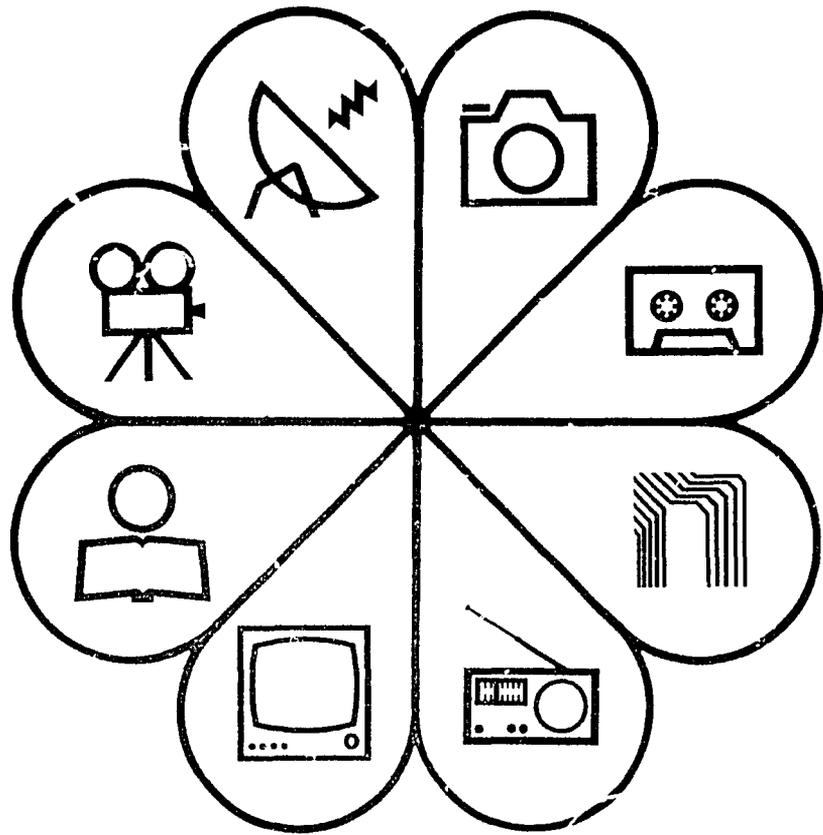


STUDIES IN
FACILITATING
LEARNING

FINAL REPORT

Contract No. AID/ta-c-1473



A program of studies, seminars
and informational materials on the use of
communications technologies for development

Conducted for the
Agency for International Development
Bureau for Science and Technology • Office of Education

By the
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FINAL REPORT
STUDIES IN FACILITATING LEARNING
September 1977 - August 1984

This report has been prepared under Contract No. AID/ta-C-1473, between the Academy for Educational Development and the Office of Education, Bureau for Science and Technology, Agency for International Development.

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Summary

In September 1977, the Academy for Educational Development was contracted by the Office of Education, Bureau for Science and Technology, U.S. Agency for International Development, to undertake a series of activities designed to capitalize on the educational potential of communications technologies and to encourage their use in AID-sponsored development programs. The **Studies in Facilitating Learning (SFL)** contract, divided into four components of Planning Studies, Seminars, Information Series, and Cost Options Studies, has completed the following activities:

Planning Studies

Forty-one communications planning activities were supported in North Yemen, the Sudan, Peru, Lesotho, Liberia, Indonesia, the Philippines, Senegal, Jamaica, Tunisia, Nigeria, the Dominican Republic, Zimbabwe, Botswana, Honduras, Mauritania, Egypt, Swaziland, Ecuador, Guyana, and Pakistan.

Five major communications projects were developed in the Sudan, Peru, Liberia, Egypt, Honduras, Swaziland and Ecuador.

Seminars

Eighteen communication seminars, ten in Africa, three in the Caribbean, one in the Middle East, one in India, one in Asia, one in Latin America, and one in the South Pacific, were supported by the SFL contract.

The seminars averaged 40 participants, for an approximate total of 720 policy-makers and planners. The average seminar length was 10 days.

Information Series

Two 16mm films, Radio Mathematics in Nicaragua and A Way to Bridge the Distance, and two 3/4" color videotapes, A New Voice in the Village and Masagana 99: Promoting a Miracle, were produced.

Six thousand brochures in English, French, Spanish, and Arabic were produced to accompany the films and videotapes.

Over five hundred requests have been received for the films and videotapes. Over 160 requests were from AID/Washington or AID Missions.

Cost Options Studies

Eight analytical activities were conducted, including satellite studies in North Yemen and Indonesia and a methodology for planning development communication systems.

SECTION I

INTRODUCTION

In September 1977, following a competitive procurement process, the Academy for Educational Development was awarded Contract No. AID/ta-C-1473 by the Office of Education within AID's Bureau for Science and Technology (then the Office of Education and Human Resources, Bureau for Technical Assistance, later the Development Support Bureau). The purpose of the contract, entitled Studies in Facilitating Learning, was to capitalize on the potential of communications and educational technologies and to encourage their use in AID projects, in accordance with the Agency's mandate that the largest possible segment of the world's rural poor be reached directly by AID-sponsored development services.

The products and services called for under Studies in Facilitating Learning (SFL) were to be made available to those individuals responsible for planning and designing projects, both in the AID Missions and at AID/Washington. In order to accomplish this, S&T/ED envisioned a comprehensive contract which would provide information and services to AID staff primarily and, secondarily, to those counterparts with whom they worked. The Academy was asked to undertake a series of four related activities, directed to AID staff in the field and in Washington. These included:

- Carrying out, in concert with AID personnel, planning and feasibility studies to determine the role which communications might play in specific country programs and projects.
- Mobilizing information seminars to create, on the one hand, or further develop, on the other, awareness of the potential role of communications in extending the effects of AID's development programs.
- Producing a series of films, videotapes, and accompanying print materials to disseminate and transfer information on the application of communications technologies to specific development programs.
- Developing preliminary cost models of several alternative communications systems.

It was intended by S&T/ED that these four activities would be entirely complementary, with each reinforcing the impact of the others. By vesting responsibility for all of them in one contractor, it was hoped that (1) continuity of approach and quality among products would be maintained, (2) that rapid responses to AID requests, as well as quick mobilization of people and materials, would be ensured, and (3) that AID's routine management responsibilities would be minimized. An institutional history, coupled with ongoing contractual responsibilities, would also provide for the monitoring of results over time. In this way, lessons learned from past experiences could contribute to the evolution of more effective methods of planning for the use of communications technologies in development programs.

This final report is largely an update of a report entitled "A Review of Progress," submitted to S&T/ED in August 1981 in an effort to consolidate project experience to that date. It is organized into three sections. The first describes the services and products delivered under the contract; the second presents evidence of the successful integration of the components in support of field projects; and the third summarizes the

lessons learned through this work and the improvements in methodology which have been identified as a result. The substance of the second and third sections is unchanged from the 1981 report, since the experience of the final three years continued to bear out the earlier findings and conclusions.

SECTION II

ACTIVITIES CARRIED OUT UNDER STUDIES IN FACILITATING LEARNING

The four components of Studies in Facilitating Learning, as included in Contract No. AID/ta-C-1473, were Project Planning, Seminars, Information Series, and Cost Option Studies.

A. COMMUNICATIONS PLANNING AND DESIGN STUDIES

This first component of SFL consisted of studies designed to assist AID and developing countries in analyzing the role of communications in solving development problems and in planning appropriate strategies for the application of new technologies in a specific development context. In carrying out this component, the Academy identified and recruited the most qualified experts in the field of development communication from U.S. and developing country institutions, including the University of Guyana, the University of the Philippines, the University of Massachusetts, Cornell University, Stanford University, Harvard University, Florida State University, Indiana University, and the University of Wisconsin. Management of this component was primarily the responsibility of Peter L. Boynton, an Academy staff member based in Washington, D.C. the coordination of these planning studies, included Anna Stahmer, during much of 1980, and John Middleton, during late 1982 and the first half of 1983. A subcontract with Stanford University made possible the involvement of that institution and its resources in a number of the initial planning and design activities carried out under this component. A complete list of staff and consultants who contributed to this work is contained in Appendix A.

These planning studies frequently proceeded from work completed under another component of SFL, and often incorporated yet a third part of the contract. For example, a film showing resulted in a request for an information seminar, which in turn led to a request for a planning team to address a particular issue. The two to four major planning or feasibility studies called for in the original contract were increased to twenty-two by amendment to the contract. This number of studies was actually carried out, sometimes in conjunction with other SFL components. Other studies of shorter duration to analyze the role of communications in development were increased by contract amendments from six to fifteen. Of this type, nineteen were conducted. The first planning study was completed in 1979, following preparations which began the year before.

Each study was prepared to meet specific needs as determined by AID. Under the procedure delineated in the contract, AID specified the location and the nature of the development problem to be addressed and the Academy responded with a proposal which represented the way in which the study would be carried out—in terms of methodology, staff, and cost.

Each study was a result of close cooperation between Academy staff and AID representatives in Washington and in the field. Before the field investigation began, each study team consulted with AID staff and USAID Mission representatives to arrive at precise specifications for the study. When the field investigation was complete, a draft of the study was prepared before the team departed, if possible; if not, the conclusions were fully discussed with Mission staff and host country representatives.

I. Planning Studies

These "major" studies supported the design of AID projects. Each was based on an analysis of the developing country context and resources as well as the overall AID country strategy for identifying and addressing priority problems. The contract specified that each study would encompass the elements specified in AID Handbook 3, Project Assistance, Chapters 4 and 6. In addition, other planning elements were to be developed in detail:

- Each study was to identify the important human resource needs or requirements in development projects—either current or planned—to which communications technologies can be applied.
- Each study would propose a strategy for applying appropriate instructional methods, educational technology, and communications media delivery systems to meet the needs identified and a design for testing the proposed strategy.

The following studies were carried out under the Studies in Facilitating Learning contract.

- Options Analysis and Recommendations for a Communications Satellite Demonstration in North Yemen and Related Activities (January 1979)

Purpose: To prepare a series of options with costs for a satellite demonstration in North Yemen.

Background: A request to AID, following an SFL seminar, from North Yemen government officials for technical assistance to determine the feasibility of using satellite communications to meet rural development needs.

Summary: The study presents three options for a demonstration of two-way audio communications using small earth stations with the INTELSAT satellite. Recommendations for training and a review of the potential of a telephone access audiotape library in Yemen are included.

Outcome: The cost of the proposed options exceeded available funding and the project was shelved.

Staff: Heather Hudson, Peter Boynton, Robert Scrafford, Albert Horley.

- Communications Support for Primary Health Care Projects: Sudan (May 1979)

Purpose: To prepare the communications support section of the Project Paper proposing a primary health care project in the Sudan.

Background: A request from AID to supplement the health planning resources in communications planning.

Summary: This study consists of Part V and Annex H of the AID primary health care project document. The health care situation in the Sudan is assessed and the proposed communications system is described. Broadcast radio and two-way radio applications are proposed.

Outcome: The project was funded and a broadcast radio pilot project in southern Sudan was included.

Staff: Heather Hudson, Michel Guite.

● The Rural Communications Services Pilot Project in Peru (December 1979)

Purpose: To contribute to the design of an AID project to test and demonstrate the potential of communications technologies, including satellites, for extending and improving agriculture, health, and education services in rural areas.

Background: The Academy was requested to help develop an AID proposal to establish a rural satellite communications project to operate in conjunction with a major AID agricultural development project in Peru.

Summary: This contribution to the design of the rural communications services pilot project in Peru describes the proposed rural communications network and its application to the fields of health, education, and agriculture. It contains an evaluation plan for the project and an analysis of the technical and social factors involved in planning the network.

Outcome: The project was funded by the Bureau for Latin America and the Caribbean, Office of Development Resources. It is currently in progress.

Staff: Anna Casey Stahmer, Staff of the Instituto Geofisico del Peru, Peter Boynton.

● Two-way Radio for Rural Health Delivery in Lesotho (January 1980)

Purpose: To present plans and considerations for a two-way communications component in a rural health delivery project in Lesotho.

Background: The study was commissioned by AID in response to a request from the USAID-sponsored MEDEX rural health delivery project.

Summary: The report summarizes the existing high-frequency radio facilities for health communications in Lesotho, including applications, organizational structure, and maintenance procedures. Three plans are then proposed for providing two-way radio service to all hospitals and clinics.

Outcome: USAID did not fund the two-way radio project. MEDEX reported that other funding might be forthcoming.

Staff: Heather Hudson, Michel Guite, Gerard Kenney.

● Liberia Rural Information System Project Planning Study (March 1980)

Purpose: To assist a joint USAID and Liberian project committee in preparing a project paper for a radio-based rural information system.

Background: This study was requested by USAID, on behalf of the Liberian project committee, following a preliminary seminar held in 1977 and Liberian participation in a later seminar in Jamaica.

Summary: The study presents the major portions of the project paper: characteristics of the Liberian Rural Communications Network, its functions, and responsibilities; technical, engineering economic, and social soundness analyses; equipment recommendations, building and site requirements; project design summary.

Outcome: USAID/Liberia funded this project, and it is currently underway.

Staff: Richard Burke, Bela Mody, Robert M. Morgan, David Wilson.

● Indonesia Satellite Pilot Project: Preliminary Planning Study (March 1980)

Purpose: To develop a preliminary plan for a satellite pilot project designed to support the curriculum exchange and administrative activities of the Eastern Islands University Association in Indonesia.

Background: AID request in response to Indonesian interest in participating in the AID Rural Satellite Program.

Summary: This study in the form of an aide memoire describes a preliminary network and proposes plans for its further development.

Outcome: Work continues under the AID rural satellite applications management contract.

Staff: Anna Stahmer

- Aide Memoire: A Rural AID Satellite Project in the Philippines (June 1980)

Purpose: To develop a proposal for a satellite pilot project in support of a development project in Panay, Philippines.

Background: An AID request to provide a team for the detailed planning of a pilot project in the Philippines under the AID Rural Satellite Program.

Summary: The aide memoire provides background material pertinent to development of the proposal, describes the resources available, and outlines the project structure.

Outcome: Work continued under the AID rural satellite applications management contract until the Government of the Philippines decided not to proceed with the project.

Staff: Dennis Foote, Douglas Goldschmidt, Anna Stahmer, Will DeHart.

- Accelerated Impact Project, Rural Satellite Communications, USAID Senegal (September 1980)

Purpose: To develop the project design for an accelerated impact project as the first phase of a proposed rural satellite communications project in Senegal.

Background: The project is a collaborative science and technology activity of the Secretariat d'Etat a la Recherche Scientifique et Technique and USAID.

Summary: The study describes a system designed to demonstrate the significant impact of satellite technology on rural communities. System configuration was selected for its ability to demonstrate a variety of applications simultaneously at minimum cost. The study describes the architecture of the system with emphasis on engineering system design, external

interfaces, and services provided.

Outcome: Project was reviewed as one of the sites for an AID rural satellite pilot project, but Congressional approval to proceed with the activity was withheld.

Staff: Allan Kulakow, Heather Hudson, Douglas Goldschmidt, Ruth Levenson, Robert G. Frost, Joseph Child.

(The last three satellite studies contributed to the development of a major AID-sponsored satellite initiative, funded under a separate contract.)

- Study of the Use of Two-Way Radio and Radio Broadcasting in Support of Rural Primary Health Care in Pakistan (April 1982)

Purpose: To address the feasibility of the use of radio in addressing the training and continuing education needs of mid-level and community health workers in Pakistan.

Background: The study was requested by USAID/Pakistan in connection with the development of a Project Paper to support the rural primary health care system in Pakistan.

Summary: The study reviews the structure of rural primary health care services, experience in use of two-way and broadcast radio, and potential applications in Pakistan. Pilot projects in two-way radio and radio broadcasting are recommended.

Outcome: As of July 1982, the Academy understood that the Mission planned to implement four two-way radio pilot projects.

Staff: Heather Hudson, Albert Fredette.

- Agricultural Communications in Pakistan's Northwest Frontier Province (April 1982)

Purpose: To prepare a Project Identification Document for an effort to strengthen agricultural communication in the Northwest Frontier Province.

Background: The study was requested by USAID/Pakistan.

Summary: Based on guidance from USAID/Pakistan, and the shortage of qualified agricultural communicators in the region, the study recommended the development of a Department of Agricultural

Communications at the University of Peshawar.

Outcome: The Academy understands that USAID/Pakistan submitted a PID based on this study, but that it was not approved. The development of the department has, however, been made part of the overall program to develop the Agricultural University of the Northwest Frontier Province.

Staff: Larry Meiller, William Sweeney.

- Assessment of Information Management Requirements for the Ministry of Education in Zimbabwe (August 1982)

Purpose: To determine the appropriateness of microcomputers to meet the information management requirements of the Ministry of Education in Zimbabwe.

Summary: This study recommended a program of activities to upgrade administrative procedures and improve planning and budgeting. The program was presented in three phases. Microcomputers were recommended for simulating different levels of support for various schools and to rapidly calculate formula allocations. The study also recommended improvements in organizational communications.

Background: USAID/Zimbabwe was developing a major education sector grant and requested assistance in formulating potential activities in information management and microcomputer applications.

Outcome: USAID/Zimbabwe developed a sector grant to provide further support for administrative and planning improvements in the Ministry. An interim combination of further study and seminar activities was funded by USAID/Zimbabwe through amendment of the Studies in Facilitating Learning contract with the Academy (See below).

Staff: Kurt Moses

- Feasibility Study for a Two-Way Radio System for Integrated Rural Health Services in Ecuador (April 1982)

Purpose: To provide the Mission and the Ecuadorian Ministry of Health with the basic information required to decide whether and how to proceed with pilot projects using two-way radio in rural health care programs.

Background: USAID/Ecuador requested the study after learning of project experience in Guyana with using two-way radio for supporting rural health care.

Summary: The study reviewed the structure of integrated rural health care services and the ways in which two-way radio could support the existing system. Pilot projects in one or two regions of the country were costed.

Outcome: Due to the Minister of Health's desire that the system have a 24-hour communication capability and the mountainous character of the regions, costs were found to be higher than the project could sustain.

Staff: Heather Hudson, George Gehr.

- Follow-up Study and Implementation Assistance to Improve Information Management of the Ministry of Education in Zimbabwe (August 1982-November 1983)

Purpose: To provide assistance to the Ministry of Education in following up on recommendations growing out of the study in Zimbabwe described above.

Background: See above study in Zimbabwe.

Summary: A microcomputer-based planning and budgeting model was developed and installed in the MOE in Zimbabwe. Training was provided to MOE staff in the use of the system and its operation through a seminar funded under this contract.

Outcome: The system was implemented by the MOE and further systematization was supported under the Education Sector Grant.

Staff: Kurt Moses, Robert Zemsky, Rod Lauver, Eric Eno, Davis Jenkins.

- Planning Assistance for a Pilot Public Health Campaign in Ecuador (November 1982)

Purpose: To plan a public health education campaign for a diarrheal disease control program in three regions of Ecuador.

Background: USAID/Ecuador and the Ministry of Health were interested in replicating the program of public health education to improve the treatment and

prevention of diarrheal disease which was being implemented under the S&T/ED Mass Media and Health Practices Project in Honduras and the Gambia.

Summary: Under the supervision of the Academy's director of the Mass Media and Health Practices Implementation Contract, a member of the field staff of the Honduras site designed and conducted an audience research study in the selected regions and provided a report outlining and analyzing the campaigns.

Outcomes: On the basis of the study, the pilot campaigns were implemented and now form the basis of an ongoing national effort. The Academy is providing technical assistance under the ongoing Mass Media and Health Practices Project.

Staff: Reynaldo Pareja, William A. Smith.

- Educational Technology Planning Study, Zimbabwe (December 1982)

Purpose: To assist in the preparation of Project Identification Document for an Human Resources Development Sector Grant.

Background: USAID/Zimbabwe assembled a team of experts from various sources to assist it in defining the activities which would be likely candidates for support under the Grant. An expert in instructional technology was required to assess Zimbabwean programs in this field.

Summary: A specialist in educational technology and instructional systems development joined a team in Zimbabwe and, following visits to various sites and programs, drafted key sections of the PID.

Outcome: Following approval of the PID, the Academy was subsequently asked to assemble a team to prepare the grant paper, which was approved. Grant implementation is now underway.

Staff: Robert M. Morgan

- African Health Communications Study (December-March 1982)

Purpose: To assist in the planning of the Health Education Component of the Triple C D Project (Combating Childhood Communicable Diseases).

Background: The Triple C D Project comprises a major effort by the U.S. Government to reduce three of the

major causes of mortality in infancy and childhood (i.e., diseases preventable by immunization, diarrheal diseases, and malaria).

Summary: The Academy provided the services of the director of its Mass Media and Health Practices Contract and other staff to review documentation, interview key agency officials, and assess through field visits practices and problems in selected African nations. A draft report was prepared which formed the basis for a workshop held in Washington under the seminars component of this contract, upon which the final report was based.

Outcome: The recommendations of the report were considered in planning the AID Primary Health Technologies (PRITECH) Project.

Staff: William A. Smith, staff of the Academy's health education group.

- Development and Health Communications in Swaziland (February-July 1983)

Purpose: To assist in planning a program of public health communication using radio.

Background: The Ministry of Health of Swaziland is engaged in programs of infrastructure development and public health education in relation to decreasing the incidence of water-borne diseases and general improvement of sanitation. USAID/Swaziland is supporting this program and requested specialized assistance in planning the use of radio and other media for support of educational programs.

Summary: An Academy staff member and consultant provided the required assistance, and a health communication unit in the Ministry was strengthened.

Outcome: Public health education activities were improved and communication-based campaigns were implemented. An indirect outcome has been increased attention in general to development communication in Swaziland, and the development of an AID project to support a development communication center.

Staff: Allan Kulakow, Esta de Fossard.

- Communications in Support of Family Planning in Egypt (April-November 1983)

Purpose:

- 1) Prepare an overall plan, implementation schedule, and budget for a USAID/Cairo grant to the State Information Service for family planning IEC activities;
- 2) Develop and implement a management information system for SIS IEC activities, assessing the utility of utilizing microcomputers in this connection;
- 3) Development plans for organizational development of SIS local program operations;
- 4) Develop plans for increased use of television and radio in SIS IEC programs.

Background: The implementation of large annual grants to SIS for support of its population and family planning information, education and communication activities was not meeting USAID/Cairo's expectations.

Summary: The Academy provided a number of specialists to develop the required plans and provide implementation assistance to USAID/Cairo and the SIS.

Outcome: A more structured grant to SIS was prepared and a program of technical assistance was proposed. USAID/Cairo let a separate contract for the implementation of the technical assistance activities.

Staff: John Middleton, Lyle Saunders, Kurt Moses, Royal D. Colle, Robert Worrall, Susan Saunders, Peter Boynton.

- Study of Incorporating the Systematic Use of Communications Technology Into Agricultural Development Projects (June 1983-August 1984)

Purpose: To identify promising strategies for incorporating and integrating communications technology into extension or other technology transfer projects/programs within the context of the total technology generation-diffusion-adoption process.

Background: Several offices within the Science and Technology Bureau and Regional Bureaus of AID were interested in an in-depth exploration of the subject, with a view to using its findings to help structuring a new centrally-funded technology transfer project.

Summary: A senior Academy staff member assumed responsibility for the authorship of this study, which was conducted primarily in Washington, although incorporating experience gained in several field settings. The study was based on documentary review, interviews and the author's considerable experience in agricultural and technology transfer.

Outcome: At the conclusion of the contract the report had been submitted to S&T/ED for review and comment by other interested offices. The Academy understands that further work in this field has been incorporated in a new contract being let by S&T/ED to continue the field support activities funded under the Studies in Facilitating Learning program.

Staff: Howard E. Ray.

● Project Design for a Remedial Education Assessment Project in Jamaica (June-July 1983)

Purpose: To develop a design for an experiment to test the relative cost-effectiveness of traditional vs. computer assisted approaches to providing remedial instruction to unemployed youth in Jamaica.

Background: The Jamaican Government and USAID/Jamaica were interested in assessing the PLATO computer-assisted instructional system for basic education skills training, in response to a proposal from Control Data Corporation to provide services to the Ministry of Education and the Ministry of Youth and Sports.

Summary: A team consisting of an expert in instructional systems, an expert in remedial education and job training, and an educational economist developed a design for an experimental comparison of the PLATO system vs alternative paper and pencil-based instructional systems.

Outcome: Following submission of the report, the idea of an experiment to compare these two approaches was dropped.

Staff: Robert M. Morgan, Barry Argento, Victor Levine.

- Study of Human Resource Development Planning for Mauritania (August-September 1983)

Purpose: To assist USAID/Mauritania analyze the present system for manpower training in Mauritania and refine USAID strategy for the development of a Human Resources Development Project.

Background: Manpower constraints severely affect the ability of the GIRM to develop and implement effective development programs.

Summary: A consultant in the field of manpower development and planning conducted a study of the constraints and developed portions of a Project Identification Document.

Outcome: The consultant participated in a review of his report in AID/Washington, which appeared to indicate considerable interest in following through with more detailed project design.

Staff: Robert Charlick.

- Study of Agricultural Communications in Honduras: Analysis and Recommendations (March 1984)

Purpose: To assist USAID/Honduras and the Honduran Ministry of Natural Resources with the preparation of a plan of action through which the GOH might implement its plan to incorporate more effective use of communication technology into its agricultural extension programs.

Background: The study was a direct result of a seminar on Agricultural Communications funded under this contract and held in April 1983.

Summary: A senior member of the Academy's staff, who had also served as a lead trainer in the prior seminar, conducted the field work for this study. The study recommended a series of measures to increase the functional integration of the Communications and Public Relations Unit of the Ministry of Natural Resources into Honduran technology development and transfer programs. Resource requirements for establishing and operating a pilot optimal communications subsystem were made. Two alternative strategies were suggested in the event the full optimal subsystem could not be established at the outset. A comprehensive ten year project to expand the pilot subsystem to all regions of the country was also recommended.

Outcome: USAID/Honduras and the Ministry are proceeding to implement many of the study's recommendations.

Staff: Howard E. Ray, Larry Meiller.

2. Studies of Communication in Development Sectors

These "minor" studies analyzed the role of communications in development. They fall into the following general categories:

- Analyses of communications practices and infrastructure in a particular development sector, e.g., health, agriculture, rural development, education, nutrition.
- Analyses of the communications sector in particular countries, e.g., development orientation and planning priorities of the national communications infrastructure.

The studies which were performed under these two broad categories are summarized in this section.

- Planning Assistance to the University of the West Indies

Following the AID-sponsored satellite communications demonstration for the University of the West Indies in 1978, the Academy defined the feasibility issues which the university should address in the proposed study on potential applications of satellite communications in extending university services and in administrative support. Following this assignment, the university was awarded a grant by AID to conduct the feasibility study, which has since been completed. It served as the basis for the implementation of a pilot project under the AID Rural Satellite Program. Staff: Dennis Foote.

- MEDEX Two-Way Radio Communications in Guyana

Since 1978, the Academy has assisted USAID/Guyana and the Ministry of Health in planning and implementing a two-way radio system which provides administrative and technical support to rural health extension workers. The recently concluded pilot phase of the MEDEX project was the result of extensive pre-project planning under this contract: a study of the components of the health sector in Guyana and an analysis of the communications requirements of the proposed pilot project and alternative communication needs. Plans are currently under way to expand the pilot phase of the project into a broader medical communications network which will serve rural extension workers throughout the country. Staff: Heather Hudson, Douglas Goldschmidt, Stanley Burns.

- Educational Technology Center in Indonesia

In July 1978, the Academy, under another contract, sent a team of consultants to Indonesia to assist USAID/Jakarta and the Government of Indonesia in developing a project paper for a National Center for Communication Technology in Education and Culture. Following that assignment, the SFL contract supported Academy participation in the review of the project paper by AID/Washington. The national center has subsequently become a major new resource towards the effective extension of educational opportunities to a broad and previously unserved spectrum of Indonesia's population. Staff: Peter Boynton.

- Agricultural Communications in Africa

In September 1978, at the request of S&T/ED, Anna Stahmer from the Academy attended a conference of AID agricultural officers held in Ibadan, Nigeria. The conference was organized to discuss AID's new agricultural policy and to inform the participants of the project development services available to them under this contract.

- Tunisian "Dr. Hakim" Project

In March 1979, the Academy conducted a seminar in Hammamet, Tunisia, to plan the second phase of the "Dr. Hakim" radio nutrition education project. The seminar was organized to recommend to the local administering agency--the National Institute of Nutrition--specific plans and activities to achieve the goals of the project's second phase. In the week that followed the seminar, the Academy's representatives prepared a proposal which incorporated the work and recommendations of the seminar's participants. The proposal was later submitted to the Tunisian Ministry of Health and international donors for approval and funding. Subsequent funding was received to continue the "Dr. Hakim" project. Staff: Allan Kulakow, T. El Amouri, Marion Zeitlin.

- Project Assistance in the Dominican Republic

At the request of S&T/ED, in September 1979, the Academy analyzed the communications and administrative needs of a project to disseminate agricultural information to rural women in the Dominican Republic. The project--the pilot site of the AID-sponsored Educational Media for the Integration of Women--was in its initial planning stage. The services of a communications planner were needed to analyze the communications requirements of the project, develop technical and administrative guidelines for further project planning activities, and recommend appropriate administrative linkages and cooperation. At the conclusion of this assignment, a strategy was proposed for applying appropriate instructional methods and communications delivery systems to meet the informational objectives of the project. Staff: Bonnie Caine.

- Satellite Project Management

In December 1979, the Academy prepared the Satellite Project Management Paper, which reported and analyzed past experiences in managing satellite applications programs. The study was undertaken to provide AID with information for consideration in developing project designs for satellite-based communication systems in developing countries. Staff: Anna Stahmer.

- Two-way Communications for Health Care Delivery

Growing interest in using communications systems for delivering health services prompted this compilation of case studies on telemedicine projects in developed and developing countries. The report presents case studies of projects in Asia, Africa, the Caribbean, Central America, South America, South Pacific, United States, Canada, and Australia. The format for the presentation provides a description of the project, technical data, target area of the project, participants, sponsoring agencies, and resources. This report was the keystone of a seminar on the applications of two-way radio for health care sponsored by the National Academy of Sciences in June 1980, and represents a major contribution to the role of communication in health care delivery. Staff: Heather Hudson, Wilma Lynn, Douglas Goldschmidt.

- Health Communications

In March 1981, the Academy was asked to provide technical assistance in development communication to the American Public Health Association which, under contract with the Bureau for Science and Technology, Office of Health, was in the process of preparing an issues paper on communications in health and nutrition services. Written and verbal contributions were provided for use in preparing the paper in its first and second drafts. Staff: Ronald Parloto, William Smith.

- Educational Communications Planning in Zimbabwe

In April 1981, the Academy attended a conference of educational professionals to discuss the role of communications in development and to help identify potential areas for AID program or project support in educational communications. Staff: Stephen F. Moseley.

- Center for Development Communication in Botswana

In June 1981, the Academy, at the request of USAID/Botswana, participated in a planning activity to determine appropriate efforts to increase the number of trained radio and other communications personnel and to assess the initial interest among development ministries and agencies for the development of a Center for Development Communication that would support various development goals. As a result of this initial planning activity, a proposal was

submitted to USAID/Botswana to bring together representatives from development ministries and agencies to plan the design and implementation of the Center for Development Communication. Staff: Allan Kulakow.

- Assessment of Applicability of Radio Mathematics to the Honduran Situation

In June 1982, the Academy was requested to send a consultant who had worked with the Nicaragua Radio Mathematics Project to Honduras to present information about the project and discuss with Honduran officials how the Nicaraguan experience might be adapted to Honduras. Staff: Klaus Galda.

- Assessment of Options for Developing a Media-Supported Diarrheal Disease Prevention and Treatment Program in Ecuador

In August 1982, the Academy's Director of the Mass Media and Health Practices Project travelled to Ecuador at the request of the Mission to explore how Ecuador might mount a campaign similar to that conducted under the MMHP project in Honduras and the Gambia. The result of his visit was a recommendation, subsequently implemented under the Studies in Facilitating Learning Contract, for a combination of planning assistance and seminar activity leading to a pilot campaign, on the basis of which a larger effort might eventually be mounted. Staff: William A. Smith.

- Planning Assistance for an Agricultural Communication Seminar in Honduras

At the request of USAID/Honduras, the Director of the Studies in Facilitating Learning Contract worked with USAID/Honduras over a period of two months in the fall of 1982 to plan a national seminar on agricultural communications, designed to develop a better understanding of problems Honduras faced in implementing agricultural communication programs and to provide information about models implemented in other countries which might be relevant to the Honduran situation. The result was the independent funding of the seminar by USAID/Honduras and the initiation of a process which led to a major planning study implemented in March 1984 (described in the preceding section of this report). Staff: Peter Boynton.

- Mauritania Health Education Study

In connection with the design of a primary health care project, the Academy was asked to send a consultant to Mauritania with a background in the planning of mass media-based health education campaigns and development of health manpower training. Field work was undertaken in November 1982. Staff: Mark Lediard.

- Jamaican Health Communications Study

In October 1982, the Academy was asked to provide a consultant to recommend to the Jamaican Ministry of Health and USAID a system for utilizing existing and to-be-provided two-way radio equipment for more effective communication among health care centers and hospitals. Following the nomination of several alternative candidates, the field work was undertaken in January 1983 and a report was submitted recommending a phased program of investment. Staff: Herbert Ohlman.

- Assessment of an Agricultural Radio Station in Jamaica

In connection with a trip to Central America for other purposes, the Academy's senior specialist in agricultural communications was asked to visit Jamaica to assess the current status of a rural radio station which had been the focus of a seminar conducted under the Studies in Facilitating Learning Contract during in June 1979 (see below). His report reviewed the current programs, staffing and problems faced by Radio Central, located in the Pindars River-Two Meetings rural development project area. Staff: Howard E. Ray.

- Assessment of the Communication/Outreach Component of a Proposed Agricultural Research Project in Honduras

The Academy's senior specialist in agricultural communications was asked by USAID/Honduras to assess how a proposed project to establish an agricultural research foundation could be strengthened by the systematic use of communications to feed into research decisions and to disseminate research results. Field work was undertaken in February 1984. Staff: Howard E. Ray.

- Planning Assistance for a Development Communication Project in Swaziland

In May 1984, the Academy's senior specialist in agricultural communications joined a team working in Swaziland to plan a project to provide technical assistance and other support to help establish a development communication center in Swaziland. This center is expected to provide support to communication outreach activities undertaken by several development programs. The project was included as a component of the Swaziland Manpower Development Project. Staff: Howard E. Ray and Allan Kulakow.

B. SEMINARS IN COMMUNICATION FOR DEVELOPMENT

The second component of the Studies in Facilitating Learning project originally called for ten seminar cycles to be planned and conducted in response to the growing interest in using communications to help achieve development goals. This number was subsequently increased by contract amendment to twenty-one. In fact, the Academy conducted eighteen seminars in five regions of the world. The seminars, designed to meet AID requirements and intended to inform USAID staff and host government decision-makers of the role that communications play in development projects, are described in the contract as follows:

The more specific purpose of each seminar will vary along a continuum according to the needs and characteristics of country site. At one end of this continuum is the information-oriented seminar; its function is to inform and arouse interest about various applications of educational technology. At the other end of the continuum is the implementation-oriented seminar; its function is to catalyze thinking and planning which might result in a project.

The information seminar reviewed current and past experiences in using communications in development projects in all sectors. It was usually brief, lasting from two to three days, and the participants included USAID staff and host-government decisionmakers. Films, videotapes, and other materials produced under the Information Series were used as part of the presentations. The information seminars focused on a state-of-the-art overview of development communication and introduced concepts relating to systematic planning for the use of communications strategies to help achieve development goals.

The implementation seminar was designed to promote in-depth discussion of particular programs among planners, project managers, and communications specialists, and to provide specific planning assistance in the field or in Washington. This could take from four days to two weeks, depending on the degree of interest in the applications under discussion, the extent to which the seminar is used for training, and the stage in the planning process at the time the seminar is held. The seminar presents conceptual material similar to that offered in the information seminar plus specific development models for various sectors, whether agriculture, health, or education.

Under the management of Allan Kulakow, with assistance from staff and consultants noted the following seminars have been held in accordance with the terms of the SFL contract:

1. Information Seminars

a. Regional Meeting on Human Resources Development of the Comité Permanent Inter-États de Lutte contre la Sécheresse dans le Sahel (CILSS)

In March 1978, the Academy offered a seminar to provide an overview of development communication for regional CILSS participants. The participants in the seminar represented six of the eight Sahel countries, AID, UNESCO, FAO, the Swiss development agency, and consultants to CILSS for health and nutrition. As a result of the seminar, a special Commission on Mass Communications and Rural Development was established to plan and review regional development communication activities. (40 participants). Staff: Allan Kulakow and Heather Hudson.

b. AID Regional Agricultural Officers Conference

In September 1978, the Academy provided an overview of development communication for USAID agricultural officers working in Africa. The purpose of the seminar was to inform participants of the role that communications play in disseminating agricultural information. (40 participants). Staff: Anna Stahmer.

c. Yemen Telecommunications Seminar

In December 1978, USAID requested the Academy to conduct a seminar in the Yemen Arab Republic to bring Yemeni ministries and directorates together to discuss existing plans for a national communications system. The focus of the seminar was the increasing importance of communications satellite systems in achieving national development goals; Yemen will be covered by the ARABSAT satellite to become operational in 1989. As a result, Yemeni government officials requested technical assistance from USAID; and the Academy prepared a planning study, Options Analysis and Recommendations for a Communications Satellite Demonstration in North Yemen, under the Planning and Cost Options Studies components of the SFL contract. (40 participants). Staff: Heather Hudson, Saud Jallad, Tahar El Amouri, Bella Mody, Allan Kulakow.

d. Conference on Research for Decisionmaking in Educational Media

In December 1980, S&T/ED requested that the Academy fund under the seminar component of the SFL contract the travel of four participants to the Conference on Research for Decision -making in Educational Media in Ahmadabad, India. The conference was attended by decision-makers and planners from 19 countries; SFL contract funding made possible participation from Peru, the United States, Senegal, and Jamaica.

2. Implementation Seminars

a. Seminar in Radio Education, Caribbean Region

The Academy conducted a seminar in Ocho Rios, Jamaica, in 1978, to help develop a regional experimental radio education project for the Caribbean. Participants included representatives from Antigua, Barbados, Jamaica, and St. Vincent. As requested by AID, the seminar was intended to review experiences relevant to the participating islands in the use of radio for educational purposes. An illustrative project design was prepared by each country during the seminar, and regional communications support services were discussed. (20 participants). Staff: Allan Kulakow, Judy Irwin, Barbara Searle, Peter Spain.

b. Jamaica Radio Nutrition Education Seminar

In June 1978, the Academy organized a seminar in Jamaica on media-based nutrition education campaigns, in support of the National Nutrition Education Campaign financed by the World Bank. The seminar was a contribution by USAID/Jamaica to the improvement and expansion of a national campaign which focused primarily on conventional advertising strategies: billboards, posters, and public service and newspaper announcements.

The seminar participants developed specific action plans for their parishes, stressing the critical role of personal, face-to-face communication, and its integration with a media campaign. (60 participants). Staff: Allan Kulakow, Janet Alexander, Hilda Kokuhirwa, Anthony Dodds, Royal D. Colle.

c. Tunisian Seminar on Nutrition Education and Communication

At the request of the Tunisian USAID Mission and the National Institute of Nutrition, the Academy was asked to conduct a seminar to review Phase I of the "Dr.

Hakim" project and to determine the directions and strategies for Phase II. Of particular importance was the decision on the part of the government to use television in Phase II.

The Academy's team of consultants consisted of nutrition educators, anthropologists, a television producer, communication theorists and practitioners, and Tunisian experts--all with experience in the application of communications media and educational processes to social development, nutrition and health education, and behavioral change.

The seminar produced conclusions and recommendations for Phase II of "Dr. Hakim," and resulted in a draft proposal by the Director of Nutrition Education of the National Institute of Nutrition, which was based on the recommendations produced at the seminar. One important outcome of the seminar was the opportunity for Tunisian government representatives to meet for the first time to discuss mutual support for nutrition education in the country. (40 participants). Staff: Allan Kulakow, Marion Zeitlin, Tahar El Amouri.

d. Jamaican Radio Rural Development Project

As part of the development of the AID-funded rural integrated development project in the Pindar River region of Jamaica, the Academy in cooperation with the Jamaican Broadcasting Corporation offered a two-phase seminar in June 1979 to plan the radio component of the project and to train extension workers for its effective implementation. The purpose of the first phase was to inform a broad interministerial audience about the Jamaican Broadcasting Corporation project and to make this audience aware of specific examples of the successful application of communications to development. During the second phase, extension agents were introduced to the development communication aspects of the rural development project. Approximately forty-two persons attended each phase of the seminar. Staff: Anna Stahmer, Dennis Foote, Bella Mody, Barbara Searle, Peter Spain, Vicente de Jesus.

e. University of the South Pacific Seminar

In May 1980, the Academy organized a seminar for the Extension Services of the University of the South Pacific, in Suva, Fiji, to plan outreach programs for the AID-supported satellite project. The seminar was coordinated with the annual meeting of the directors of the University's extension centers throughout the Pacific region. Other participants included representatives of the international organizations using the satellite (ILO, WHO, UNFPA, YWCA, ITU); two Fulbright advisors working on the project; and other resource people concerned with development in the South Pacific. The purpose of the seminar was to assist the staff and Extension Center directors in developing new program ideas and plans for outreach activities as projected and required in the AID funding agreement. The seminar produced conclusions and recommendations in administration, staffing, and programming designed to meet the projected requirements. (40 participants). Staff: Heather Hudson, Allan Kulakow.

f. Sahel Regional Radio Seminar

The Academy planned and conducted a seminar in Bamako, Mali, to prepare a proposal for a regional development communication resource within the Institut du Sahel. The seminar was based on AID-supported work over the preceding three years in response to requests from the Comité Permanent Interetats de Lutte contre la Secheresse dans le Sahel (CILSS) for assistance in developing proposals for communications projects and on the results of a radio and television survey of the Sahel conducted in 1979. The seminar was attended by representatives from the Cape Verde

Islands, The Gambia, Mali, Niger, Mauritania, Senegal, and Upper Volta, as well as FAO and USAID. The delegates to the seminar adopted a proposal which established a service unit in the Institut to coordinate all development communication activities of the CILSS, and a development communication unit to provide consultants, organize training workshops, and establish a clearinghouse for materials and information on development communication. (30 participants). Staff: Allan Kulakow, Emile McAnany.

g. Multimedia Environmental Sanitation Project Seminar

In November 1980, at the request of USAID/Botswana, the Academy conducted a seminar to plan the community education component of the USAID-funded environmental sanitation project in two Botswana provinces. Approximately 30 provincial health representatives attended the seminar. The agenda was planned to permit information about the role of communications in community education and mobilization to be drawn from case studies. The Academy's resource experts presented these case studies, highlighting the key elements which were most relevant to the Botswana project. Participants in the seminar then developed plans for implementing the campaign in the two provinces. (30 participants). Staff: Allan Kulakow, Janet Alexander, George Bostick, Hilda Kokuhirwa, Pia Olsen.

h. Honduran Seminar on the Management of Diarrheal Disease Control Programs

In October 1981, the Academy was requested by S&T/ED to participate in a seminar in Honduras on the management of diarrheal disease control programs. The seminar was jointly funded by the Pan American Health Organization (PAHO) and AID. There were fifty one participants, representing twelve Latin American countries plus the U.S. and Switzerland. The purpose of the seminar was to provide five days of intensive training for managers of diarrheal disease control programs from Latin America. Special emphasis was given to the role mass communication can play in support of large scale national programs. The Academy developed and presented special modules on mass communications and health and provided administrative and logistical assistance for AID-sponsored participants. The film, "A Way to Bridge the Distance," funded under this contract, publications of the Clearinghouse on Development Communications and reports of the Mass Media and Health Project were used. Staff: William A. Smith, and staff of the Academy's health education group.

i. Gambia Radio Production and Planning Seminar

This seminar took place in June 1982 and was designed to train twenty-eight representatives of Radio Gambia and communications staff from various other agencies in radio production techniques. Special sessions were provided for representatives of a cooperative development program. Radio Gambia has a key role to play in providing media support to S&T/ED's Mass Media and Health Practices project site in that country, as well as to other development-oriented ministries. Staff: William A. Smith, Albert Hundley, Esta de Fossard, and Peter Spain.

j. Botswana Development Communications Center Planning Seminar

Approximately 30 participants attended this seminar to plan a Center for Development Communications for Botswana, held in Gabarone, Botswana, April 26-May 1, 1982. The seminar was followed by workshops on script writing, radio production and evaluation, as well as individual consultation with interested ministries. The first three days of the seminar concentrated on the design of the Center, to be housed in the

Department of Non-Formal Education and serving all ministries responsible for broadcast and non-broadcast development-related communications programs. The next two days were spent in a program planning exercise to train the participants in the design of radio broadcasts for development programs. Seminar staff included Allan Kulakow, Esta de Fossard, Joyce Hill, and Klaus Galda.

k. Swaziland Seminar

In October 1982, a seminar was held to plan a communication component of a USAID/Swaziland-funded Rural Water-Borne Disease Control Project. Approximately 30 participants attended. One of the seminar's outcomes was a decision to pursue the possibility of conducting in Swaziland a diarrheal treatment and prevention campaign modeled after those being conducted in Honduras and the Gambia under the Mass Media and Health Practices Project. Staff: Allan Kulakow, Bette Booth, Esta de Fossard, Rachel Greenberg, and the Academy's Swaziland Rural Water-Borne Disease Control Project team.

l. Seminar to Implement the Zimbabwe Ministry of Education Microcomputer Planning Model

Following the development of the planning model described above under Section B above a seminar was held in Zimbabwe in November 1982 to train Ministry of Education staff in the use of the model and to identify further modifications required to ensure its appropriateness to the Ministry's concerns. Following the seminar modifications were made and the model is now in regular use by the Ministry's planning office. Staff: Kurt Moses, Eric Eno, Robert Zemsky, Rod Lauver.

m. Indonesian Open University Planning Seminar

In January 1984 the Academy organized and conducted, in cooperation with the Indonesian team assigned to develop a plan for a national open university, a seminar designed to identify the key implementation issues pertaining to the new institution. Six Academy consultants and staff participated in the program, which dealt with such issues as course design, materials development, delivery of instruction at a distance, staff development, facilities requirements and interface with existing institutions, among others. The outcome of the seminar was to set in motion a process leading to the development of a detailed implementation plan, expected to be completed in October 1984, with the help of consultants provided under the Academy's Rural Satellite Program Implementation Contract. Staff: Bahman Vahidi, Jack McBride, Winai Rungsinan, Michael Nathenson, Donald Ely, and Michael Calvano, from the Academy's Indonesian Educational Communication Development Project team.

n. Triple C D Seminar

A two day workshop was held in Washington, D.C., March 10-11, 1984, for approximately 20 health education experts and other representatives of AID, the Center for Disease Control, and Expand Associates, to develop recommendations for health education in support of the Combating Childhood Communicable Diseases program. The seminar was based on the findings of the study described in section B above and conducted in December 1982. Staff: William A. Smith and staff of the Academy's health education group.

C. INFORMATION SERIES

This component of the SFL project was designed to disseminate information about innovations in development communication and to promote the transfer of approaches through the use of films, videotapes, and print materials documenting the use of communications technologies in development programs. The work to produce a series of information packages was managed by Jill Merrick of the Academy's staff, with production assistance from several subcontractors under her supervision. A complete list of subcontractors, staff, and consultants involved in this component is contained in Appendix A.

Under the terms of the contract, the Academy produced two 16mm color films and two videotapes, each in English, Spanish, French, and Arabic. In addition, a film on the Basic Village Education project, produced under another S&T/ED contract, was translated and reproduced. For convenience, the films produced under SFL were transferred to videotape, and multiple copies of both formats, film and videotape, were made. The numbers of copies produced in each language are presented in Appendix B, along with a distribution list.

The responsibility for maintenance and distribution of these films and videotapes rests with the Clearinghouse on Development Communication, which is supported by ST+/ED (formerly DS/ED) and operated by the Academy. Since distribution began in 1980, the Academy has responded to more than 300 requests for the films and videotapes, with each request involving at least two viewings. Of these requests, over 160 were from AID/Washington or AID Missions. The average audience is 30 viewers, although at times it has numbered as much as 400.

I. Films

- Radio Mathematics in Nicaragua. Filmed on location, this film documents an important AID research and development project which used radio to present basic arithmetic skills to rural children in the classroom, using innovative educational techniques. Scenes of radio mathematics lessons illustrate how curriculum and lesson plans were developed and how classroom teachers supported the program. Discussions of the project's staff and training requirements, cost factors, and evaluation show the potential of this model for use in other countries facing similar problems of poor-quality instruction in rural areas.
- A Way to Bridge the Distance. Filmed on location in Alaska, Guatemala, Tanzania, and the Philippines, this film explores four different strategies for delivering critical health information to remote areas: two-way radio, mass media campaigns, satellite-linked diagnostic assistance, and social marketing. The project cases illustrate how communications media are used to support and to educate rural health workers and to motivate villagers to change their behaviors. The film illustrates four fundamental requirements for effective use of communications technologies for development:
 - strong government commitment;
 - systematic planning based on needs and resources;

- o audience-testing of messages during program development; and
- o ongoing evaluation and use of findings to improve programs.

The two films, Radio Mathematics in Nicaragua and A Way to Bridge the Distance, have won Golden Eagle awards, given by the Council on International Nontheatrical Events (CINE), a program sponsored by the United States International Communication Agency (USICA). The awards recognize outstanding achievement in American non-commercial filmmaking, and mark productions as suitable for showing abroad as examples of American craftsmanship in this area.

Twenty copies were made in English of each of these films, along with multiple copies in French, Spanish, and Arabic.

2. Videotapes

The SFL contract also called for the production of two videotapes:

- A New Voice in the Village explores mass communication techniques to support nutrition education in a developing country. It uses as an example the Tunisia-based "Dr. Hakim" mass media project designed to improve infant nutrition practices. Project personnel candidly discuss their experience in designing effective messages and in winning the support of their colleagues, who were often reluctant to test an innovative approach. This videotape was translated into French, Spanish, and Arabic.
- Masagana 99: Promoting a Miracle Begun in 1972, the Masagana 99 project was designed to increase rice production in the Philippines. The videotape explores the four parts of the project: researching new rice technologies; introducing a "no collateral" loan program for participating farmers; training farm extension workers; and systematically using mass media such as radio and print to inform the public about the program. The videotape focuses on the communication component of the project--especially the use of radio in farm extension programs. It describes how advertising techniques were interwoven with existing extension strategies to build public support for the program. This videotape was translated into Spanish and French.

Masagana 99: Promoting a Miracle was accepted for entry into the international video festival, Video Roma '80, which was jointly sponsored by the Corporation for Public Broadcasting and the City of Rome Arts Council.

3. Print Materials

A series of booklets and brochures was developed to accompany the films and videotapes. An example of each is presented in Appendix B. They are intended to serve as guides to the information presented in the audiovisual material; they are not research papers or exhaustive treatments of the projects. The following were produced:

- Basic Village Education: 1,000 copies each in English, Arabic, French, and Spanish.

- Radio Mathematics: 1,000 copies each in English, Arabic, French, and Spanish.
- A New Voice in the Village: 500 copies each in French, Spanish, and Arabic; 1,000 copies in English.
- Masagana 99: 500 copies each in English, Arabic, French and Spanish.
- A Way to Bridge the Distance: 500 copies each in English, French and Spanish.

4. Use of Information Series Products

These films, videotapes, and print materials have been used in a variety of ways to promote S&T/ED's work in development communication. Under the terms of the contract, they have supported the other components of Studies in Facilitating Learning, particularly the seminars and planning activities. In addition, they have been used by a number of academic institutions, delineated in Figure II-1, as course materials in their communications programs. AID has emphasized the utility of this application, as it improves the quality of training by introducing recent real-life examples.

FIGURE II-1
INSTITUTIONS USING SELF-INFORMATION SERIES PRODUCTS
AS PART OF COMMUNICATIONS CURRICULUM

<u>RADIO MATHEMATICS</u> <u>IN</u> <u>NICARAGUA</u>	<u>A WAY TO BRIDGE</u> <u>THE DISTANCE</u>	<u>COMMUNICATIONS</u> <u>FOR CHANGE</u>	<u>MASAGANA 99:</u> <u>PROMOTING A</u> <u>MIRACLE</u>	<u>A NEW VOICE IN</u> <u>THE VILLAGE</u>
Stanford University	Cornell University	Indiana University	Stanford	University of Wisconsin
University of Pennsylvania	East-West Communications Institute	University of Pennsylvania	Virginia Polytechnic Institute	Indiana University
Cornell University	Florida State University	Florida State University	Indiana University	Northwestern University
American University	Indiana University	East-West Communications Institute	Michigan State University	Cornell University
Florida State University	American University	American University	Northwestern University	Michigan State University
East-West Communications Institute	University of Toledo	Concordia University, Montreal	East-West Communications Institute	Stanford University
University of Western Ontario	Virginia Polytechnic Institute	University of South Pacific	Cornell University	East-West Communications Institute
Indiana University	University of Washington		University of Pennsylvania	University of Pennsylvania
University of South Pacific	University of Western Ontario		Florida State University	Florida State University
	University of South Pacific		University of South Pacific	University of South Pacific

The films and videotapes have also been presented at a number of international conferences and seminars, frequently at the request of S&T/ED. They serve to inform a worldwide audience of decision-makers and program managers about AID's work in development communication, while acquainting these individuals with the potential benefits of using communications in their own programs. Following are several examples highlighting the use of the Information Series products; a fuller description of their use is contained in Appendix B.

Radio Mathematics in Nicaragua is shown often by Stanford University, the contractor of the project, to promote new applications of the instructional use of radio and to disseminate knowledge about the project. In Washington the film is shown frequently at the request of S&T/ED for visitors interested in the project's innovative approach to teaching. Missions have requested the film to support their programs, including those in Kenya, Ecuador, Sri Lanka, Nicaragua, Botswana, and Guatemala.

Communication for Change, the Basic Village Education film, has been requested for screening by USAID Missions in Botswana and Zimbabwe as well as by the Ecuador Literacy Project, the AID-sponsored Rural Satellite Program, and several colleges and universities in this country.

A Way to Bridge the Distance was screened at the University of the South Pacific seminar and at the Botswana environmental sanitation planning conference sponsored under SFL. It was the initial presentation of the Third World health communications program at the WHO-sponsored Munich conference on health education by radio and television. As a result of this screening, members of the conference requested the film for viewing in their countries.

A New Voice in the Village was first used by Dr. Anthony Meyer of S&T/ED at a seminar for some 30 AID nutrition officers, sponsored by the AID Office of Nutrition. The tape has since been requested by Northwestern University, the Annenberg School of Communication at the University of Pennsylvania, Indiana University, and the University of Wisconsin, among others.

Masagana 99: Promoting a Miracle was used as a focal case study in an agriculture and communication workshop in Jamaica in 1979, carried out under the seminar component of SFL. Liberian participants, impressed with the project, included ideas from the film in planning a subsequent AID-sponsored project which will use mass media to encourage rural development. It was also screened in November 1980 at the SFL conference in Botswana, to plan the USAID-funded Botswana environmental sanitation project. Masagana 99 was shown on national television in the Philippines; and it was selected to represent Philippine innovation in agriculture at the UNTAD conference in Manila. The Ministry of Agriculture in the Philippines has incorporated the videotape into its training program for extension workers.

D. COMMUNICATIONS SYSTEMS COST OPTIONS

This fourth component of the SFL contract called for developing preliminary telecommunications systems configurations and calculating their costs to help individual countries or regional groups identify cost-effective ways of increasing social service delivery systems. The countries were selected by AID, based on consideration of the country's intention to extend basic telecommunication services to rural areas and underserved groups or expand its own capacity to provide social service broadcasting in education, agriculture, nutrition, or health.

Under the direction of Dr. Heather Hudson, this component had three elements, as described in the SFL contract: defining a methodology; conducting analyses by country or region to test it; and providing on-call consulting services as required in this area.

The work in all three areas proceeded from the premise that the application of telecommunications to development requires an understanding not only of development needs but also of how telecommunications can be used—taking into consideration technical constraints, system costs, and options for integrating technologies with other services. Studies were required to determine the technical requirements for specific applications, the technology options for providing these services, and the capital and operating costs of the communications systems. For example, in the Sudan the planning task involved designing a communication system to support a rural primary health care delivery project. The result was a plan for a two-way, high-frequency radio system. In Indonesia, the requirement was for an educational radio system to replace distribution of audio cassettes. Several options were examined, with a satellite delivery system using Indonesia's PALAPA system found to be the most cost-effective.

At a more general level, a set of tools and procedures was developed under this component which together could be called a methodology for planning development communication systems. This methodology was developed by the Academy under a subcontract with EDUTEL and applied to case studies in North Yemen and the Philippines.

1. Element I: Development of Communication Planning Methodology (1978)

The purpose of this element was to develop a methodology for planning systems which would provide telecommunications services in support of development goals. This methodology was to be designed for use by AID officials who lacked experience in telecommunications planning. It was intended to provide an overview of the approaches and information required to plan effective rural communications systems—a general guide to communications planning which could then be applied to specific country and project contexts.

The study includes an iterative approach methodology which outlines technical alternatives, formulation of objectives, and design tools. It provides a section on technical alternatives including satellites and a variety of terrestrial technologies including radio, open wire, and cable. It concludes with a section on planning guidelines for communications networks using typical developing country sites.

A preliminary application of the methodology was carried out for Bolivia using data available in the United States. Subsequently, these planning tools were applied in the Yemen and Indonesia case studies.

2. Element II: Studies of Particular Countries

Two studies were carried out under this element:

a. Use of Small Aperture Earth Stations in Yemen: Applications and Design Considerations for the ARABSAT System (1978)

As a result of an AIDSAT demonstration using ATS-6 in Yemen and a subsequent seminar under SFL, the government of North Yemen indicated interest in obtaining U.S. assistance to determine whether satellite communications should be considered as a means of improving Yemen's domestic rural communications. The timing was

particularly appropriate as the ARABSAT satellite system was being planned, thus offering an opportunity to assist Yemen in defining its communication requirements and influencing the ARABSAT design. North Yemen was selected to be the first satellite planning case study under the EDUTEL subcontract for which the planning methodology developed as the first major product was to be applied.

The study examined Yemen's geography, population distribution, and rural communication requirements and proposed a system using satellite capacity which would meet Yemen's rural development needs. The report included an analysis of small earth station technology appropriate for Yemen, identified satellite design characteristics which should be incorporated in the ARABSAT system, and developed a comprehensive satellite-based rural telecommunications system for Yemen.

b. Case Study of Alternative Systems for Distribution of Educational Radio in Indonesia (1980)

The second case study completed under Element II of this component also involved applications of the communications planning methodology developed in Element I. The study resulted from USAID interest in helping Indonesia apply its domestic satellite system (PALAPA) to national development goals.

Estimates of cost options were developed for the delivery of educational programs throughout Indonesia by satellite and other forms of tele-communications. The study examined technical facilities, comparative costs, and trade-offs for each option. It also investigated the question of technical facilities required and estimated costs for an audio conferencing network.

3. Element III: Technical Support

Several activities were completed under this element:

a. Planning Documents in Support of USAID SYNCOM IV (1977-78)

In 1977 and 1978, USAID participated in a U.S. government activity involving the possibility of using a Hughes communication satellite, SYNCOM IV, for public service and/or international development use. An analysis of this proposal examined SYNCOM IV technical parameters; sample lease specifications; earth station cost matrix; elevation angles from various developing country locations; and procurement cost estimates for South American earth stations.

b. Draft Recommendations for USAID to Present to the U.S. WARC Delegation (January 1979)

This memorandum, prepared to inform the Department of State about AID recommendations for inclusion in the U.S. position for the World Administrative Radio Conference (WARC), was used in preparing a study for AID on U.S. and Third World development communication requirements to be taken into consideration at the WARC.

c. Modular Power Sources for Remote Earth Terminals (December 1977)

This memo presents the factors that must be considered in the design of remotely located telecommunication station power sources and conditioners.

d. Photovoltaic Conversion of Solar Energy and Its Prospects for Developing Countries (March 1978)

This report assesses the present state of the art of photovoltaic conversion (PVS) with emphasis on its potential for application in developing countries.

e. Conceptual Framework for Preparation and Review of USAID Rural Satellite Project

This memorandum was to provide a framework for the conceptualization of AID's program to test the use of satellite communications to reach remote rural areas with critical development information. The memorandum included comments on the need for local involvement in the design of the project and in the selection, procurement, and installation of the hardware.

SECTION III

RESULTS OF THE STUDIES IN FACILITATING LEARNING PROGRAM

The impact of the Studies in Facilitating Learning program can be measured in terms of how the four project components were integrated to provide useful information and effective services to USAID Bureaus and Missions, and how many communications-related activities were planned and implemented as a result.

For several years prior to 1977, the Academy worked with S&T/ED sponsorship to promote the effective use of communications technologies in development programs. The potential of these technologies to expand program outreach was examined and documented, as increasing evidence was gathered through actual field experience. The award of the SFL contract allowed the Academy, on behalf of S&T/ED, to respond to the growing interest among AID Missions and developing countries in exploring how communications technologies could contribute to development. It also provided a vehicle through which the various S&T/ED-supported entities within the Academy, such as the Clearinghouse on Development Communication, could collaborate in support of S&T/ED goals.

Thus, the work performed under SFL should be reviewed not in terms of four isolated activities; rather, it was a comprehensive campaign, offering information and services, to promote a way in which the effectiveness of AID's programs might be enhanced. The integrated approach spelled out in the SFL contract ensured that the seminars would provide material for the design of information products; in addition, they would serve as catalysts for project planning studies or analyses of communications in particular development sectors. As information products became available, they were used to generate and focus discussion in seminars; they became important tools for informing the primary audience about development communication, encouraging requests for seminars and project planning missions. Planning studies led to requests for seminars and workshops to continue a process begun by the visit of the planning team or to provide an opportunity for project participants to work out implementation details with help from technical specialists. Telecommunications costs and system studies were conducted in countries where applications planning was in process, i.e., planning on how to make the best use of communications infrastructure for development purposes.

There are several examples of projects which were designed and implemented following the delivery of products or services under SFL. In several instances, different components of the contract were involved over time.

A. LIBERIA

Like many other countries, Liberia realized during the 1970s that, despite increased efforts and larger budget allocations, it simply was not possible to train and support enough fieldworkers, extension agents, teachers, nurses, and other development workers to reach all of the people in rural areas with essential information and services in health, agriculture, nutrition, and education.

In the fall of 1977, participants from the Liberian ministries of education, health, and agriculture, as well as local governments and other development-related ministries, attended a seminar on communication in development, conducted by the Academy and AID and the Liberian Ministry of Information and Cultural Affairs, to study the systematic use of communications in development, discuss case studies on the use of communications in other developing countries, and engage in communication planning exercises.

In May 1979, a team of senior-level personnel from the Liberian development ministries, accompanied by an education and human resources officer from USAID/Liberia, participated in an SFL seminar in Jamaica, convened to review the use of radio in rural development programs. The team then visited Guatemala to observe the Basic Village Education Project. On their return to Liberia, members of the team formed a permanent working group, the task force on communications. Concurrently, a rural development task force was established which presented a comprehensive plan for decentralization, including development councils, committees, and action groups, from the national level to the local village level.

The task force, following discussions with USAID/Liberia, drew up the design for a rural information system in Liberia, using regional broadcast facilities. A Project Identification Document (PID) was completed. Following this step in December 1979, the Academy received a request from USAID/Liberia to provide technical assistance in developing the second stage of the project design cycle--the Project Paper (PP). In response, the Academy, under the SFL contract, organized a four-member team of communication planners to assist USAID/Liberia and the Liberian counterparts in preparing the technical design for the Rural Information System Project. The team was accompanied by a representative of S&T/ED. In February 1980, the team's work began.

During this phase of the project, the specialists in radio communications hardware and software, communications planning, and nonformal education materials undertook a comprehensive analysis of the technical and operational feasibility of the project. The work of the team was concluded in March 1980. Suggestions with regard to administrative arrangements, techniques of program design, and the methods to be employed for project evaluation were incorporated into the design of the Project Paper. At this point, the Project Paper entered the internal AID review, approval, and funding process. The project emerged in the form of a Request for Proposal for Technical Assistance.

The Liberian Rural Informational System Project illustrates the project planning process from the conceptualization of an idea to its implementation. It is also an example of how the provision of different kinds of technical planning services during each stage of the project design cycle contributes to developing and refining a comprehensive rural development communication project. By providing information materials and such services as seminars and a planning team, an idea to introduce information services to the underserved rural populace of Liberia was translated into a workable and locally defined approach to achieve integrated rural development. From the initiation of the idea, through the Project Identification Document and Project Paper, to the issuance of a Request for Proposal, such services played a key role in reinforcing each other and contributing to the planning activities of the Liberians themselves.

B. OTHER CASE STUDIES

There are several other examples of the contribution of Studies in Facilitating Learning to the development of programs which use communications technologies to reach their objectives.

- In Guyana, a prototype two-way radio system was developed by an Academy planning team under SFL. Reaching ten remote sites, the system design considered hardware, administrative and instructional uses of the system, and evaluation methodology. The evaluation was continued under a

contract between USAID/Guyana and the Academy. Currently, the system is being expanded to accommodate 35 sites, under a contract between the Mission and the MEDEX program at the University of Hawaii.

- In Yemen, a seminar to promote discussion about the potential applications of satellite-based communication systems to rural development prompted a request for planning assistance under SFL; and a more in-depth treatment of system configurations and related costs was produced under the cost options component.
- In Jamaica, a seminar promoting the use of radio to encourage rural development resulted in the planning and implementation of a program using the facilities and resources of the Jamaican Broadcasting Corporation to augment agriculture extension services.
- In Indonesia, planning and information services through SFL encouraged examination of ways in which the national satellite system, PALAPA, could be most effectively used for development purposes. Design work continued under the AID Rural Satellite Program and Indonesia was eventually selected as the site of a pilot project under this program.
- In Honduras, Academy staff assisted the Mission in planning a seminar on agricultural communications, which was subsequently supported with Mission funds. The seminar set in motion a process which has since led to additional requests for planning assistance under SFL which have led to incorporation of a communication element in a new USAID project to establish a Honduran foundation to support agricultural research, as well as in a separate project to strengthen the use of communications in support agricultural extension.

As noted in Section II, other examples of continuation of work initiated under SFL are provided by Swaziland, and the communications component of the environmental sanitation program there; the University of the West Indies, and its work to extend educational outreach and improve administrative services using satellite-based technology; and the Sudan, and the primary health care program now under way there.

The work under SFL has resulted in a number of communications programs that are now being planned or are already in progress. In addition, a worldwide community of decision-makers and planners at both the policy and implementation levels has been reached with information and, at their own request, services which relate to planning for the application of communication to development. The effects of these information materials and the planning assistance can only be measured over time, in terms of how many projects become operational and how effective they are in delivering social services in new and innovative ways. As development resources continue to dwindle and demand for services increases throughout the world, more cost-effective delivery mechanisms will continue to be investigated. The burgeoning potential of communications, as examined and publicized under Studies in Facilitating Learning, remains ripe for exploration.

GENERAL OBSERVATIONS OF THE STUDIES IN FACILITATING LEARNING PROGRAM

The Studies in Facilitating Learning program began with the basic assumption that communications technologies can make an important contribution to development. This is particularly true if one undertakes a comprehensive plan systematically applied to communications planning and implementation. To understand the SFL program, one must understand the basic components underlying this systematic approach to communications:

- Needs assessment and determination of audience characteristics.
What do target populations have to say about their own living conditions? How can planners capitalize on what they already know? How do they learn new information and practices? What is the best way to gather this information?
- Determination of content priorities and measurable objectives.
What information must be communicated at once? What are people saying about their priorities? How can desired outcomes be stated in such a way that program managers will know whether or not the intended purposes have been achieved?
- Survey of other message sources and analysis of context.
What are the different ways in which people get information? What is the influence of community leaders, friends, and relatives? How can conflict be avoided among sources of information?
- Media and format decisions.
What other channels of communication are available? Which are most appropriate? What is the role of, say, radio? What about folk art, singers, actors, dancers, and other forms of entertainment? What is known about people's preferences? Do they like lectures? interviews? Radio novels?
- Program writing, pre-testing, and production.
How often should the same message be delivered to the rural audience? How can planners find out if the audience will comprehend a series of programs? What production techniques are appropriate to particular messages?
- Delivery, reception, and utilization.
If radio is used, will the broadcast signals be clear and free from interference? Can people be expected to listen in groups and to take part in discussion after the programs? How can group listening, discussion, and action be stimulated? How can monitors or animators be motivated to work with organized groups?
- Evaluation, feedback, and system modification.
How does one know if selected communication strategies are working? How are the appropriate kinds of information gathered from the audience? What steps must be taken to modify communication activities?

The overall goal of the SFL program was not just the introduction of new communications hardware, but the spread of awareness about and adaptation of systematic communications planning to the practical needs of development. Two firm measures of success were essential to the SFL program:

- Increase in the size of the constituency for communications planning.
- Increase in the number of actual programs applying communications planning during the course of the project.

The Summary of this report suggests that on both counts the SFL program was effective.

The following observations stem primarily from these achievements. SFL was not after all an experimental project designed to compare one communications system with another, nor even to test the basic feasibility of systematic communications planning. The purpose of SFL was to disseminate an idea, diffuse an approach to planning, and promote widespread practical application of the concept. We learned that the integration of information programs, seminars, project planning resources, and long-term studies were effective in defining and supporting that special audience most likely to apply development communication strategies.

2. What Aspects of Communications do People Care about?

Communication affects the lives of all of us, from affluent consumers weighing the merits of videodisc against video cassette to rural farmers deciding between a radio with Double A or Size D batteries. The elements of communications technologies are so ubiquitous that frequently many go totally unperceived. However, ask a minister of health if he or she needs a radio design expert, or a minister of agriculture how satellites can improve fertilizer use, or an AID education officer if radio can teach mathematics, and the constituency for applied communications may well dissolve into a series of quizzical expressions. Selling an idea, an approach to using communication tools, is often a much more complicated problem than later selling the entire system. One important observation from the SFL program is simply that people are much more attracted to the innovative aspects of communications than to the systematic planning approach.

A second observation is that the first one does not always prove true. During the course of the SFL program, the constituency for communications technologies has grown in both size and sophistication. Many countries can now point with pride to one or another application of communication to development. But increased contact and experience have generated skepticism along with sophistication. The SFL seminars brought together practitioners who had gone beyond the first blush of enthusiasm and were now seeking answers to the difficult questions of continuity, audience fatigue, and dwindling resources. Tanzanians spoke of the difficulty in regularly conducting another "Man is Health" or "Food is Life" campaign. They were earnestly searching for simple, more practical applications of communication to development. In Tunisia, the first excitement of Dr. Hakim's national media success was overshadowed by the need to diffuse more complex information and the imperative to continually generate audience appeal. Clearly, a second, third, and fourth generation of problems and challenges are developing among communication's growing constituency. There now exists a constituency which is bright and tough-minded, and it is fair to say that SFL contributed to this phenomena.

The third observation is that most development planners, whether seasoned or not, continue to see communications as a means to an end--a tool to promote agriculture, education, nutrition, primary health care, energy conservation, or responsible family planning. In most cases, they are more interested in the goal than in the communications tool used to achieve it. SFL participants wanted to know how to reach more isolated people, how to promote a new project, how to reduce the costs of field extension

workers, and how to generate more public support for their programs. Few expressed the need to use radio or television or satellites. This observation leads us to a second category of questions: How can we best persuade this broad audience that communications can be a useful development tool?

3. How to Persuade Those That Care and, Maybe, Those That Do Not?

a. First Make the Distinction

Perhaps the most critical lesson reiterated during the SFL program was the importance of knowing to whom you were speaking, what their interests were, and how communications might help them get their job done. A single approach was simply not applicable to all audiences. To convince experienced practitioners, the approach had to be practical, hardheaded, and cognizant of the limitations as well as the contributions of communications. For the novice, it was first necessary to be positive and sometimes sanguine about the benefits of communication. Interestingly, the basis for conversation in both cases was the technical content of the program to be developed and not the needs or the limitations of the communications hardware.

b. Know the Technical Language of Your Audience

Simply, in discussing communications with a nutritionist, you need to know almost as much about nutrition as you do about communications. SFL began with a reasonable, but, in retrospect, facile assumption that most development professionals were able to draw relevant conclusions from experiences in sectors different from their own. The agronomist could learn about communication from experiences in health; the physician from experiences in education; the demographer from experiences in farm extension. This simply proved untrue. Each specialist wanted to hear about experiences in his or her own specialty and discounted the experiences in other fields as irrelevant or unintelligible. Understanding specific sectoral issues became a major requirement for discussing communication.

While it was necessary to talk the same sectoral language, it was also critical to place advice in a specific geographical, social, and economic context. People wanted to know that the idea would work in their country, and again they were reluctant to draw much solace from experiences in other hemispheres or even from neighboring countries. The tendency was to focus on differences rather than similarities. The principal task of SFL staff was to draw parallels, make bridges, and pose questions which led to a local solutions and concrete projects. SFL tailored the experiences to specific situations and promoted sectoral foci for information, seminar, and planning components. A Way to Bridge the Distance is simply referred to by most viewers as "the health film," a fact indicating that they see its significance in a sectoral context. The Tunisian seminar, for example, was organized not around radio issues but around radio for nutrition education.

c. Match Ideas with Resources

If the goal was to stimulate greater use of communication in existing programs, then an effective approach was to match ideas with resources. Projects resulted most often when participants were able to identify personnel, money, and time to support new ideas.

It is our experience, based on the SFL program, that no amount of exposure, training, or targeting is going to produce a project when resources do not exist to support it. Experience demonstrates that while communication is practical, it is also big

business—it requires top-level commitment, serious discussion, and often the reallocation of scarce resources. The best programs resulted from situations in which both resources and relevant needs concided. Programs like those in Indonesia, Jamaica, Swaziland, and Peru all demonstrated this confluence of interests. But Liberia is perhaps the best example of how resources, needs, and information come together to produce a major new development communication initiative. Through a four-year effort of seminars, external visits, and planning workshops, the best experience in development communication was linked with AID and Liberian resources. The formal seminars were important, but equally important were the informal visits and discussions which transformed the formal experience into concrete plans supported with real resource commitment. SFL personnel often provided a key link between AID mission support, ministry approval, and participant planning. The ability to place communication needs in an administrative, financial, and resources context was essential to the overall success of the SFL program.

d. Intervene at a Variety of Levels

Finally, SFL clearly demonstrated the soundness of integrated information, planning, and training activities. Neither the seminars, the information products, nor the planning missions alone would have achieved the range of success attributable to the combination of services. The variety of services allowed SFL personnel to intervene at all levels, providing examples of applied communications, as well as planning major programs and even training local personnel. Most importantly, they provided a comprehensive and integrated approach for the diffusion of practical and tailored development communication alternatives.

Appendix A

Principal Academy Staff, Subcontractor Staff, and Consultants
By Contract Component

PRINCIPAL ACADEMY STAFF, SUBCONTRACTOR STAFF, AND CONSULTANTS

BY CONTRACT COMPONENT*

I. INFORMATION SERIES

Academy Staff

Jill Merrick
William Smith

Hearst Metrotone

Charles Shutt
John May

Thirtyfive-Sixteen

Robert Denny
Georg Voellmer

User, Inc.

Vincent Durago

Consultants

Chapman Mott
Sara Munger
Barbara Searle
Mary Lou Reker
Patricia Mathews
Arlene Horowitz
Barbara Sutton

Translators

Lili Packer
Marie-Claire Bart
Saud Jallad

Narrators

Ruby Dee
Diana Campillo

*Individuals are listed once only under the component on which they primarily worked.

II. COMMUNICATIONS PLANNING AND DESIGN STUDIES

Academy Staff

Peter L. Boynton
Anna Stahmer
Douglas Goldschmidt
Howard E. Ray
William A. Smith
Kurt Moses
Reynaldo Pareja
John Middleton

Consultants

Edwin Wallace
Stanley Burns
Bonnie Caine
Kenneth Dewire
Michel Guite
Gerard Kenney
Richard Burke
David Wilson
William Sweeney
Eric Eno
Rod Lauver
Maria Rubama
Robert Worrall
Victor Levine
Mark Lediard
Ronald Parloto

Consultants

Robert M. Morgan
Bella Mody
Joseph Child
Will DeHart
Judy Roberts
Victor Forsythe
Albert Fredette
Larry Meiller
Robert Zemsky
Davis Jenkins
Esta de Fossard
Lyle Saunders
Barry Argento
Robert Charlick
Klaus Galda
Herbert Ohlman

Frost Communications, Inc.

Edward G. Frost
Joseph Child

Morcom, Inc.

George Gehr

III. COMMUNICATIONS SYSTEMS COST OPTIONS

Academy Staff

Heather Hudson

EDUTEL

Albert Horley
James Janky
Hugh Paul
Robert Scrafford

IV. SEMINARS IN COMMUNICATION FOR DEVELOPMENT

Academy Staff

Allan Kulakow
Bette Booth

Consultants

Janet Alexander
Royal Colle
Anthony Dodds
Saud Jallad
T. El Amouri
Marion Zeitlin
Emile McAnany
David Freyss
Kathy Mendoza
Michael Nathenson
Jack McBride

Consultants

Gordon Straub
Klaus Galda
Larry Meiller
Vicente de Jesus
Hilda Kokohirwa
George Bostick
Barbara Searle
Jeanne Bisilliat
Albert Hundley
Donald P. Ely
Winai Rungsinan

Appendix B

1. Activities By Contract Component
2. Product Samples

I. Activities by Contract Component

I. INFORMATION SERIES

The Academy has received numerous requests from AID missions worldwide for the use of films and videotapes produced under the Information Series of the Studies in Facilitating Learning contract. The following constitutes a partial listing of these requests:

- USAID/Peru requested the Spanish-language videotape of Radio Mathematics for mission viewing.
- USAID/Jakarta requested that the English-language film version of Radio Mathematics be delivered to the document center of the Indonesian Institute of Science for screening by the national television authority for possible broadcast.
- USAID/Tunisia requested the French-language videotape of New Voice in the Village for permanent loan.
- USAID/Nicaragua loaned the Spanish-language videotape of Communication for Change for use in a seminar in Ecuador.
- USAID/Philippines borrowed the English-language videotape Communication for Change for mission use.
- USAID/New Delhi requested a copy of the English-language film A Way to Bridge the Distance for showing to the Ministry of Health in India.
- USAID/Haiti requested a copy of the French-language Radio Mathematics film to be shown to the agriculture mission.
- USAID/Egypt requested both the English and Arabic videotapes of A New Voice in the Village for a health project in Egypt.
- USAID/Morocco requested a French videotape of New Voice in the Village for showing at the mission.
- USAID/Abidjan requested an English videotape of New Voice in the Village for mission presentation.
- The director of the USAID/Ecuador mission requested the Spanish videotape of Radio Mathematics for mission use.
- USAID/Guatemala requested a Spanish videotape of Radio Mathematics for screening.
- USAID/Botswana requested the English videotape of Radio Mathematics for screening.

- USAID/Sri Lanka asked for a English-language film of Radio Mathematics for mission use.
- USAID/Nicaragua requested a Spanish-language film of Radio Mathematics for use by the Ministry of Education.
- USAID/Mali requested French versions of the videotapes for New Voice in the Village, Masagana 99, and the film Communication for Change for a nonformal rural education campaign.
- USAID/Jordan requested English-language videotapes of New Voice in the Village and A Way to Bridge the Distance in order to prepare a project paper.
- Radio Mathematics in Nicaragua was shown at the University of the South Pacific seminar conducted under SFL in Suva, Fiji, for representatives of the university, ILO, WHO, UNFPA, YWCA, ITU, and other resource people concerned with development in that area.
- The French version of Radio Mathematics in Nicaragua was shown at another SFL seminar in Bamako, Mali, in connection with devising a proposal for using development communication on a regional basis in the Sahel.
- The Agence de Cooperation Culturelle et Technique in Paris purchased a copy of the French Radio Mathematics in Nicaragua.
- The Sudan Gezira Board in Barakat, Sudan, used Radio Mathematics in Nicaragua in a training program for school teachers.
- A Way to Bridge the Distance has been requested by the AID Office of Public Affairs, Gabarone Health Services Development Project; AID's Near East Bureau, Office of Technical Support; National Academy of Sciences; an AID-sponsored conference on two-way radio for health; and the USAID Missions in Senegal, Guatemala, Tanzania, and the Philippines. Most recently, it has supported project planning for the AID Rural Satellite Program in Peru, Senegal, and the Philippines.
- Masagana 99: Promoting a Miracle was used by AID's Office of Agriculture within the Development Support Bureau; the Near East Bureau; and USAID/Philippines. Other requests for it have come from the Appalachian Community Services Network, Stanford University's Institute for Communication Research, and the World Bank. It has been shown to 60 agricultural information specialists from around the world at three six-week Department of Agriculture workshops on development and communications.

PRODUCTS

	<u>Radio Mathematics in Nicaragua</u>	<u>A Way to Bridge the Distance</u>	<u>Communication for Change (Basic Village Education)</u>	<u>A New Voice in Village</u>	<u>Masagana 99</u>
Produced 13mm color film in English	x	x	n/a	n/a	n/a
Number of copies of English film made	20	20	n/a	n/a	n/a
Translated film into French number of copies made	5	20	5	n/a	n/a
Translated film into Spanish number of copies made	10	20	10	n/a	n/a
Translated film into Arabic number of copies made	5	10	5	n/a	n/a
Transferred film to videotape English, number of copies made	8	8	n/a	n/a	n/a
Transferred film to videotape/ French, number of copies made	8	8	n/a	n/a	n/a
Transferred film to videotape Spanish, number of copies made	8	8	n/a	n/a	n/a
Transferred film to videotape Arabic, number of copies made	8	8	n/a	n/a	n/a

PRODUCTS

	<u>Radio Mathematics in Nicaragua</u>	<u>A Way to Bridge the Distance</u>	<u>Communication for Change (Basic Village Education)</u>	<u>A New Voice in the Village</u>	<u>Masagana 99</u>
Produced color videotape in English	n/a	n/a	n/a	x	x
Number of copies of English videotape made	n/a	n/a	n/a	8	8
Translated videotape into French, number of copies made	n/a	n/a	n/a	8	8
Translated videotape into Spanish, number of copies made	n/a	n/a	n/a	8	8
Translated videotape into Arabic, number of copies made	n/a	n/a	n/a	8	8
Produced print brochure in English, number of copies made	1,000	500	1,000	1,000	500
Translated print brochure into French, number of copies made	1,000	500	1,000	500	500
Translated print brochure into Spanish, number of copies made	1,000	500	1,000	500	500
Translated print brochure into Arabic, number of copies made	1,000	500	1,000	500	n/a

** In preparation

II. COMMUNICATIONS PLANNING AND DESIGN STUDIES

Under this component of the Studies in Facilitating Learning contract, divided into Project Planning Studies and Studies of Communications in Development Sectors, a total of 41 activities were carried out as follows:

Project Planning Studies

- Options Analysis and Recommendations for a Communications Satellite Demonstration in North Yemen and Related Activities, January 1979.
- Communications Support for Primary Health Care Projects: Sudan, May 1979.
- The Rural Communications Services Pilot Project in Peru, December 1979.
- Two-Way Radio for Rural Health Delivery in Lesotho, January 1980.
- Liberia Rural Information System Project Planning Study, March 1980.
- Indonesia Satellite Pilot Project: Preliminary Planning Study, March 1980.
- Aide Memoire: A Rural AID Satellite Project in the Philippines, July 1980.
- Accelerated Impact Project, Rural Satellite Communications, USAID Senegal, September 1980.
- Feasibility Study of the Use of Two-Way Radio and Radio Broadcasting in Support of Rural Primary Health Care in Pakistan, April 1982.
- Agricultural Communications in Pakistan's Northwest Frontier Province, April 1982.
- Assessment of Information Management Requirements for the Ministry of Education in Zimbabwe, August 1982.
- Follow-up Study and Implementation Assistance to Improve Information Management in the MOE of Zimbabwe, August 1982-November 1983.

- Feasibility Study for a Two-Way Radio System for Integrated Rural Health Care in Ecuador, April 1982.
- Planning for a Health Campaign in Ecuador, November 1982.
- Educational Technology Planning Study in Zimbabwe, December 1982.
- African Health Communications Study (Triple C D Study), December 1982.
- Development and Health Communications in Swaziland, February-July 1983.
- Communications in Support of Family Planning in Egypt April-November 1983.
- Incorporating the Systematic Use of Communications Technology Into Agricultural Development Projects, June 1983-August 1984.
- Project Design for a Remedial Education Assessment Project, June-July 1983.
- Study of Human Resource Development Planning for Mauritania, August-September 1983.
- Study of Agricultural Communications in Honduras: Analysis and Recommendations, March 1984.

Studies of Communications in Development Sectors

- Planning Assistance to the University of the West Indies, June 1978.
- Indonesian Educational Technology Center Consultations, July 1978.
- Agricultural Communications in Africa, September 1978.
- Tunisian Dr. Hakim Follow-Up Project Planning, March 1979.
- MEDEX Two-Way Radio Communications in Guyana, May 1979.
- Project Assistance in the Dominican Republic, September 1979.
- Satellite Project Management, December 1979.
- Two-Way Communications for Health Care Delivery, May 1980.
- Health Communications, April 1981.
- Educational Communications Planning, Zimbabwe, April 1981.
- Center for Development Communication, Botswana, June 1981.

- Assessment of Radio Mathematics Applicability to Honduras, June 1982.
- Assessment of Options for Developing a Media-Supported Diarrhea Prevention and Treatment Program in Ecuador, August 1982.
- Planning Assistance for an Agricultural Communications Seminar in Honduras, Fall 1982.
- Mauritania Health Education Study, November 1982.
- Jamaica Health Communications Study, January 1983.
- Assessment of an Agricultural Radio Station in Jamaica, Fall 1982.
- Planning Assistance for a Development Communication Project in Swaziland, May 1984.
- Study of Communication/Outreach Component of Proposed Agricultural Research Project in Honduras, March 1984.

III. COMMUNICATIONS SYSTEMS COST OPTIONS

Under this component of the contract, divided into Methodological Development, Studies of Particular Countries, and Technical Support, a total of eight activities were carried out as follows:

Methodological Development

- Communications Planning Methodology, 1978.

Studies of Particular Countries

- Use of Small Aperture Earth Stations in Yemen: Applications and Design Considerations for the ARABSAT System, 1978.
- Case Study of Alternative Systems for Distribution of Educational Radio in Indonesia, 1980.

Technical Support

- Modular Power Sources for Remote Earth Terminals, 1977.
- Planning Documents in Support of USAID SYNCOM IV PROPOSAL, 1977-1978.
- Photovoltaic Conversion of Solar Energy and Its Prospects for Developing Countries, 1978.
- Draft Recommendations for USAID to Present to the U.S. WARC Delegation, 1979.
- Conceptual Framework for Preparation and Review of USAID Rural Satellite Project.

IV. SEMINARS IN INTERNATIONAL DEVELOPMENT

Under this component of the contract, the Academy has conducted or participated in the following seminars and conferences—nine in Africa, three in the Caribbean, one in the Middle East, one in India, one in Indonesia, one in Latin America, one in Fiji at the University of the South Pacific, and one in Washington—for a total of eighteen:

- Regional Meeting on Human Resources Development of the Comite Permanent Interetats de Lutte contre la Secheresse dans le Sahel (CILSS), March 1978.
- Seminar in Radio Education, Caribbean Region, March 1978.
- Jamaica Radio Nutrition Education Seminar, June 1978.
- AID Regional Agricultural Officers Conference, September 1978.*
- Yemen Telecommunications Seminar, December 1978.
- Tunisian Seminar on Nutrition Education and Communication, February 1979.
- Jamaican Radio Rural Development Project, June 1979.
- University of the South Pacific Seminar, May 1980.
- Sahel Regional Rural Radio Seminar, October 1980.
- Multimedia Environmental Sanitation Project Seminar, November 1980.
- Conference on Research for Decisionmaking in Educational Media, December 1980.*

* Attendance to conference supported by the Studies in Facilitating Learning Contract

- Workshop on Communications and Diarrheal Disease Control in Honduras, October 1981.
- Gambian Radio Production and Planning Seminar, June 1982.
- Botswana Seminar To Plan a Center for Development Communication, May 1982.
- Swaziland Seminar, 1982.
- Zimbabwe Seminar on Implementation of Microcomputer System, November 1982.
- Indonesian Open University Seminar, January 1984.
- Triple C D Seminar, March 1984.

2. Product Samples

The Basic Village Education Project: Guatemala

A New Voice In the Village

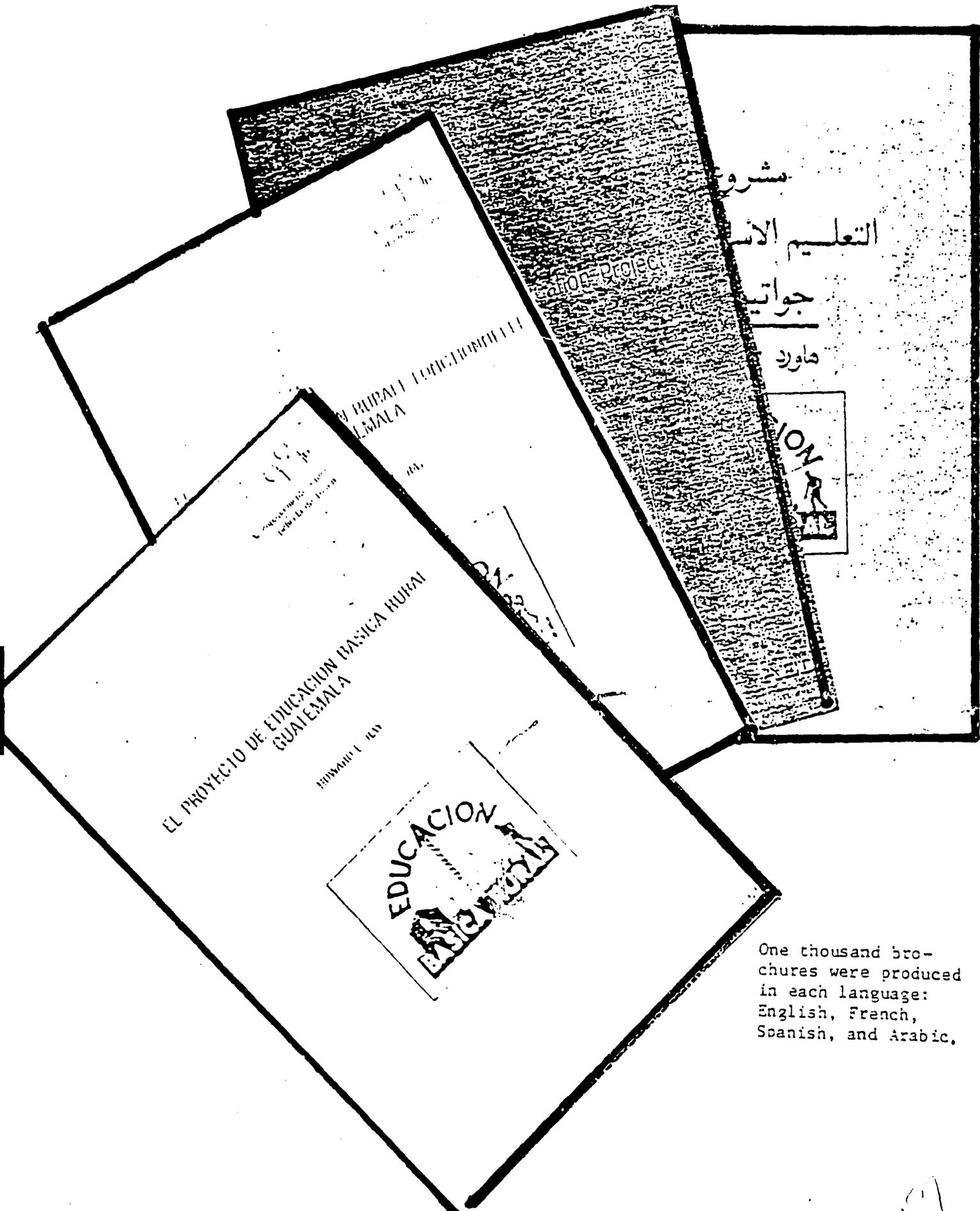
Radio Mathematics in Nicaragua

A Way to Bridge the Distance

Masaqana 99: Promoting a Miracle

in English, French, Arabic, and Spanish

Copies of the enclosed materials are available
from the Office of Education, Bureau for Science
and Technology, Agency for International Development.



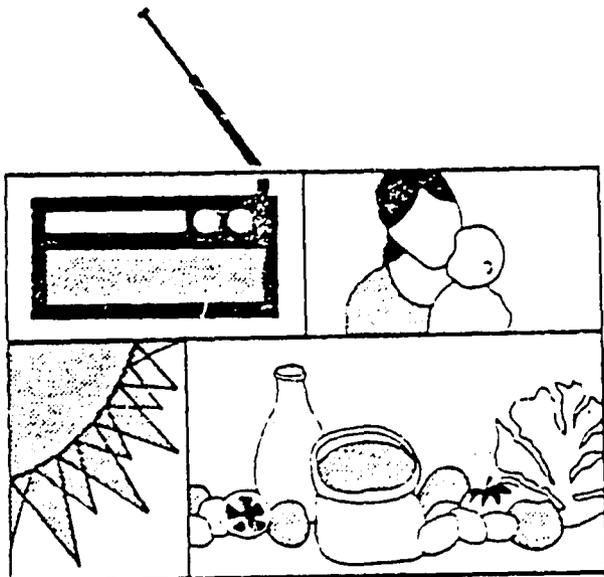
One thousand brochures were produced in each language: English, French, Spanish, and Arabic.

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Accompaniment to
a VIDEOTAPE

A NEW VOICE IN THE VILLAGE



AED

ACADEMY FOR EDUCATIONAL DEVELOPMENT

A 3/4" color videotape available in English,
French, Spanish, and Arabic from the:
Clearinghouse on Development Communication
1414 22nd Street, N.W.
Washington, D.C. 20037 U.S.A.
Tel. (202)362-1900
Cable: ACAGED

A NEW VOICE IN THE VILLAGE

...examines the use of mass communication techniques to support nutrition education in a developing country.

This 3/4" videotape looks at the successful experience of the Dr. Hakim Mass Media Project conducted in Tunisia. New Voice focuses specifically on how the project improved infant nutrition practices. Project personnel candidly discuss their experience in designing effective messages and in winning the support of their often reluctant colleagues in testing this innovative approach.

The message design process is summarized in five steps:

- 1) defining a limited development problem and identifying a specific target audience;
- 2) conducting audience research and involving the target audience in program development;
- 3) pre-testing and revising draft messages under actual listening conditions;
- 4) carefully scheduling broadcasts;
- 5) systematically monitoring and evaluating the program.

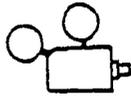
A New Voice in the Village was produced by AED for people interested in how mass media and face-to-face instruction can be combined as an effective development tool.

This videotape was produced with support from the Office of Education, Development Support Bureau, U.S. Agency for International Development.

Produced by the Academy for Educational Development, this videotape was translated into French, Spanish, and Arabic. Eight copies of each language -- English, French, Spanish, and Arabic -- were made of the videotapes.

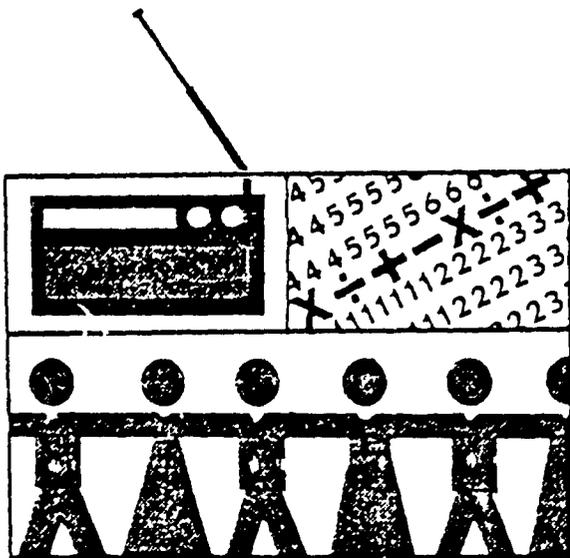


Five hundred brochures were produced in each language: English, French, Spanish, and Arabic.



Accompaniment to
a 16mm FILM

RADIO MATHEMATICS IN NICARAGUA



AED

ACADEMY FOR EDUCATIONAL DEVELOPMENT

A 16mm film or 3/4" color videotape available in English, French, Spanish, and Arabic from the:
Clearinghouse on Development Communication
1414 22nd Street, N.W.
Washington, D.C. 20037 U.S.A.
Tel. (202)862-1900
Cable: ACADEP

RADIO MATHEMATICS IN NICARAGUA

...explores an innovative project that combined radio and systematic instructional design to teach primary school mathematics in a developing country.

Filmed on location in Nicaragua, Radio Mathematics discusses how the project succeeded in presenting basic arithmetic skills in a context relevant to rural children. Classroom scenes of Radio Math lessons illustrate how curriculum and lesson plans were developed, and how classroom teachers supported the programs. Discussion of the project's staff and training requirements, cost factors, and evaluation results show the potential of this model for use in other countries facing similar problems of poor quality instruction in rural areas. Children tested in the Radio Math program achieved significantly higher levels of learning than children taught by traditional methods.

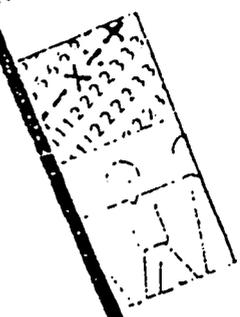
This film was produced by AED, with support from the Office of Education, Development Support Bureau, U.S. Agency for International Development, as part of a series on the use of media in international public service programs.

Produced by the Academy for Educational Development. 20 copies of this film were made in English, five copies in French, ten copies in Spanish, and five copies in Arabic. This film was transferred to videotape. Eight copies of each language -- English, French, Spanish, and Arabic -- were made of the videotape.

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LIQUES
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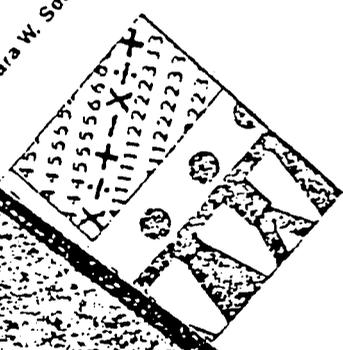
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الراديو
نيكاراجوا
باربارا سوارث



99
Accompagnement a une
RECEVIBLE de 16mm

MATEMATICAS
POR
RADIO EN
NICARAGUA

Barbara W. Soarle



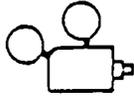
RADIO
MATHEMATICS
IN
NICARAGUA

Barbara W. Soarle



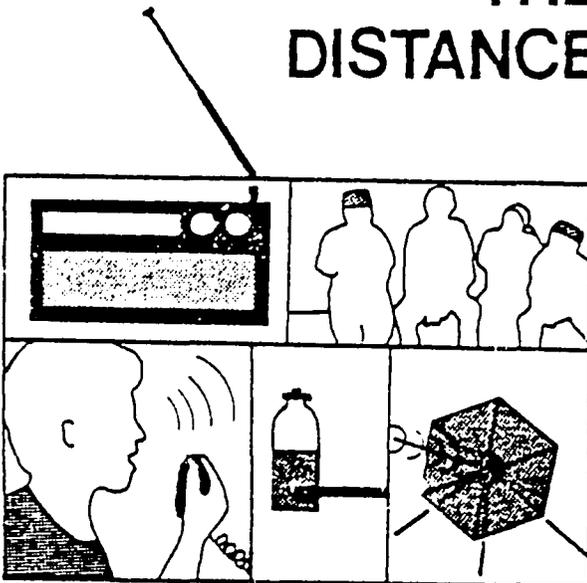
One thousand
brochures in each
language: English
French, Spanish,
and Arabic.

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Accompaniment to
a 16mm FILM

A WAY TO BRIDGE THE DISTANCE



A WAY TO BRIDGE THE DISTANCE

Filmed on location in Alaska, Guatemala, Tanzania, and the Philippines, A Way to Bridge the Distance explores four different strategies for delivering critical health information to rural villages. Two-way radio, mass media campaigns, satellite-linked diagnostic assistance, and social marketing are shown. The project cameos illustrate how communication media are being used to support and educate rural health workers and motivate behavior changes among villages in developing countries.

The film identifies the fundamental requirements for effectively using communication technologies for development:

- * strong government commitment
- * systematic planning based on needs and resources
- * audience testing of messages during program development
- * ongoing evaluation and using these findings to improve programs.

AED

ACADEMY FOR EDUCATIONAL DEVELOPMENT

A 16mm film or 3/4" color videotape available in English, French, Spanish, and Arabic from the:
Clearinghouse on Development Communication
1414 22nd Street, N.W.
Washington, D.C. 20037 U.S.A.
Tel. (202)862-1900
Cable: ACADED

A Way to Bridge the Distance was produced by AED, with support from the Office of Education, Development Support Bureau, U.S. Agency for International Development, as one of a series on the use of media for international public service programs

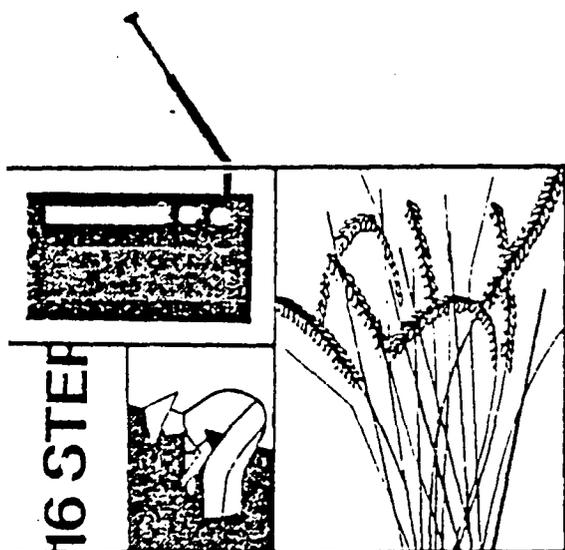
Produced by the Academy for Educational Development. 20 copies each were made in English, French and Spanish. Ten copies were made in Arabic. This film was transferred to videotape. Eight copies of each language -- English, French, Spanish, and Arabic -- were transferred to videotape.

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Accompaniment to
a VIDEOTAPE

MASAGANA 99: PROMOTING A MIRACLE



MASAGANA 99: PROMOTING A MIRACLE

Masagana 99 was a program begun in 1972 to increase rice production in the Philippines. The four-part program included conducting research on new rice technologies; creating a "credit without collateral" loan program for participating farmers; training farm extension workers; and systematically using mass media such as radio, print, and other promotional materials to inform the public about the program.

Masagana 99: Promoting a Miracle focuses on the communication component of the project, especially the radio and farm extension programs. It describes how advertising techniques were interwoven with traditional farm extension strategies to answer farmers' questions on cultivation and to create a national spirit for the program.

This 3/4" color videotape will particularly interest people concerned with how media can be used to link agricultural research with the application of new technologies by rural farmers.

AED

ACADEMY FOR EDUCATIONAL DEVELOPMENT

A 3/4" color videotape available in English, French, Spanish, and Arabic from the:
Clearinghouse on Development Communication
1414 22nd Street, N.W.
Washington, D.C. 20037 U.S.A.
Tel. (202)862-1900
Cable: ACADEC

Masagana 99 was produced by AED, with support from the Office of Education, Development Support Bureau, U.S. Agency for International Development, as part of a series on the use of mass media for international public service programs.

Produced by the Academy for Educational Development, this videotape was translated into French, Spanish, and Arabic. Eight copies of each language -- English, French, Spanish, and Arabic -- were made of the videotapes.

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Appendix C

Table 1: Estimated Level of Effort

Table 2: Estimated Expenditures

Studies in Facilitating Learning
Contract AID/ta-c-1473

Table 1
Life of Contract Level of Effort

<u>Category</u>	<u>Person Months Provided</u> <u>9/30/77-8/15/80</u>	<u>Contract</u> <u>Estimates</u>
Key Personnel:		
S. Moseley	8.5	9.2
C. Greenwood	9.2	9.0
J. Merrick	12.6	12.5
P. Boynton	14.4	14.5
H. Hudson	20.7	20.5
A. Kulakow	39.4	42.0
D. Goldschmidt	6.8	7.0
A. Stahmer	10.2	10.0
L. Buss	6.4	6.5
B. O'Grady	9.0	9.0
K. Moses	6.2	3.5
J. Middleton	3.0	7.5
H. Ray	6.3	2.7
	162.1	161.9
Other Professional Staff	<u>2.7</u>	<u>0</u>
	164.8	161.9
Secretaries	114.2	120.4
Program Assistants	31.9	38.2
Other Clerical	0	2.0
Consultants	<u>69.3</u>	<u>85.9</u>
	380.2	408.4

Studies in Facilitating Learning
Contract AID/ta-c-1473

Table 2
Life of Contract Expenditures

<u>Category</u>	<u>Expenditures</u> <u>9/30/77-8/15/84</u>	<u>Contract</u> <u>Estimated Budget</u>
Salaries/Wages	\$640,128	\$635,775
Employee Benefits	135,142	137,745
Consultant Fees	229,804	350,124
Travel/Transportation	474,781	494,676
Other Direct Costs	212,588	212,054
Equipment	18,652	8,252
Subcontracts	461,480	466,927
Overhead	424,344	443,850
Subcontract G & A	366	0
Total	<u>\$2,597,285</u>	<u>\$2,749,403</u>
	(Obligated:	<u>\$2,612,701)</u>