness of components

#### VI. Conclusions and Recommendations

- A. Strengths
- B. Targets for improvement
- C. Limitations of ACPO Model
- D. Methods for increasing effectiveness
- E. Suitability of ACPO Model for other Latin American countries
- F. Suggestions for adoptions based on cost-effectiveness analysis

## FSU/ACPO Evaluation Project

BUDGET ESTIMATE  
(30 months)

Principal Investigator - 7.5 man-months	\$ 21,000
Project Director - 20 man-months	38,400
Professor - 9 man-months	19,500
Senior Research Associates - 24 man-months	52,800
Research Associates - 40 man-months	60,000
Secretary - 30 man-months	21,000
Clerk-typist - 20 man-months	8,000
	<u>220,700</u>
Graduate assistants - 120 man-months	51,000
	<u>\$271,700</u>
Fringe Benefits (14.85% of \$220,700)	32,774
Unemployment Compensation (0.6% of \$271,700)	1,630
Health Insurance (150.5 man-months at \$15.19)	2,286
	<u>\$308,390</u>

## CONSULTANTS

40 man-days at \$150	6,000
Travel 10 trips at \$450	4,500
	<u>\$ 10,500</u>

## TRAVEL &amp; TRANSPORTATION

Airfare:	
20 Round trips in U.S. at \$250	5,000
32 Round trips U.S. to Colombia at \$450 (FSU Project Staff)	14,400
10 Round trips Colombia to U.S. at \$450 (ACPO Project Staff)	<u>4,500</u>
Per Diem	
80 Days in U.S. at \$30	2,400
275 Days in Latin America at \$35 (FSU Staff)	9,625
350 Days in U.S. at \$25 (ACPO Staff)	8,750
12 Days in travel status at \$24	<u>288</u>
Excess Baggage Allowance	
8 Round trips Colombia to U.S. at \$75	600
Incidentals	
35 Trips at \$60	2,100
30 Trips at \$90	<u>2,700</u>
Total Travel:	<u>\$ 50,353</u>

## SUBCONTRACT BUDGET ESTIMATE

### SALARIES

Project Director - 20 man-months	\$ 30,000.00
Research Associates - 48 man-months	48,000.00
Research Assistants - 60 man-months	48,000.00
Secretary - 27 man-months	10,800.00
Clerk Typist - 27 man-months	9,450.00
Student Assistants - 175 man-months	<u>52,500.00</u>
	\$198,750.00

### TRAVEL AND TRANSPORTATION

Airfare - 20 Round trips Colombia to other Latin American countries at \$500	10,000.00
Per Diem - 120 days at \$40	4,800.00
Incidentals - 20 trips at \$100	<u>2,000.00</u>
	\$ 16,800.00

### MATERIALS AND SUPPLIES

Office	2,200.00
Survey	5,000.00
Instructional	<u>3,000.00</u>
	\$ 10,200.00

### OTHER DIRECT COSTS

Communications	6,000.00
Postage and Shipping	1,000.00
Duplicating and Reproduction	3,000.00
Preparation of publications and reports	<u>6,000.00</u>
	\$ 16,000.00

### OVERHEAD

	Total Direct Costs	\$241,750.00
10% of \$241,750 (All Direct Costs)		<u>24,175.00</u>
	GRAND TOTAL ESTIMATED COST:	\$265,925.00

BUDGET  
Page Two

MATERIALS & SUPPLIES

Office	\$ 1,800
Instructional	3,400
Survey	<u>3,000</u>
	\$ 8,200

OTHER DIRECT COSTS

Computer Services	6,500
Communications	7,500
Postage and Shipping	3,000
Duplicating and Reproduction	6,000
Health Insurance (for Latin American Research Associates and Assistants during training in Tallahassee)	500
Passport/visa fees, immunizations	<u>500</u>
	\$ 24,000

SUBCONTRACT

See separate attached budget \$265,925

OVERHEAD

50% of \$271,700 (Direct Labor) 135,850

GRAND TOTAL ESTIMATED COST:

BUDGET SUMMARY

CATEGORY	AMOUNT
Salaries	\$308,390
Consultants	10,500
Travel and Transportation	50,363
Materials and Supplies	8,200
Other Direct Costs	24,000
Subcontract	265,925
Overhead	<u>135,800</u>
TOTAL:	\$803,178

## ANNEX D

## CET Cost Sharing (30 months)

PERSONNEL

Professor	15%	9,375
	20%	14,000
Assoc. Professor	20%	11,250
	10%	5,750
Asst. Professor	20%	9,250
Research Associate		
	10%	4,625
	10%	4,000
	15%	9,750
Technical Associates		
	20%	7,500
Secretarial	Two (2) at 30% time	8,100
		<u>77,850</u>
Graduate Students		
	Two (2) at 25% time	<u>4,800</u>
	TOTAL PERSONNEL	92,650
Fringe Benefits	14.85% of \$77,850	11,500
Unemployment Compensation	0.6% of \$82,650	496
Health Insurance	75 man-months at \$9.98	<u>749</u>
		\$95,455
Consultants	20 man-days at \$150	3,000
Travel and Transportation		1,500
Instructional Materials		1,500
Computer Services	(instruction & data analysis)	5,000
Facilities		
	(instructional space, media facilities, library)	7,500
Overhead	50% of \$82,650	<u>41,325</u>
		\$155,280



**LIST OF KEY EVENTS FOR ACHIEVEMENT  
OF PROJECT PURPOSE**

1. Project Approval Obtained
2. Contract(s) Signed; Coordination and staffing begun; Evaluation strategy planning begun; Design of training program begun
3. Staffing and coordination complete
4. Evaluation strategy planned: Analysis of ACPO goals and target population begun; design of field instruments begun
5. Special training program developed
6. Training complete
7. Analysis of ACPO model and target population complete; variables of evaluation identified
8. Evaluation design and methodology complete; sample for survey selected
9. Instruments field-tested and validated
10. Field staff fully trained
11. Sample data (from sample area) fully collected
12. Analysis of initial data complete
13. Field staff for subsequent (other areas) prepared
14. Data for other areas fully collected
15. Data analysis completed
16. Report completed, manual prepared. Seminar conducted.
17. Additional (supplementary) reporting completed. Follow-up Consultation to other radiophonic systems underway.
18. Continuing consultation by ACPO (not funded as part of this project)

## THE INSTRUCTIONAL SYSTEMS DEVELOPMENT CENTER

Mission

The mission of the Instructional Systems Development Center is three-fold: (1) to improve and economize educational programs through the application of research and technology; (2) to broadly engage in developmental research on all aspects of education; and (3) to provide training and technical assistance to educational agencies and institutions.

In the conduct of its mission, both within and outside the United States, ISDC cooperates with the University's academic departments and other support units.

Education has not traditionally had available to it the mechanisms and resources for the systematic improvement and upgrading of its teaching processes. Instructional reform has been an evolutionary process, too slow to keep pace with changing societal demands, and only minimally responsive to the needs for increased efficiency and effectiveness. Yet, the relatively new discipline of Educational Technology, combining knowledge and techniques from modern management science, communications technology, and the behavioral sciences appears to have much to contribute to improved educational practices. ISDC is a response to the need to bridge the gap between new research knowledge and products and their operational use in education.

In the fall of 1968 a group from Florida State University met with members of the Florida House Education Committee. Student enrollments and the associated total annual cost of education in Florida were extrapolated through the year 1980. By also projecting the growth of state revenues for

this twelve year period, it was evident that cost of education would exceed the state educational budget somewhere between 1978 and 1980. The recent energy crisis, the depressed economy of the state and the increased inflationary rate, were not anticipated in 1968 and the threat of bankruptcy of Florida's state educational system is occurring earlier than had been estimated. The problem of too few resources to provide the kind and level of education needed is not a problem unique to Florida, but is being experienced by all other states and nations.

The responses that can be made to this problem in Florida or elsewhere are limited.

State income could be increased through heavier taxation of Florida's citizens.

Educational costs could be reduced by restricting access of students to free public education, an alternative being considered seriously by the State University System today.

Educational quality could be diluted by simply spreading the fixed resources over larger and larger number of students.

Or, alternative means could be found by which instruction could provide instruction more economically without diminishing its quality.

In recognition of these general problems, Florida State University created some organizations several years ago which now comprise the Instructional Systems Development Center. The Instructional Systems Development Center (ISDC) is tasked by the university to change and improve instruction. ISDC's first priority is in the improvement of the teaching-learning process on the FSU campus. However, ISDC is being used as a resource for instructional improvement by other off-campus education and training groups as well. For example, through the use of funding from outside the university budget ISDC

has worked to support teaching improvement projects in Florida county school districts. It has also been involved in project work for several federal agencies, such as the Department of Defense, the Department of Labor, and several others. Finally, ISDC has had substantial participation in a number of national educational reform programs in foreign countries.

In efforts to improve instruction at Florida State the focus is on learning outcomes rather than on teaching processes. The ends of education should determine the means! The effectiveness and efficiency with which instruction can lead to well-defined learning outcomes can be measured. ISDC emphasizes four dimensions of the instructional improvement process. These are 1) the quality of the student's learning, 2) the time required for the learning, 3) the cost of the instruction, and 4) learning opportunities are maximized for the largest number of students. Clearly these are not unrelated conditions. Quality may be improved through either increasing expenditure or by allocating more time to the process. However, what is systematically sought are educational programs which result in the greatest qualitative yield and the widest opportunity for learning that require the least time and the least money.

### Organizational Capability

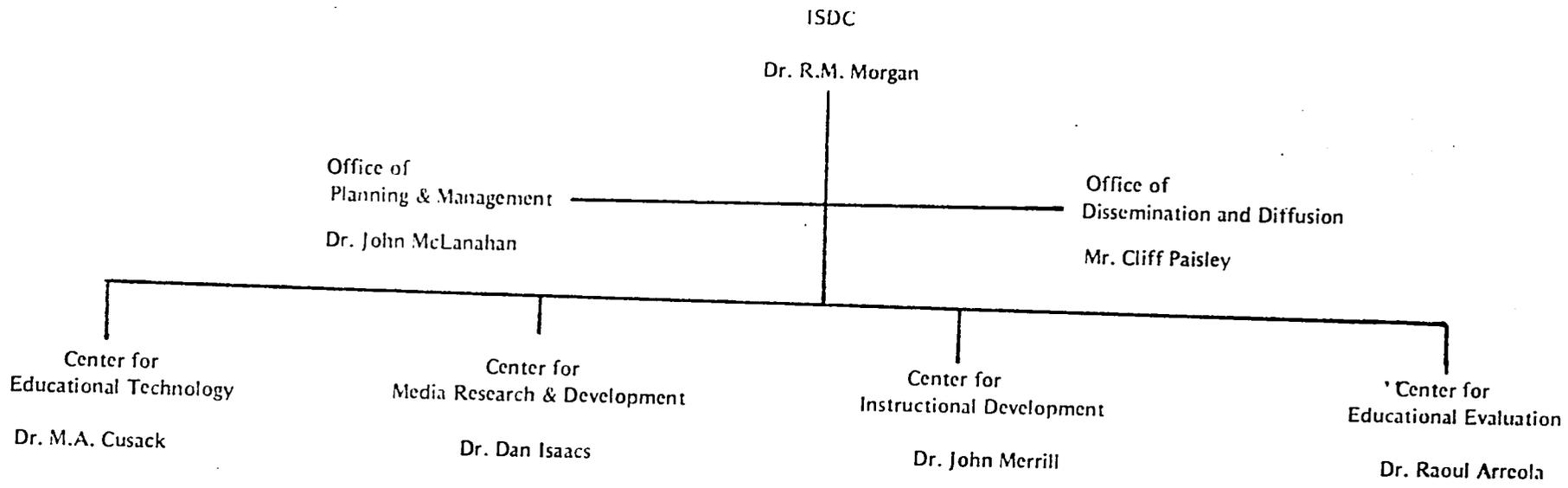
The Instructional Systems Development Center is in FSU's Division of Educational Services and ISDC's director, Dr. R. M. Morgan, is responsible to the Vice President for Educational Services. ISDC is organizationally divided into four coordinate units. These are:

- Center for Educational Technology
- Center for Media Research and Development
- Center for Instructional Development
- Center for Educational Evaluation

Each of these Centers has its own faculty, research associates and technical support staff, totaling about 160 people, and has defined focal areas which determine the programs in which it will engage and the clients it will serve. Taken together the four units include all the resources requisite to comprehensive development research in education. Detailed résumé of the faculty level personnel are included in Appendix B.

Following is a summary organizational chart of ISDC showing the directors and principle areas of responsibility for each unit. As can be seen from the chart ISDC engages in a wide variety of educational development activities. Those listed for each of the Centers reflect the kinds of programs which that Center tends to emphasize. Some activities such as instructional materials development, faculty development and research are undertaken by all of the groups. There is considerable coordination and mutual support between the Centers and their programs. Research Staff are assigned to various projects on an ad-hoc basis even when these projects are in Centers other than the one to which they are administratively assigned.

INSTRUCTIONAL SYSTEMS DEVELOPMENT CENTER  
 ORGANIZATION AND FUNCTIONAL RESPONSIBILITIES



- International Development
- Non-formal Education
- Low-cost educational technology
- Educational Systems Analysis
- Information Exchange Networks
- Military-Industrial Training

- Regional Film Library
- Media Support Services
- ITV Production & Broadcast
- Instructional Media Research
- AV Equipment Maintenance
- Multi-Media Development

- University Instruction Development
- Computer Applications Research
- Learning Resource Center
- Competency Based Education
- Computer Manged Instruction
- Educational Management

- Evaluation Research & Services
- Faculty Instruction Rating
- Test Scoring and Analysis
- Test Construction
- Field Evaluation
- Faculty Development

The following activities are representative of the types of work in which ISDC has been engaged.

#### Individualized Instruction

By applying systematic approaches to curriculum design it has been possible to define course objectives operationally, provide self-test progress checks and select or develop instructional sequences that will permit virtually all students meeting entry prerequisites to achieve mastery of the course. The emphasis is on qualitative improvement of learning by adapting instruction to the variation in learning rate and style of individual students.

#### Multi-media Instruction

The cost-effectiveness of mediated instruction as a supplement to or a partial replacement of a live instructor has been demonstrated in U.S. and International settings.

#### Computer Applications to Instruction

Florida State University has pioneered much of the research on the utilization of the computer for instructional purposes. This work includes Computer-Assisted Instruction, Computer-Managed Instruction, Gaming and Simulation, and using the computer in an interactive tutorial mode.

For example, FSU developed the first operational programs in Computer-Managed Instruction in this country. CMI uses the computer to help diagnose specific learning deficiencies and to prescribe instructional events on an individual basis, with most of the student's learning taking place away from the computer terminal.

Cost savings of 50-65% have been realized with no reduction in the quality or amount of learning. Currently, the most promising new development in this area is the Plato System, with which FSU is presently experimenting.

#### Student and Faculty Evaluation

FSU Faculty regularly evaluate the effectiveness of their instruction throughout ISDC's Office of Evaluation Services. A relatively new concept of educational measurement is assessing student's performance on an absolute rather than the traditional normative or relative basis. The rationale here is that a student's performance should be assessed in terms of how many of the course objectives he has attained rather than that he has performed better than his fellow students. These and other modern concepts are promulgated through ISDC conducted faculty workshops on the techniques of testing, measurement and evaluation of student performance.

#### Curriculum of Attainments

The Curriculum of Attainments is presently in the experimental stages at FSU. It joins the tutorial approaches associated with Cambridge and Oxford with modern instructional technology. The student progresses at his own rate through his program based on periodic demonstration of competency attainment to a faculty jury.

#### Information Networks

Through the Center for Educational Technology, ISDC is developing criteria for cost effective networks in the area of educational technology between FSU and other institutions (foreign and domestic) which produce and utilize educational technology information.

Included in this task is the development and testing of criteria for

specifying procedures for identifying the producers and users of educational technology, and their characteristics which condition the form, language, training, substance, etc. of knowledge needed in the area.

#### Research and Development as Derived from Selected School Needs in Leon County

ISDC has undertaken a study of school district needs, represented by examples from School Districts, to reveal their implications for educational research and development. The basic assumptions underlying the study were that (1) school needs are often complex, requiring a variety of activities that include administrative, financial, and political considerations, besides the actions implied by the phrase "research and development"; (2) that the research and development aspects of school needs are usually not well communicated to the people who may be able to do something about them.

#### Interservice Instructional Development Project

ISDC personnel are in the final stages of a multi-year project designed to improve and standardize methods of developing instruction within the armed forces. The Center's initial involvement in this project began in 1972, when the Combat Arms Training Board (CATB) of the Army asked FSU to assist in finding a vehicle to improve the cost-effectiveness of its training. The vehicle decided upon was the Instructional Systems Development (ISD) Model. Subsequently, it became a jointly-sponsored project for all four services.

#### Technical Assistance Projects Overseas

CET has been heavily engaged with several foreign governments in the reform of their educational programs. Work has been undertaken with the governments of Korea, Colombia, Iran, Venezuela, Peru, Zaire and Ethiopia, etc. In some cases this work is sponsored by one of the international

agencies such as the U.S. Agency for International Development, the Organization of American States, or UNESCO. In other cases it is being funded by the local government itself. Selected programs are:

#### Korea

CET is responsible for the design, development, and implementation of the Korean Educational Development Institute (KEDI) in Seoul, South Korea. This is FSU's most comprehensive education reform effort. The KEDI Broadcasting System was funded not only to present regular school programs, but to serve high school and college correspondence projects, and programs for pre-schoolers. This project is expected to equalize educational opportunities, particularly for school children, by bridging geographical and cultural gaps and through specialized instruction for the physically handicapped. By using a carefully engineered curriculum which includes individualized instruction, coordinated with televised teaching, Korea will realize a 15% savings per student per year on costs for the nation's elementary and middle schools. This will allow the enrollment of over a million students for whom there has been no room in school in the past without any net increase in annual educational expenditure.

#### Colombia

ISDC is focusing on the use of low-cost, intermediate technologies in non-formal education in Colombia. ISDC is participating with Accion Cultural Popular (ACPO) of Colombia in an extensive field evaluation of the use of records/programmed books in self-instruction in reading, and educational radio for illiterate campesinos to accelerate rural development and help bring this disadvantaged population into the mainstream of the Colombian national economic and social system. The results of this developmental research project will be made available for use by educational planners in other areas with similar rural development problems, and goals.



ACCION CULTURAL POPULAR  
 ESCUELAS RADIOFONICAS  
 BOGOTA-COLOMBIA

---

M E M O R A N D O

De : Mons. José Joaquín Salcedo

Para: Mr. Herman Kleine

Bogotá, Febrero 18 de 1976

---

Después de nuestra entrevista de fecha 10 de Febrero, le agradezco la atención y la amabilidad que usted ha manifestado para apoyar la ayuda que está solicitando Acción Cultural Popular para sus campañas de educación del pueblo campesino colombiano y de transferencia de tecnología a otros países de América Latina.

Me ha parecido importante comunicarle a usted por medio de este Memorando que la situación financiera de Acción Cultural Popular se podría dividir en tres concretas realidades:

- (1) La Editorial Andes - Unidad de producción, que es una de sus fuentes principales de autofinanciación, ha venido consolidando su operación financiera, administrativa y comercial. Esta unidad no tiene ni en el presente ni en el futuro ningún problema financiero distinto a la necesidad de aumentar su capacidad de producción de recursos. Para esto el Empréstito que estudia actualmente la Misión de la A.I.D. en Bogotá, será elemento definitivo en la generación de recursos de financiación para la Institución, salvo que estos recursos no podrán empezar a generarse antes del final del año 77, si el proyecto en cuestión es prontamente aprobado.
- (2) La segunda parte de la situación financiera de la Institución se refiere a toda su operación educativa que está recibiendo actualmente ayuda del Gobierno de Colombia y cuyo aporte nacional está siendo intensamente estudiado por el Gobierno para la consolidación futura de la Institución. Para esta operación recibe la Institución ayuda de organismos alemanes y algunos pocos de Holanda quienes están renovando la aprobación de los proyectos.

Esta segunda parte financiera de la Institución por el momento permite asegurar por un tiempo la adecuada marcha de la Institución. Es precisamente para perfeccionar este objetivo financiero para lo cual se hace muy importante la aprobación de los proyectos del Centro de Tecnología Educativa de Tallahassee y del D.P.G. Internacional.

./..



ACCION CULTURAL POPULAR  
ESCUELAS RADIOFONICAS  
BOGOTA-COLOMBIA

Memorando al Sr. Herman Kleine - AID - Pág. 2a.

- (3) La tercera parte se refiere a salvar las circunstancias propias de los países en vías de desarrollo, aumento inflacionario de precios, crisis precios del papel, recesión económica en varios sectores y problemas de crédito local por razón de control monetario, a este respecto la Institución está solicitando ayudas especiales del Gobierno Nacional de Colombia, de entidades Alemanas y tangencialmente en la conversación con usted se trató este punto importante para el futuro.

Con este Memorando Sr. Kleine, quiero manifestarle que la Institución que dirijo asegura a usted el correcto funcionamiento de los proyectos para los cuales estoy solicitando respetuosamente su aprobación final y que en caso de que hubiere problemas que agudicen los conflictos económicos de estos países y que necesariamente afectan a la Institución, oportunamente acudiríamos a adecuadas soluciones con los expertos de la A.I.D. de manera tal que por ningún motivo fuera a menoscabarse el buen nombre y la eficiencia administrativa de la A.I.D. en buena hora encomendada a su alta dirección.

Con sentimientos de consideración y aprecio, me suscribo cordialmente.

Mons. JOSE JOAQUIN SALCEDO  
Director General