This newsletter discusses development projects in developing nations, including the Dominican Republic, Ecuador, and Peru. The following major articles are included: (1) "Radio Santa Maria: A Case Study of Participatory Evaluation" (John K. Mayo, Charles B. Green, and Miguel E. Vargas); (2) "Instruction by Audio Conference: An Alaskan Example" (Coppie Green); (3) "Spreading Good Ideas: Adapting Illustrated Materials" (Joan Haffey and Ann Jimerson); (4) "Interactive Radio in the Classroom: Ten Years of Proven Success" (Maurice Imhoof); (5) "The Measure, the Problem: Communication at Work in Ecuador" (Reynaldo Pareja); (6) "Message from Puno: Radio Onda Azul" (Jane Duran); (7) "Training African Communicators: A Message to Media Trainers"; and (8) "Improving Worldwide Telecommunications: The Maitland Commission Report." Reviews of recent publications and announcements of development-related conferences, grant awards, and courses are included. (LMM)
Radio Santa María: A Case Study of Participatory Evaluation

by John K. Mayo, Charles B. Green and Miguel E. Vargas

Radio Santa María was established in 1964 under the auspices of the Catholic Church in the Dominican Republic. Its initial purpose was to attract rural and urban disadvantaged adults into a certified literacy program, but it has evolved into programs leading to certificates at the primary and intermediate levels. Breaking with conventional methodology that depends on remote-memory learning, RSM curricula stress education as a tool that helps individuals meet and cope with their environment, relating school learning to real-life needs. RSM depends on three educational aids: workbooklets, radio broadcasts, and field teachers. The radio station is largely self-sufficient with some support from the Government of the Dominican Republic and private contributions.

"All too often the main result of an educational program evaluation is a report that finds a resting place on office shelves." This statement reflects the experience and the fear of many persons currently involved in the evaluation of development communication projects. We have seen too many evaluations that have had little, if any, influence on program performance and that have resulted in "just one more report." This realization was foremost in our thinking when the Learning Systems Institute at the Center for International Studies at Florida State University (FSU) was invited by Radio Santa María (RSM) of the Dominican Republic to submit a proposal for an evaluation of their distance teaching programs. At the outset, we wanted to be as certain as possible that, were we to become involved, our evaluation would be genuinely helpful to RSM's administrators and producers.

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Instruction by Audio Conference:
An Alaskan Example

by Coppie Green

Despite rapid changes in the last decade, the State of Alaska is still very much in a phase of development, not unlike many developing countries. It is faced with similar challenges and constraints due to its climate and enormous size, as well as its limited technology and slowly emerging institutional support systems. Among the challenges Alaska faces is educating its widely scattered, multi-cultural population. This poses numerous problems including: where to find enough qualified teachers for remote sites; how to deal with the multi-cultural Alaskan population so as to preserve diversity; and how to provide in-service training for teachers in remote villages. To provide the best possible education the LearnAlaska Network was established which evolved out of earlier Applications Technology Satellite (ATS) experiments. This article describes how tele-education works in Alaska. Developing countries that face similar challenges in providing basic educational opportunities for their rural populations may find it relevant and useful information.

The State of Alaska has a land mass 1/5 the size of the United States, more coastline than the United States, and only 400,000 people. Of Alaska's 250 communities scattered across its 570,000 square miles, only 15% can be reached by roads, and many of these communities have a population of fewer than twenty people. Yet—or perhaps the word should be "therefore"—here resides the world's largest instructional telecommunications system: the LearnAlaska Network.

Created by the Alaska State Legislature in 1980 to facilitate educational opportunities for rural Alaskans, the LearnAlaska Network is a satellite-based system of audio-conferencing and low-power television. The Alaska Department of Education and the University of Alaska are joint sponsors of the Network. Its principal users are the 51 public school districts and all branch campuses of the University. The University of (continued on page 6)
of the experiences and the findings of the previous RSM studies, and that the new evaluation should exhibit the following characteristics:

1. RSM personnel should be involved as much as possible, even though this might compromise the objectivity of the study in certain areas.
2. The study should not overemphasize the measurement of outputs to the neglect of inputs and processes.
3. The evaluation should not disrupt ongoing activities.
4. The evaluation should take account of RSM's resources and the limits under which it operated. In this manner, recommendations growing out of the evaluation would be realistic and practical.
5. The evaluation should not ignore significant program elements just because they could not easily be quantified.
6. The evaluation should enhance RSM's ability and willingness to continue monitoring and improving its various services.
7. It would be at least as important to identify RSM's strong points as to pinpoint its shortcomings, since it is often more feasible to improve an institution's strengths than to correct its weaknesses. The report growing out of the evaluation should highlight guidelines for the continued growth and improvement of the institution.
8. The evaluation should evolve and improve as the nature and needs of RSM became better understood by the institution and its outside evaluators.

A Participatory Self-Study

In preparation for the evaluation, our team reviewed the previous studies of RSM as well as studies conducted on other Latin American educational radio programs. Subsequently, a planning seminar was held with some of the persons who had carried out those studies. Although the evaluation team recommended that personnel from RSM become actively involved in the evaluation, it was unsure how much time staff members would actually be able to devote to the effort. After considerable discussion in the planning seminar, the RSM leaders adopted the concept of a fully participatory self-study. RSM staff members would carry out the field work while members of the expatriate evaluation team would serve as facilitators, helping to design the evaluation instruments, training the RSM staff in evaluation techniques, and conducting the major statistical analyses.

Since the planning seminar had involved only the RSM leaders, as a first step in the self-study, a meeting of RSM's entire staff (approximately 35 people) was held to discuss the purpose of the evaluation and the activities that would be involved.

A policy document, which RSM's leaders had issued in Spanish as an RSM publication, with the FSU team listed as editors. RSM's administrator also requested that the FSU team write up its suggestions and recommendations independently since the team members, while serving as facilitators had become very familiar with the operation of the organization. These recommendations were submitted as a separate report.

Advantages of Self-Study

In retrospect, the most important advantage of this approach, we found, was that the evaluation process itself resulted in program improvements while the evaluation was underway. As the RSM staff members discovered ways in which their programs could be strengthened, they immediately started to take measures necessary to make improvements. By the same token, the final evaluation report of the self-study became part of an improvement process, not the culmination or final event of that process. Momentum had built up during the self-evaluation and all indications were that this would result in a continuation of the evaluation effort.

As active participants, RSM personnel also developed some important evaluation skills. Plans were made to upgrade data management and analysis skills since these had been performed largely outside the organization. A computerized information retrieval system was installed by RSM with this same objective in mind.

Although the original project called for the study of only some of RSM's educational programs, the participatory approach demonstrated that it was not possible or desirable to compartmentalize the evaluation. Although the self-study did focus on specific education programs and objectives, the study actually touched every aspect of RSM's operations. For example, it revealed a need for improved staff communication to upgrade the overall administration of the radio station, and steps were eventually taken to provide stronger links among various administrative and production units.

Our experience with RSM caused us to re-examine just how participatory one can be in the conduct of program evaluations. As we began the evaluation, we had in mind that, ultimately, we would be in charge of the evaluation and would direct members of the staff in the data collection and subsequent activities. We found that once our suggestions were taken at face value, the RSM staff assumed command of virtually all parts of the study. We came to question whether a truly participatory evaluation could mean anything less than a self-study similar to our experience. Participation may be analogous to diving from a ten-meter platform: you cannot do it only half-way!

Some Disadvantages

The participatory approach presents some obvious disadvantages, particularly with regard to interviewer bias. If the team had hired outside
Spreading Good Ideas: Adapting Illustrated Materials

by Joan Haffey and Ann Jimerson

It is often much easier to change well-tested educational materials from another country to suit local conditions than it is to "start from scratch." However, adapting means changing, not duplicating. Ample care must be taken to include messages specific to the needs of the new audience and not just to ensure that images such as clothes and surroundings are appropriate. The examples that follow demonstrate some of the advantages of starting with successful materials, and point to the need to pretest all materials in the new setting. The examples are from pictorial booklets for semiliterate and illiterate audiences, and demonstrate the need for clear visual illustrations. The same guidelines apply to the adaptation of any materials that rely on visual images to relay or reinforce information.

Reasons for Adapting Materials

- Proven ideas work well
  A major advantage of adapting materials is being able to test ideas that have proven useful elsewhere. This Pakistani drawing, which tells pregnant women to avoid visiting those who may have a contagious illness, had to be revised six times before it was clearly understood by the illiterate Pakistani target group. A Kenyan adaptation of this same message and drawing was well understood during the first pretest.

- Technical information requires few changes
  The instructions for correctly using a particular technology or product often are the same worldwide. Existing educational materials dealing with technical information usually provide a good selection of points, readily adaptable for local use. For instance, the message "Continue feeding a child who has diarrhea" is the same for Mexico and Indonesia, a similarity reflected in these visuals.

- Time and money are saved
  A Nigerian project saved both time and money by using this Sierra Leonean drawing of a man receiving an injection to cure a sexually transmitted disease. The drawing was easily understood. The final version for Yoruba speakers in Nigeria is quite similar except an illustration of the wife receiving an injection was added to the same page.

Reasons for Testing Materials

- Misunderstood messages
  Symbols are culture-specific and often need to be changed to convey an identical message. For example, although the message "Come to receive an injection every three months" is the same in Mexico and Sierra Leone, the symbols that prove effective in conveying this message to illiterates differ considerably for these cultures. Thus, existing materials should only be used as preliminary drafts for the development of your own visuals.

(continued on page 4)
Interactive Radio in the Classroom:
Ten Years of Proven Success

by Maurice Temroff

Interactive radio is something new in educational radio. It is unlike any other application of radio to education, and must be thought of apart from "educational radio" as practiced in the past.

Interactive radio is based on a careful instructional design that creates radio lessons to involve students. Students interact with the radio lesson by responding orally, physically, or in writing to prompts from the radio. Well-timed and frequent pauses by the radio instructor allow the students time to respond, and the pause is immediately followed by the radio instructor giving the correct response to reinforce or correct the students' answers. Typically in a half-hour broadcast, students will be called on to respond over one hundred times. The pace is quick, the students cannot remain passive, the classroom teacher has a prominent role, and the thirty minutes go quickly.

Interactive radio really works. After ten years of unprecedented development and research by the Office of Education, Bureau for Science and Technology (S&T/ED), of the U.S. Agency for International Development to demonstrate the effectiveness of interactive radio, we are encouraged by the results. In Nicaragua, Kenya, and the Dominican Republic, S&T/ED projects created a major breakthrough in reaching more children, providing them with better instruction, and at low per-student cost.

The interactive instructional-radio model used in these countries has shown conclusively that systematic radio broadcasts can carry the principal instructional burden in the key subject areas of mathematics, language arts, and basic skills. Daily half-hour programs broadcast to first-, second-, and third-grade children have produced dramatic gains in student achievement without the need for significant retraining of teachers or large investments in textbooks and other materials.

To apply this breakthrough to other countries, an instructional radio conference was held in Nairobi, Kenya from September 24-28, 1984. The theme of the conference—a new direction for education by radio—was set by the keynote speaker, Alex Quarryme, Unesco Chief Technical Adviser, Zimbabwe Institute of Mass Communication:

Radio is one of Africa's greatest wasted resources... We require a renovation of the broadcaster and the educator themselves. From the broadcaster we require a commitment to, and a change of attitude toward education. Similarly, from the educator, we require a commitment to, and a change of attitude toward radio.

Sponsored by Kenya's Ministry of Education, Science, and Technology and by S&T/ED, the conference focused on the ongoing Radio Language Arts Project at the Kenya Institute of Education to demonstrate the process and principles of interactive radio as applied in rural Kenyan schools. The Radio Language Arts Project team discussed project design, implementation, and evaluation. In addition, conference members visited rural classrooms where English lessons were being received. This "field-laboratory" experience provided the basis for conference discussions on the interactive-radio approach used in all of the S&T/ED projects: Radio Mathematics in Nicaragua, Radio-Assisted Community Basic Education in the Dominican Republic, Radio Language Arts in Kenya, and the newly funded Radio Science Project.

Throughout the conference, there were demonstrations of how the S&T/ED model of interactive radio could apply to educational problems faced by planners in developing areas. Daily presentations were given by the S&T/ED interactive radio research project directors. Participants were leaders in instructional-materials development, adult education, and educational broadcasting from Botswana, The Gambia, Lesotho, Liberia, Nepal, Somalia, Zimbabwe, and Kenya.

To convey the urgency of using interactive radio as a major cost-effective medium of instruction, the conference participants formulated a number of recommendations. While recognizing the importance of other educational strategies these recommendations stress the utility and practicality of interactive radio as a familiar and effective medium.

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Ann Linerson is Media/Materials Coordinator for PIAC/PATH. She has worked in educational materials development and communication training in Honduras, Costa Rica, Brazil, Colombia, Panama, and Washington, D.C.
Recommendations

- Interactive radio should be more widely used. Through interactive radio, education of both high quality and greater access can be provided to achieve the requisite level of competence. Radio can even be used to reach the unschooled at a lower cost than traditional forms of education. Thus more educational broadcast time and coverage should be made available by governments.

- Interactive radio can be an important educational tool at the primary level. Many developing countries currently lack the classrooms and trained teachers necessary to teach primary school children. Interactive radio can compensate for these deficits in the schools and can provide basic education to adults or children in nonformal settings as well.

- Interactive radio should be used in critical curriculum areas. Interactive radio can provide better instruction in subjects that are difficult to teach through conventional means. Second-language instruction, for example, can be enhanced by interactive radio's use of careful instructional design, with speakers who use the regional standard language in real situations. Mathematics, a perennial challenge to teach, has been taught through interactive radio with great success.

- The development of radio lessons should be integrated into the overall curriculum development and evaluation. Interactive radio can fit into the existing curriculum. In fact, without integrating interactive radio lessons into a system which includes educational leaders, broadcasters, teachers, and learners, and without the development, testing, revision, and implementation of the educational innovations, interactive radio instruction will fail.

- Interactive radio at its best should be part of a mix of instructional techniques. In viewing radio as a cost-effective medium to solve educational problems caused by a lack of resources, we should not ignore the fact that interactive radio combined with other media—including excellent teachers—can be effective. Teacher participation, print and other visual support will strengthen interactive radio's effectiveness.

- Interactive radio should be viewed as an aid to the teacher. Radio presents the subject matter uniformly high-quality instruction to difficult subject areas; the classroom teacher manages the classroom, and has the opportunity to give individual help. The radio lessons may indirectly add to teachers' skills as well.

- Radio should be used to train teachers. The proportion of untrained and underqualified teachers is likely to grow as the school population increases. Radio has proved to be an effective means of providing instruction to untrained teachers and of providing inservice training. In addition, special consideration should be given to training teachers in the use of interactive radio broadcasts.

- Interactive radio should be more widely promoted to parents and administrators. Since parents and educators may be more comfortable with traditional teaching methods, the value of interactive radio needs to be clearly and systematically presented to them. Experts should create a forum to explain intensive, interactive radio before broadcasts begin, to help teachers use the programs well, and to reassure teachers of their continuing priority role in the classroom.

- Further implementation of interactive radio should proceed. Since interactive radio has been successful on an experimental basis in several countries, it should be integrated into national curricula in those countries, and its application extended to other countries.

Maurice Imbro is the Director of the Kenya Radio Language Arts Project at the Academy for Educational Development. Much of his career has been spent in developing countries, where he has applied learning methodologies, designed textbooks, and trained teachers.

The Spring 1985 issue of DCR will focus on interactive radio.

1985 International Development Conference

The biennial International Development Conference will be held in Washington, D.C. March 20-22, 1985. This year's theme is "Toward a National Consensus on International Development." Sessions will cover the effects of Third World development on particular sectors of America's life, an examination of elements of current U.S. policy toward the developing world: American attitudes toward, and information about, the Third World; and specific ways to increase public understanding of international development.


Training Scholarships Available

The U.S. Agency for International Development (A.I.D.) has allocated $200,000 to the U.S. Telecommunications Training Institute (USTTI) to award scholarships for professionals from developing countries to receive short-term training in the field of telecommunications. Nominations for these scholarships should be submitted either directly to USTTI, 1255 23rd St., N.W., Washington, D.C. 20037, U.S.A., or through A.I.D. missions in developing countries.

Development Communication Report, published quarterly by the Clearinghouse on Development Communication, has a circulation of over 6,000. The newsletter is available free of charge to readers in the developing world, and at a charge of $10.00 per year to readers in the industrialized countries.

A center for materials and information on important applications of communication technology to development problems, the Clearinghouse is operated by the Academy for Educational Development, a nonprofit planning organization, and supported by the U.S. Bureau for Science and Technology of the U.S. Agency for International Development as part of its program in educational technology and development communication.

The views expressed in Development Communication are those of the authors and not necessarily those of its sponsors. Original material in the Report may be reproduced without prior permission provided that full credit is given and that two copies of the reprint are sent to the Editor.

Readers are invited to submit typed manuscripts, of no more than 1,000 words.
(LearnAlaska continued from page 1)

Alaska Instructional Telecommunication Services (UAITTS) manages and operates the Network and provides support for faculty and students, while the Department of Education coordinates use for grades K-12. Each of these systems also provides programming for adult lifelong learning, using both instructional television and audio conferencing. The Alaska Department of Administration installs and maintains equipment.

Audio Conferencing

Audio conferencing—the first of the systems to be installed—has proven to be a highly effective tool for providing instruction across the state’s vast distances. Accessible by any telephone in the state, the LearnAlaska System can link up to 120 sites in a single audio conference, or several sites together in simultaneous conferences. The equipment at the local level consists of several sites together in simultaneous conferences. The equipment at the local level consists of a convener (speaker) and free-standing push-to-talk microphones. Equipment is located in audio conference sites throughout the state—in public schools, on university campuses, in legislative offices, in some correctional centers, in village-owned community centers, and in nonprofit agencies. Most sites are staffed by volunteer site coordinators selected by the educational/community agency sponsor. The coordinators—now numbering more than 600 including alternates—prepare conference rooms and equipment and are a communication link between the Network and the community.

In three years, the number of LearnAlaska audio sites has grown to 318. The LearnAlaska audio conference network handled 3432 conferences during the 1983-84 academic year. Of these, 76 percent were for direct instruction; the remainder were for support of instruction and administration of programs.

All “units” of the University of Alaska—including the three University campuses, eleven University-sponsored community colleges, and the Rural Education, Correspondence, and Cooperative Extension Services programs, use audio conferencing to provide distance education. Audio conferencing is used for university degree requirement courses, elective courses such as local government, farming, and homemaking; professional certification upgrading or maintenance courses for nurses and teachers; vocational training courses, and general interest subjects.

Each university unit decides what its service area needs are, and whether or not to develop courses for only its area or perhaps to design a statewide-mandated course. Once these courses are designed, the unit requests audio conferencing hours from the Network prior to the semester they are to be offered. After the hours are allocated, the unit schedules and administers its own academic program. Recognizing that new technology must be accompanied by new teaching methodology, UAITTS provides assistance to faculty in developing, designing, adapting, and evaluating distance delivered courses. This assistance includes faculty forums; in-service workshops; teacher and student guides and handbooks explaining the use of the system; and, if requested, assistance in developing entire courses or programs. One such program developed with help from UAITTS was an audio conferenced course entitled “19 Ways to Make Farming Pay in Alaska.” Following this success, another community college offered a course, “Marketing Agricultural Products,” via audio conferencing to farmers in nine communities across the state. Other recent audio conference courses have included subsistence resource development, beekeeping, marine mammal management, community health aide training, rural Alaska community action, marketing livestock, gardening, and Alaskan language and culture groups.

One-Way Video — Two-Way Audio

There is also a growing use of interactive systems incorporating live one-way video and two-way audio. Courses in nursing and paralegal studies are currently taught in this manner. A teacher conducts the live televised class with students who are provided with audio conference sets. Each class is broadcast to participating sites. The distant students see the live lecture and engage in dialogue with the teacher, the students in the classroom, and the other participating audio conferencing students.

“With audio conferencing, accessibility of education to rural students is greatly enhanced through their ability to receive instruction where they live and work.”

The challenges to teacher and learner are significant. Teachers must be trained in the methodology of distance delivery: careful planning, clarity of delivery, thoroughness of supporting materials, sensitivity to the limits and advantages of the system, and understanding of the unique needs of the students. There must be close coordination between the distance teacher and the local education system. Students must assume a great degree of self-discipline, dexterity in study skills, and willingness to partake in the give-and-take process of the audio conference. The teacher-active, student-passive dynamic is deadly for the audio conference. Both teachers and students must be prompt in the interchange of supporting print materials.

The positive implications of audio conferencing for the distance delivery of instruction are highly relevant for developing countries. Audio conferencing is simple to use, can be accessed by existing telephone systems, and costs much less than the direct instruction which—although desirable—is often impossible to accomplish in countries with a widespread rural population and limited staff capabilities. With audio conferencing, accessibility of education to rural students is greatly enhanced through their ability to receive instruction where they live and work, individualized instruction is significantly enhanced, and the base of expertise is greatly broadened by securing instructors from many locations.

Developing countries show a growing interest in the LearnAlaska telecommunications systems. In the past 16 months, visitors from 25 nations have toured the Network and talked with staff of the University of Alaska Instructional Telecommunication Services, the LearnAlaska Network and the Alaska Department of Education. Staff from UAITTS and LearnAlaska have also traveled to Indonesia, as well as England, to assist in the development of audio conferencing for instruction.

The University of Alaska welcomes the exchange of ideas and information with people interested in the field of tele-education. Their address is: Instructional Telecommunication Services (UAITS), Office of the Statewide Director, 3 Bunnell Building, Fairbanks, Alaska 99701, U.S.A.

Copple Green is the Assistant to the Statewide Director of UAITTS.

Rural Development Course at Cornell University

Cornell University will hold its annual course on Communication Planning and Strategy, July 14, through August 9, 1985, at Ithaca, New York. The course is intended for officials and decision-makers in rural development programs. It is designed to increase participants’ understanding of how to incorporate systematic information and communication support for agriculture, health, nutrition and family planning projects. Topics include communication aspects of technology transfer, decentralization policies, and use of paraprofessionals in field operations, as well as principles of persuasion, and mobilization of information resources.

Field trips to Washington and New York City are planned, and will be tailored to individual participant’s professional interests. There will also be several media workshops.

Instructional fees for the four-week course are US$1,400. Housing (including field trip) will be approximately US$645 (not including meals and other personal expenses.) Applications can be obtained from Dr. Royal D. Colle, CP85, Cornell University, 640 Steward Avenue, Ithaca, New York 14850, U.S.A. Telephone: (607) 256-6500, Telex: 937478. Enrollment is limited to 40 persons and is usually filled by April 30.
The Measure, the Problem: Communication at Work in Ecuador

by Reynaldo Pareja

Diarrhea kills millions of children every year by dehydration. Most of these children could be saved if they were given the oral rehydration solution (ORS) being promoted in so many countries today. But a common problem for many ORS programs is how to be sure that the correct amount of water is used in preparing the solution. In villages there are few standard measures, and it too little water is used the solution can be dangerous.

Throughout the world, many types of containers have been used as standard measuring devices. In The Gambia, JulPearl (a local soft drink) bottles are used; three bottles-full make a liter. In Honduras, the standard liter Coca Cola bottle is used; it Costa Rica the ORS packet has been adapted to the size of a common baby bottle; and in Brazil the ORS packets are geared to the size of a special cup supplied with the pack.

In Ecuador, a baseline investigation showed that as in many other countries, no standard sized receptacle was available throughout the country. To design and distribute a special bottle or jar would be too expensive. To solve this problem, Ecuador’s diarrhea control program devised an inexpensive but colorful and instructive plastic bag.

When a mother comes to a health post seeking help for her diarrhetic child, she receives a folded plastic bag containing two oral rehydration packets. She is instructed how to use the plastic bag as a liter measure, and how to follow the printed directions on the bag. (See illustrations) The instructions show her how to fill the bag with water to a clearly printed black line, empty the water into another container, pour in one packet of salts; and mix them. The mother then gives the child as much of the drink as he or she wants throughout the day. Advice about breastfeeding and feeding solid foods to the sick child is printed on the reverse side of the bag.

These same messages are repeated on dozens of radio spots that promote the liter bag, and teach listeners the mixing procedure and the administration steps. Radio broadcasts also describe the signs of dehydration and dangers of loss of body salts and water during an episode of diarrhea. A flip chart used in communities shows the same plastic bag and its use.

This practical, inexpensive Ecuadorian response to the measurement dilemma has proven to be a highly effective communication tool, as well as providing an accurate standardized measuring device.

There is an abundance of riches to note this quarter. Each publication is well worth your attention. The Council of Europe’s Foundation for Educational Research recently sent us their Directory of Educational Research Information Sources 1983. This is quite a useful compendium of timely information sources. While the countries doing educational research represented in the volume are mostly in the industrialized world, readers in developing countries can derive much valuable information from the lists of funding sources, international databases and bibliographies on educational research. The book is available in English only. Write to A.G. Kallenberg, Head, Documentation Department, Foundation for Educational Research, Pletterijkade 50,25 5 SH ’ s-Gravenhage, Postbus 19050, CB ’ s-Gravenhage, the Netherlands for price and shipping information.

For those readers who want more information about various regional development institutions, the following book will be of interest. The Southeast Asian Ministers of Education Organization (SEAMEO) has just published for the third time, their Resource Book on SEAMEO. SEAMEO publishes the Resource Book to “induce others to... promote cooperation among the Southeast Asian nations through education, science and culture.” Part One gives the nature and history of the organization; Part Two discusses the various projects supported by SEAMEO; and Parts Three and Four explain its funding and organizational activities. To receive a copy, write to Southeast Asian Ministers of Education Secretariat, 920 Sukhumvit Road, Bangkok 10110, Thailand.

Arenberg/Longman has just published a fine handbook entitled World Communications. Unlike most collections of academic essays, this one is eminently readable. Its chapters include important essays on five global communication issues: Global Perspectives on Information; Transnational Communications: The Flow of News and Images; Telecommunications: Satellites and Computers; Mass Communications: Development within National Contexts; and Intergovernmental Systems: Toward International Policies. Many of the authors are well known to DCR readers. This 527-page book is well worth the relatively modest U$53.95 price tag. It can be obtained directly from Longman, Inc., 1560 Broadway, New York, New York 10036, U.S.A.

Last April, the International Colloquium of the University of Illinois at Urbana-Champaign sponsored a Midwest Regional Symposium on “Development Communications in the Third World.” The conference proceedings have been published and are available directly from Earl D. Kellogg, 113 Mumford Hall, University of Illinois, 1301 W. Gregory Drive, Urbana, Ill.

INTELSAT Project Grant Awards

In conjunction with its twentieth anniversary celebration, INTELSAT is soliciting proposals for testing and demonstration of satellite technology in remote areas to promote social uses of telecommunications for health and education. Free technical advice and transmission time will be provided. The International Institute of Communication is assisting INTELSAT in the development of the project. For those interested in applying for a grant, the first round of grant applications for projected April 1985 start-up has passed. Applications must be received by March 15, 1985 for projects that expect to begin in July, 1985, and by September 15, 1985 for projects to start in January 1986. Inquiries applications can be obtained from INTELSAT, Project SHARE, 490 L’Enfant Plaza, S.W., Washington, D.C. 20024 U.S.A. Telephone: (202) 488-2300.

(continued on page 9, col. 2)
Message from Puno: Radio Onda Azul

by Jane Duran

Radio Onda Azul (Radio Blue Wave) is a church-sponsored community radio station based in the city of Puno, in the mountains of southern Peru. It is one of the few stations in Peru to transmit programs in indigenous languages, with its output divided between Quechua, Aymara and Spanish broadcasts. It is also one of a handful of community stations existing in Peru with a predominantly developmental purpose. Although Radio Onda Azul has been transmitting since 1963 with a strong emphasis on educational programming, it did not begin to function as a community station until 1981. During my visit to the station in 1983, I hoped to find out how community participation in programming evolved, and how it works in practice.

The Studio and its Productions

Radio Onda Azul operates with rudimentary studio facilities and a very limited budget allocated to it by the episcopate of Puno, and is supplemented by commercials. It broadcasts on medium wave, with a transmitted power of 1kW, reaching only parts of the department of Puno. The station consists of two small studios, an auditorium and office, built around a courtyard, and is located in the center of the city. What is immediately apparent to the visitor is that Radio Onda Azul does not operate as a professional enclave, but as an integral part of the community. Its doors are open and its listeners wander in and out, either to contribute to programs, or to join studio audiences.

A program called "Popular Saturdays," for instance, is a compendium of songs performed by amateur musical groups from both urban and rural communities in Puno. During a live broadcast which I attended, people of all ages crowded into the small auditorium, packing the aisles and doorways. Although some singers were nervous, and some occasionally strayed off tune, the audience was responsive and encouraging. Outside in the street and the courtyard, other groups rehearsed and awaited their turn. The program lasted several hours, and judging by the sustained enthusiasm of its audience, had great popular appeal.

"Auditions" is another community-based program broadcast every weekday by Radio Onda Azul. Each live broadcast of "Auditions" is produced and presented by a different community with its own group of local leaders or grass-roots organizations. Occasionally they approached villages directly. They often found that it was easier to establish a relationship of confidence if they arrived without recording equipment. Promoters also found that the less organized communities tended to be less responsive to their visits. It was decided that priority would be given to those communities in the process of organizing themselves, in the hope that, through their example, the dormant communities would become interested in self-help activities, and in participatory radio.

...if a community invests in the equipment, it will be more likely to use it.

Radio Onda Azul's Production Department now employs five "promoters," or station extension workers, to cover both rural and urban areas within the range of the station's transmitter. These promoters are responsible for organizing listener participation in program production as a means to community development. Of the four promoters covering rural areas, two are fluent Quechua speakers, and two are fluent in Aymara.

Engaging participation has been a slow process, and one which continues to develop and change. When promoters first visited rural communities, campestinos were suspicious and unwilling to answer questions about their communities. The question, "Why don't you want to talk?" did, however, elicit responses. The answers were broadcast, and this broke the silence.

Promoters believe that motivation for participation in station programming should come from the communities themselves. Radio Onda Azul does not rely on local facilitators, as staff feel that this would direct activities too much, and remove spontaneity. Nor does the station provide communities with recording equipment or materials, as it is expected that highly motivated groups will purchase these themselves. Promoters feel that if the community invests in the equipment, it will be more likely to use it, and care for it. Those communities which have acquired recording equipment receive support from Radio Onda Azul in the form of three-day, on-site production workshops.

Criteria for Program Selection

Now communities are more forthcoming about sending recordings to the station. Some are entire programs. Others serve as inserts such as talks, interviews, and sociodramas. The promoters monitor and select material to be broadcast. Beyond the basic prerequisite of intelligibility, they are not concerned with technical quality. The main criterion is: does this recording concern or serve the best interests of the community as a whole? Material can be rejected if it is not community-oriented.

This criterion is also applied to the content of live broadcasts involving contributions by members of the community. In a program called "Life of the Campestino," representatives from rural communities come to the studio to give talks and participate in discussions. Initially, these contributions consisted of lengthy greetings to relatives and friends. Little by little these greetings were shortened, and the emphasis shifted to community projects. In a broadcast that I attended, one contributor talked about a road which his community was building; another announced a local meeting to discuss problems within the community; and a third gave details of an agricultural training course for campestinos planned by a local grass-roots organization.

Promoters believe that motivation for participation in station programming should come from the communities themselves. By offering communities a channel of expression, Radio Onda Azul is able to promote local culture. By providing a forum in which problems and projects can be explored, it acts as a catalyst for change. Its activities are based on the premise that communities have a right to participate in station programming, and to determine the form and content of their own social and economic development.

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Prior to 1981, Radio Onda Azul staff had no experience with community radio. They have learned by trial and error, and are constantly expanding the scope of their activities as new communities become involved in production. By offering communities a channel of expression, Radio Onda Azul is able to promote local culture. By providing a forum in which problems and projects can be explored, it acts as a catalyst for change. Its activities are based on the premise that communities have a right to participate in station programming, and to determine the form and content of their own social and economic development.

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A Communicator's Checklist


This practical and insightful manual clearly explains how, when, and with whom to pretest print materials. Pretesting is the process of evaluating materials before they have been printed for mass distribution. When pretesting, individual messages are shown to members of the target audience for whom they have been developed. According to the perceptions and comments of the individuals interviewed, revisions are then made and further pretesting continues, until the content and presentation of the materials is clearly comprehensible and acceptable. Although this manual is oriented to the production of print materials with an emphasis on child health and nutrition, many of the techniques can be adapted to pretest other educational materials, such as radio scripts or theater presentations.

Pretesting, a vital stage in materials' development, has too often been overlooked. The traditional excuse of lack of resources is often synonymous with a lack of interest in, and respect for, the target audience. Many programs have printed and distributed educational materials, only to find they are ignored or rejected by the population. Designers of the materials then blame the target group for their ignorance and lack of appreciation. Responsibility must legitimately be assigned to those who designed the materials and failed to take into account the needs and perceptions of the audience. Without pretesting, simple errors that could have easily been corrected can render useless months of work.

The author illustrates the importance of understanding variations in cultural perceptions. People differ radically in the way they view, and subsequently interpret visuals. Those who have long been accustomed to print materials are quickly able to understand messages from a conglomeration of symbols, photographs, and/or drawings. Those not familiar with print materials may not recognize what a photograph or drawing is trying to depict. In order to convey a message, it may be necessary to teach people to "read" drawings.

Specific recommendations for improving or assuring comprehension of visuals include: omit background detail as it can distract from the message; use positive messages as "don't do's" are difficult to portray; and keep new ideas to a minimum as too many messages can be confusing and may overwhelm the "reader."

Guidelines to the pretesting process are given in the manual in a practical and concise manner. Particular attention is given to interviewing and the training of interviewers; the use of open-ended questions is stressed, and constructive examples provided. For example, interviews beginning with the question, "What does the woman have in her hand?" assumes that the interviewee has recognized that one of the forms is a woman. Some non-leading questions are: "What do you see in the picture?" or "Do you recognize anything here?" or "What do you think this looks like?" These questions allow the person being interviewed to give a more objective response than if she or he is led into the answers that the interviewer wants to hear.

The manual outlines a three-day workshop for training health workers in pretesting, within the context of the entire materials' development process. The workshop advocates actual pretesting practice with special emphasis on applied experience in the field.

Throughout Pretesting Communication Materials, specific examples are shared and appropriate illustrations enhance its readability. While the illustrations are amusing and clear, the layout could be improved so as to clearly differentiate captions from the rest of the text. Dynamic cartoon figures show common mistakes made by materials' developers in the past. Mistakes will continue to be made; but anyone who uses this manual will find how he or she can identify and correct them before materials are printed.

Available free of charge from: The PSC Section, UNICEF, P.O. Box 1435, Rangsoon, Burma.

Reviewed by Lena Steckel, an Assistant Program Officer with PIACT/PATH. She has a Master's of Public Health degree and has worked in public health education in Togo, Africa.

(Pubs to Note continued from page 7)

Since its establishment in June 1981, the International Programme for the Development of Communication (IPDC) has been making good progress in carrying out its mandate to enhance the communications capabilities of the developing world. From May 3 to 9, 1984, members of the Intergovernmental Council of the IPDC met at Unesco headquarters in Paris, France for their fifth session. The agenda comprised an assessment of the program through a study of the financial situation, the projects submitted to the session, and the evaluation and follow up of projects.

Acknowledging the growing effectiveness of the IPDC, Director-General of Unesco, Amadou-Mahtar M'Bow, noted that the program had become operational very quickly and by the fifth session had: financed fifty-five projects from its Special Account; found funds-intrust support for nine projects; and adopted sixteen projects to be executed when financing could be obtained. He also noted that the IPDC had established a good groundwork for cooperation with intergovernmental and non-governmental organizations. In particular, IPDC had worked with other agencies of the United Nations system in the field of communication, including the International Telecommunication Union, the Universal Postal Union, the World Health Organization and the Food and Agriculture Organization, all of which had submitted project proposals.

Gunnar Garbo, Chairman of the Intergovernmental Council of IPDC noted that the outstanding feature of this developmental phase of program development has been the confidence placed by developing countries in the IPDC as exemplified by the number of projects submitted to it. The IPDC has been able to formulate projects for the majority of least developed countries (LDC's), in keeping with the guidelines established at its second session. It has also succeeded in establishing good working relations with major regional media organizations. In addition to the Pan African News Agency (PANA), Asian News Network (ANN), Federation of Arab News Agencies (FANA), the Latin American Special Information Service Agency (ALASEI), and their collaborating national news agencies, three regional broadcasting agencies: Arab States Broadcasting Union (ASBU), Asian Broadcasting Union (ABU), and the Union of National Radio and TV Organizations of Africa (URTNA) have submitted projects to IPDC. Major regional training institutions also have submitted project proposals.

With the increased visibility of IPDC, there has been a concomitant rising expectation of as...
The facilitators urged that the discussions be structured so the results might be comparable. However, RSM staff members simply could not resist allowing the discussions to become free-ranging exchanges of opinion that moved across many different areas. As a result, the moderators learned a lot about their programs and the reactions of the clients to the programs, but the information was exceedingly difficult to summarize. Consequently, summaries of the information were not very satisfactory either to the facilitators or to the staff members.

A participatory evaluation, like an external evaluation, reveals shortcomings within an organization. But with self-studies, critical assessments are particularly difficult to ignore. There is always the possibility that steps may be taken to control the evaluation and hide potentially embarrassing revelations. This did not occur in the RSM evaluation.

Some Comparisons

In comparing our involvement with this self-study to the external evaluations we previously had done, we discovered that the latter tended to be preoccupied with the results of certain activities. In the self-study, the concern was at least as much with why things were occurring and how they were occurring. In terms of improving an organization, the "why" and "how" questions may be much more significant than the "what" questions.

At the same time, it is quite possible for a self-study to be more superficial than an external evaluation, but if the staff members support the self-study sincerely and become fully involved, the evaluation can probe to depths that no external evaluation can reach. Staff members know and understand their organization in a way that outsiders never can. One of the reasons external evaluations have had limited impact historically may be that staff members can easily perceive that the evaluators do not have adequate knowledge or understanding of the organization and the environment in which it operates.

In summary, a participatory approach can provide a valuable, holistic view of a communication system; one that sheds light on what is happening, how it is happening, and even why it is happening. If the guiding purpose of the evaluation is to help improve an organization, it not only is useful, but may be essential that key personnel, and preferably the entire staff of the organization become actively involved.

References:


2. This list of characteristics was greatly influenced by the monograph by David C. Kinsey, Evaluation in Nonformal Education.

Charles B. Green and John K. Mayo are members of the Center for International Studies at Florida State University's Learning Systems Institute.

Miguel E. Vargas is Professor of Education at the Universidad Adventista Dominicana in the Dominican Republic.

Call for Papers

The School of Communications at California State University, Chico will edit Issue No. 2 of Educational Media International, the quarterly journal of the International Council for Educational Media (ICEM). Articles are being solicited of no more than four to five thousand words on the theme of the new information technology. Manuscripts from developing country media scholars, researchers and practitioners are particularly welcome. They can be written in French, Spanish, German, or English, but must be accompanied by an English version.

Suggested topics include: the new information media in business, education, and the home; teleconferencing, satellites, microcomputer networks, and interactive video; information technologies in medicine and health; training of the new information technologies; or case studies and future scenarios for use of information technology.

The submission deadline is March 15, 1985. Submit three copies, typed and double-spaced with footnotes, bibliographic references, and notes at the end of the article. Send to: Dr. Henry Ingle, Dean, School of Communications, California State University at Chico, Chico, California 95926-0145, U.S.A. Telephone: (916) 893-4015.

Two Agricultural Policy Seminars

The University of Minnesota has scheduled two Agricultural Policy Seminars for this Spring and Summer. The first, "Agricultural Research Policy Seminar," April 15-25, 1985, will be limited to 40 senior-level agriculture officers from the U.S. and developing countries.

The second seminar, "Agricultural Policy Seminar," runs from June 10 to July 13, 1985. Agricultural policy formation and its role in social and economic development will be covered in lectures, with participants developing a policy for their home country. For more information contact: Agricultural Policy Seminars, 405 Coffey Hall, 1420 Eckles Ave., St. Paul, Minnesota 55108, U.S.A.

To Our Readers

We have included a calendar in this first issue of 1985, and hope it will be useful to you throughout the year. Our regular-length publications, including On File at ERIC, will resume with the Spring issue.

ERIC
Cos.'s establishment, identified for the Communication Sector. He also identified the bureaucracy. the IPDC to support projects of established institutions of the donor country. The past. The budget adopted for 1984-1985, to be met out of the Special Account of IPDC, is as follows:

<table>
<thead>
<tr>
<th>Projects</th>
<th>US$1,888,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparatory assistance</td>
<td>90,000</td>
</tr>
<tr>
<td>Training</td>
<td>150,000</td>
</tr>
<tr>
<td>Promotion</td>
<td>40,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>US$2,168,000</strong></td>
</tr>
</tbody>
</table>

Funds from this account make it possible for the IPDC to support projects of established institutions in developing countries without undue bureaucracy. complicated negotiations, and without being required to use experts and institutions of the donor country.

Progress achieved since the fourth session of the Council was presented by Mr. Gerard Bolla, the then Assistant Director-General responsible for the Communication Sector. He also identified general trends and orientations since IPDC's establishment.

1. The rapid increase in the number of proposed projects.
2. While the earlier project proposals had been largely for the development of news agencies, both national and regional, new projects tended to take other directions, such as production of audiovisual material for educational and cultural purposes.
3. There has been a gratifying increase in project proposals for Asia, the Pacific, and the Arab States. This redresses an earlier imbalance in which a majority of submissions came from Africa and Latin America.
4. Of the 36 countries designated as least developed, 35 are now involved in IPDC projects.
5. There was a tendency toward an expansion in the area of training: approximately 75 percent of the activities within the projects financed from the Special Account or under funds-in-trade were in the area of training.

Some new projects approved at the national level include:

- **Bangladesh**: development of regional newspapers
- **Tuvalu**: broadcasting development and training
- **Indonesia**: mass communication training center
- **Mongolia**: national news agency
- **Guyana**: establishment of videotape production unit
- **Central African Republic**: rehabilitation of radio and TV capability
- **Sudan**: development of the Mass Communication Training Centre
- **Angola**: development of the broadcasting center of the Angolan News Agency

Also presented were the parameters of a feasibility study on establishing a database on international cooperation in communication development as requested at the fourth Council session. It was recommended that a three-tier operation be established at IPDC linking it with the main frame computer of Unesco, with databases in the United Nations family; with other data banks; and sell services of IPDC's database. It was decided that a feasibility study should be commissioned using the above objectives as a guideline.

With the imminent withdrawal of the United States from Unesco, which prevents further participation in any of its related functions, an element of uncertainty was present at this session. However, the delegate of the United States reaffirmed his country's faith in the IPDC and "pledged to explore all channels to help the Council achieve its great potential."

Four-Month Course on Distance Teaching

Since 1977 the International Extension College (IEC) and the Department of Education in Developing Countries of the University of London Institute of Education (ULIE) have jointly run a four-month course on distance teaching, and its relevance for Third World countries. This course is again being offered and is scheduled to run from April 9 through July 26, 1985.

Application forms and further details can be obtained from: Departmental Secretary, Dept. of Education in Developing Countries, University of London Institute of Education, 20 Bedford Way, London WC1H OAL, England. Telephone 01-636-1500.

Training African Communicators:

A Message to Media Trainers

Two publications recently coming out of Africa contained similar messages: African communicators need more and better training relevant to the needs of their people—with particular focus on the rural nature of the populations and economies of all African countries. One publication resulted from workshops funded by the International Programme for the Development of Communication. (See the related IPDC article in this issue.) Two workshops were held during the past 15 months to bring together African media trainers and practitioners. Both were organized by the African Council on Communication Education (ACCE). One was held in Nairobi, Kenya from October 8-16 and a second in Dakar, Senegal from Dec. 12-17, 1983.

At one of the workshops David Barry, Director of the Inter-African Centre of Studies on Rural Radio (CIFRR), Burkina Faso, spoke of the need for a new type of communicator—a rural journalist who would better reflect and be knowledgeable about the habits, tastes, needs, and aspirations of the rural populations of his country. He offered a brief sketch of the ideal rural communicator for African countries: "a field person, fully cognizant of the realities of the rural world and capable of utilizing its language to disseminate and propagate specially designed development messages."

Retrain Journalists

The second publication is a paper given by E.O. Soola of the Department of Mass Communication at the Polytechnic, Ibadan, Nigeria. It was presented to the Bayero University Conference on Communication in May 1984. In it, he too called for training of development communicators. Soola said this would require a "re-conditioning of the journalist if he is to change his current urban oriented posture and apathy to the realities of the human condition in rural areas. The journalist must be trained to understand as well as appreciate the material conditions of the people . . . . to qualify him for attention and acceptance as an agent of change and development in the community."


The Independent Commission for Worldwide Telecommunications Development, better known as the Maitland Commission for its Chairman, Sir Donald Maitland, former British Ambassador to Libya, recently released its report after a year of research and meetings. Established in May 1983 by the International Telecommunication Union (ITU), the Commission's mandate was to determine the best ways to stimulate the expansion of telecommunications in developing countries, particularly through expanded public telephone service. Rather than authorize further research, the commission decided the most important thing was to propose ways to reduce constraints on the introduction and expansion of telephone systems.

According to the Executive Summary of the report, "While telecommunications is taken for granted as a key factor in economic, commercial, social, and cultural activity in industrialized countries and essential to growth, in most developing countries the telecommunication system is not adequate even to sustain essential services." With the Commission's goal, "...that by early in the next century virtually the whole of mankind should be brought within easy reach of a telephone," their recommendations established guidelines for developing countries and assistance organizations to help reach that goal. Among the 23 recommendations were the following:

- When purchasing equipment, countries should ensure that contracts include commitments for the supply of spare parts, training, ordering, post installation, and maintenance.
- The manufacture of appropriate equipment in developing countries should be encouraged, and cooperative manufacturing efforts at the regional or sub-regional level also should be promoted.
- A Center for Telecommunications Development should be established by the ITU during 1985. Its mandate would be to analyze data on policies and experiences from around the world, to organize teams of specialists to offer advice to developing countries on creating and operating an effective public network, and provide assistance with specific projects.
- Telecommunications operators in developing countries should review training needs and resources, and prepare systematic training plans, using the resources available through the International Programme for the Development of Communication (IPDC) to update those needs.
- Major regional and sub-regional political and economic organizations should consider how research and development institutes might be established in developing countries.
- Developing countries, proposed R&D institutes should serve as a source of higher technological, supervisory and managerial training.
- Developing countries should review their development plans to ensure that sufficient priority is being given to investment in telecommunications.
- In order to immediately increase the flow of resources, involved countries and international agencies should give higher priority to telecommunications. Specific provision should be made for appropriate telecommunications facilities in every development assistance project.
- Proposals should be studied by members of the ITU, in collaboration with international finance agencies, to establish a revolving fund and telecommunications investment trusts as methods of raising funds for investment in telecommunications.

KIDSNET to Computerize Information on Children's Radio and Television

The National Foundation for the Improvement of Education, a U.S.-based organization created by the National Education Association recently initiated KIDSNET, a computerized database and clearinghouse. After an initial research and development phase of 18 months, KIDSNET will collect and disseminate information on children's radio and television programming available for schools, libraries, hospitals, museums and homes in audio and video formats. KIDSNET Executive Director, Karen Jaffe, hopes to link its users in a worldwide network concerned with innovative teaching and learning facilitated by instructional and commercial radio and television.

After 1985, KIDSNET will expand its services to the international marketplace, disseminating information on American programs and collecting information on programs from other countries. There is also a multitude of research and resources on the subject of children's radio and television which can be shared among countries.

Current financial support is being provided by foundations, but KIDSNET hopes to become self-sustaining through subscriber fees. For more information, contact Karen Jaffe, KIDSNET, 1201 16th Street, N.W., Washington, D.C. 20036, U.S.A. (202) 466-4252.

Community Radio; Satellite Communications; Visual Aids; Educational Radio; Health Communication; Telecommunications.