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9. ABSTRACT

An administrative history of El Salvador's 1968 Educational Reform recording, the implementation of and the reactions to Instructional Television (ITV) into that country. It was compiled to provide a context in which to interpret the results of research on El Salvador's schools and as a reference for educational planners in other countries.

Four questions are asked in this report: 1) What was the reason for introducing ITV into El Salvador? 2) What problems arose as a result of ITV? 3) How successful was ITV?, and 4) What were the contributions of the forty foreign advisors? To answer these, four main data sources were used: 1) a series of Ministry of Education documents; 2) the files of the USAID office in El Salvador; 3) the knowledge and experience of the Stanford evaluation staff observing the reform, and 4) interviews with Education Ministry leaders and USAID officers. Conclusions drawn were the importance of strong local control of the Reform, of integrating ITV into existing programs rather than over them, of support from the highest government levels and of contributions of foreign advisors. On the whole, the Reform was seen as a success.

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AN ADMINISTRATIVE HISTORY
OF
EL SALVADOR'S EDUCATIONAL REFORM

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Research Report No. 8

This is one of a series of reports of research on the Educational Reform Program of El Salvador, and especially its use of instructional television. This report has been prepared by members of the Institute for Communication Research, Stanford University, on behalf of the Academy for Educational Development, under contract with the U.S. Agency for International Development.

November, 1971

Research Reports on the El Salvador Educational Reform and Television

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1. Design of the Study. Research Report No. 1. December, 1968.*
2. The El Salvador Educational Reform: Some Effects of the First Teacher Retraining Course. Research Report No. 2. July, 1969. By Emile G. McAnany, Genesiro Gil, Jr., Donald F. Roberts.*
3. Television and Educational Reform in El Salvador: Summary Report of the First Year of Research. Research Report No. 3, May, 1970. By Wilbur Schramm, Emile G. McAnany, John K. Mayo, Robert C. Hornik.
4. Television and Educational Reform in El Salvador: Complete Report on the First Year of Research. Research Report No. 4, July, 1970. By Emile G. McAnany, Robert C. Hornik, John K. Mayo.
5. Teacher Observation in El Salvador, Research Report No. 5, January, 1971. By Judith A. Mayo.
6. Feedback on Student Learning for Instructional Television in El Salvador. Research Report No. 6, February, 1971. By Ana Maria Merino de Manzano, Robert C. Hornik, John K. Mayo.
7. Television and Educational Reform in El Salvador: Complete Report on the Second Year of Research. Research Report No. 7, March, 1971. By Wilbur Schramm, John K. Mayo, Emile G. McAnany, Robert C. Hornik.
8. An Administrative History of El Salvador's Educational Reform. Research Report No. 8, November, 1971. By John K. Mayo, Judith A. Mayo.**

* Out-of-print.

** Various other Research Memoranda and Administrative Reports concerning El Salvador's Educational Reform have also been written. These are available through the Institute for Communication Research, Stanford University, Stanford, California.

FOREWARD

The following administrative history of El Salvador's Educational Reform recounts the ways people have shaped and reacted to change. It is essentially a history of success, but, at the same time, its focus is upon the wide variety of problems that were encountered in implementing such a massive reform program. Most of these problems have been solved; some await solution. A frank discussion of the problems has been undertaken not to find fault with any particular person or program nor to second guess El Salvador's decision makers, but rather to help educational planners in other countries anticipate and perhaps avoid some of the problems that the Salvadoran experience has illuminated.

AN ADMINISTRATIVE HISTORY OF EL SALVADOR'S EDUCATIONAL REFORM

Background

The compilation of the administrative history of El Salvador's Educational Reform has been a research priority of the Stanford evaluation team since its arrival in that country in September of 1968. Such an administrative history, or "record" as we have referred to it in earlier reports, has been assembled for two basic reasons: (1) to provide as thorough a context as possible for the interpretation of the results of our continuing research in the Salvadoran schools and (2) to offer a useful reference for educational planners in other nations who may wish to reflect upon the Salvadoran experience with the intent of gaining some insight into the variety of problems (human, material, and organizational) that are apt to accompany any effort to improve educational efficiency and upgrade educational quality through the application of television or some other modern communication technology.

Our task of evaluating the specific administrative and managerial problems that were encountered in the course of introducing instructional television was complicated by the fact that television was not the only educational innovation that the Salvadorans have undertaken in the last four years. Indeed, television was but one element of an ambitious educational reform that began in 1967 with the administration of President Fidel Sanchez Hernandez. The Salvadoran Educational Reform as spelled out in a detailed five-year plan, includes far-

reaching changes in educational administration, curricula, teacher training, evaluation, and school supervision in addition to television. For this reason, the nature of the other reforms, their manner of implementation, and their particular relationship to television have been an integral part of our analyses from the beginning.

We have structured the administrative history around a number of fundamental questions which focus on the role of instructional television in El Salvador but which also have a direct bearing on a range of other educational reforms as well. First, what was the original impetus for the introduction of instructional television in El Salvador and what role did its advocates foresee for it? Second, what problems arose in organizing the new ITV system and in adjusting its development to other changes in the educational system? In this area we were particularly anxious to identify the kinds of jurisdictional disputes and scheduling problems that had to be overcome so that concomitant innovations in curriculum, teacher training, and supervision could be integrated with the television system. Third, how successful were the Salvadorans in administering an increasingly complex and rapidly changing educational system and in training people in technical and managerial skills that would be needed to coordinate the new programs and to solve the new kinds of problems that they produced? Finally, what were the contributions of over forty foreign advisers who, over the last four years, assisted the Salvadoran government in the implementation of its reform program? The vast majority of these advisers were Americans under contract to USAID, although assistance of various

kinds was also provided by UNESCO, the World Bank, and by the governments of Great Britain and Japan.

Four principal data sources were used to chronicle the Educational Reform and to answer the questions posed above. The first of these was a series of Ministry of Education documents* which serve as the formal guide to educational policy in El Salvador. Included in this category was a series of nine booklets dealing with the Educational Reform which have been published by the Ministry. Also consulted were the yearly reports which the Minister presented to the Salvadoran National Assembly.

Another source of administrative material was made available through the files of the USAID office in El Salvador. Here were included copies of the original feasibility studies conducted on ITV, documents pertaining to the formal loan agreements between the governments of El Salvador and the United States, as well as the monthly reports and numerous administrative memoranda prepared by the USAID advisers over the past three years.

The knowledge and experience of the researchers gained from participant observation in the El Salvador project over a three year period constituted a third source of administrative material. As members of the Stanford evaluation staff and the USAID/El Salvador team, respectively, we were involved in many planning sessions within all sections of the Ministry of Education as well as USAID. This allowed

*A list of these documents appears in the Appendix.

us to observe the growth of the project at firsthand and gave us a unique opportunity to appraise the variety of problems which the project encountered.

As a follow-up technique for exploring in greater depth the knowledge obtained from studying the formal documents and through participant observation, interviews of Ministry leaders and their USAID counterparts were also conducted. The USAID advisers were interviewed at the end of their tours of duty and the Ministry of Education leaders were interviewed during the Summer of 1971. A total of 29 such interviews have been taped. These interviews have yielded what we feel to be extremely rich information which might otherwise have been lost to the research team. The recorded interviews have been catalogued and now constitute an oral history of the Salvador project. The tapes are on file at the Institute for Communication Research, Stanford University.

Early history

Although the introduction of an expensive and technically-complex educational innovation such as television would seem to require considerable forethought and planning before it could be applied successfully to a school system, the history of instructional television projects throughout the world has often been one of inadequate planning and undue haste. Educational reformers are often impatient to get a new television system underway, and there is a tendency to rush through the planning stage in order to get studios constructed and programs on the

air. As a result of this haste, the needs of teachers and the conditions in their classrooms are often neglected or given insufficient attention, and corresponding weaknesses are built into the systems from the outset. These oversights have often returned to haunt the managers of new television systems and undermine the effectiveness of their programs.

In contrast to many other projects, the decision to use television was neither imposed upon El Salvador from the outside nor taken in a precipitous fashion. Rather, it evolved over a period of years and involved many individuals from within the country and abroad. As far back as 1960, the possibility of introducing some form of educational television to El Salvador was being discussed in the country's press. The small size of the country and the fact that virtually all Salvadorans are Spanish-speaking were favorable factors often cited by a number of prominent citizens interested in the utilization of television as an educational tool. Although there was an awareness among these people of El Salvador's educational problems--a high rate of illiteracy, insufficient school facilities, high repeater and dropout rates--there was no general agreement and little knowledge about how television might help eradicate such problems. Above all, the country lacked the money and professional expertise necessary to initiate any large scale effort in this area.

One of the first steps of the long journey that was to lead eventually to the establishment of El Salvador's national instructional television system was taken by Lic. Walter Beneke in 1961. At that time

Beneke was El Salvador's ambassador to Japan, and in the course of his long residence in that country he was impressed by the role television played in Japan's educational system. Hoping to stimulate the growth of some sort of educational television project in his own country, Beneke sought the help of the Japan Broadcasting Corporation (NHK). NHK agreed to conduct a feasibility study for using educational television in El Salvador and several engineers were dispatched for that purpose in 1962. The results of this study confirmed what Beneke and other Salvadorans had suspected--their country possessed excellent topographical conditions for the installation of a national television network. The Japanese, whose study focused exclusively on the technological characteristics of a television system, recommended a national undertaking which would involve what seemed to the Salvadorans a tremendous investment in television sets as well as in production and transmission equipment. Although the results of the study stirred people's imaginations, very few believed a project of the scale the Japanese had suggested could possibly be undertaken in the immediate future.

The initiative taken by Beneke was supported by former president Rivera and in the Fall of 1963 the latter established by executive decree the first Educational Television Commission. Members of the Commission were drawn from both the public and private sectors and included the handful of interested citizens whose names had been associated with educational television in the national press. Although the original commission was asked to evaluate alternative uses for educational television with the goal of suggesting a national plan by the end of 1964, meetings were sporadic and little progress was made. The fact that all

the Commission's members served as volunteers and were not backed up by any staff inhibited the fulfillment of their responsibilities. The Commission remained firm in its belief that television could make an important contribution to the development of El Salvador, but the nature of that contribution and the methods for bringing it about were not crystallized. The one decision taken by the original ETV Commission was to send a group of young men to Japan for a year's training in the use and maintenance of television equipment. When the technicians returned to El Salvador after a successful training experience, however, they found no television system to employ them, and were forced to seek other jobs.

Another factor which retarded the growth of educational television in the early sixties was the ambivalence of the Ministry of Education toward the idea. Although a department of educational television was created in the Ministry of Education in 1964, the committee designated to define its objectives and to oversee its activities never met. Furthermore, for the first two years of its existence, the department had no leader and no budget. It was clear to members of the Educational Television Commission that the former Minister of Education, Revelo Borja, placed a very low priority on television within his administration.

The work of the ETV Commission was revitalized in the latter part of 1965 when Walter Beneke returned from his ambassadorial post in Japan and key new appointments to the Commission were made. Among them were Irma Lanzas de Chavez, who simultaneously became the first Director of the Division of Educational Television in the Ministry of

Education; Roman Mayorga, a young engineer and economic planner on loan from the National Reserve Bank, who later authored the basic plans for El Salvador's instructional television (ITV)* system and the educational reform; and Gilberto Aguilar Aviles, the director of fundamental (adult) education in the Ministry of Education, who was later named director of the national normal school at San Andres and subsequently director of secondary education. Under Beneke's chairmanship, weekly meetings of the Commission were instituted for the purpose of defining specific programs for the use of television and of finding some way to finance those programs.

Throughout 1966 the Commission debated alternative ways in which educational television might meet the country's educational needs. How those needs were defined depended largely on the experience and particular interests of the Commission's members. A strong case was made for using television to extend the school, to bring basic education and literacy to adults and to young school dropouts who for a wide variety of reasons had never completed the 6th grade. Other members of the Commission favored a more formal system which would bring televised instruction into the classroom, although they disagreed as to whether television would be more useful at the primary or secondary level. To answer these and other questions, Doctora Chavez studied the experience of other countries and sought the opinions of various section heads within the Ministry of Education while Roman Mayorga undertook a

*Instructional television (ITV) here refers to the primary service of the ETV Division which was the production and transmission of lessons for in-school use.

statistical analysis of the educational system. These studies offered the first concrete bases for evaluating alternative proposals for the use of instructional television.

By the end of 1966, the Commission had reached a consensus on a number of basic points. First, recognizing the fact that their country had neither a reservoir of trained people nor sufficient economic resources to embark upon a massive ITV project, the Commission decided that their initial efforts must be limited in scale, but flexible enough so that rapid expansion could take place if circumstances permitted. Second, the Plan Basico level (grades 7-9) was selected to be the first area served by television, for it was believed that inadequate instruction at that level constituted the most pressing "bottleneck to development." In this decision, the Commission took note of the growing demand for secondary education and the fact that only twenty percent of the teachers at the Plan Basico level possessed adequate training. Televised instruction at this level, they believed, would compensate for the untrained teachers who, in turn, could be adequately prepared in a short period of time to become effective "monitors" within television classes. Third, the Commission felt that ITV should be organized as an autonomous institute directly responsible to the president, with freedom to set its own personnel policies and to import the vast array of technical equipment that would be required. Members of the Commission were unanimous in the belief that developing an ITV system within the Ministry of Education would subject it to cumbersome bureaucratic restrictions which would impede its growth and effectiveness. Finally,

the Commission resolved to seek foreign financial and technical assistance so that ITV could be put on as secure a foundation as possible from the very beginning.

The Commission's dilemma of how to obtain foreign assistance for the initial training of a television production staff was fortuitously resolved by the availability of a special UNESCO team which had been organized to consult with Latin American ITV projects. This coincidence permitted Dra. Chavez to organize the first ITV production course during the Fall of 1966. Forty candidates were recruited from among graduates of the Superior Normal School, and the course was held at the facilities of one of San Salvador's two commercial TV stations. After four weeks of intensive course work and practice in the studio, seven teachers were awarded positions on the ITV staff.

In addition to conducting the training course, the members of the UNESCO team made other significant contributions to the development of ITV in El Salvador. In the course of numerous meetings with the ETV Commission, the five UNESCO advisers helped the Commission to refine its objectives and to broaden its conception of the factors that a successful ITV system should take into account. The role of classroom teachers was analyzed in greater depth to determine what training would be required to make them active partners of the television teachers; the need to revise the curriculum to suit television was discussed; and a new emphasis was placed on the need for auxiliary guides and teaching materials to promote more effective utilization of the television lessons in the schools.

The responsibilities of different members of a television production team were more thoroughly defined during the visit of another UNESCO expert in the early part of 1967 and it was at this time that the newly-trained production staff first began experimental programming. They continued to use the facilities of a local commercial channel which were rented twice a week at a cost of seventy-five dollars an hour. Although the small ITV production staff gained valuable experience during this period, the quality of their work was limited by inadequate equipment and the lack of any graphic art or film materials. Furthermore, the ITV people were not taken seriously by the technicians of the commercial station and an inharmonious relationship soon developed between the two groups. By the middle of 1967, the ITV staff was becoming increasingly discouraged with the lack of adequate facilities or time to practice their new craft.

With seven people employed full-time in the ITV division by the end of 1966, pressure grew on the Commission to provide some sort of long-term financial backing for the project. The Ministry of Education did not have sufficient funds or interest to underwrite the project's expansion as evidenced by the fact that in January, 1967, it had taken the personal intervention of President Rivera to put the original ITV production staff on the Ministry's payroll. In the early months of 1967, therefore, the Commission began seeking out sources of financial aid. Trips were made in behalf of the project to Mexico and Guatemala to solicit help, but no support was available in those quarters. The Japanese government, USAID, UNESCO, and the World Bank were also

approached. The World Bank displayed the most favorable response during this period and a brief feasibility study was conducted on their behalf during February of that year. This study reached the same favorable conclusions as the earlier Japanese study, and members of the Commission were highly optimistic that a World Bank loan could be obtained to develop the ITV system.

The Commission's plan to seek World Bank assistance changed abruptly when Fidel Sanchez Hernandez was elected president in March of 1967 and immediately thereafter attended a conference of hemisphere presidents at Punta del Este. There he heard President Lyndon Johnson set forth the U.S. proposal to sponsor an educational program using instructional television which could serve as a pilot project for Central America.* Concurrent developments in his own country made Sanchez Hernandez realize that El Salvador would be a prime candidate for such a project and, upon his return, he vigorously backed the ETV Commission's efforts to put their case before the appropriate American officials.

USAID, which had independently come to consider El Salvador as a prime candidate for the implementation of President Johnson's proposal, displayed an immediate interest in the Salvadorans' request and in the Spring of 1967 a team of American experts, under contract to the National Association of Educational Broadcasters, arrived in El Salvador to conduct yet another feasibility study. The six man team not only confirmed the technical feasibility of ITV in El Salvador, but it also found many

*President Johnson's proposal for a Central American pilot project in educational television stemmed from a recommendation of his White House Task Force on ETV in the Less Developed Countries, which had been established in November, 1966, under the chairmanship of Leonard Marks.

other circumstances that favored the establishment of such a system. Chief among these were, they reported, "Ministry cooperation, strong private support, some experience with ETV, a single language, and a reasonably small geographic area."*

The NAEB/USAID team ultimately recommended that USAID respond favorably to the Salvadorans' request for financial and technical assistance. However, substantial differences were expressed during their discussions with Salvadoran leaders as to what kind of project should be undertaken. Members of the NAEB/USAID team pushed for a large project at the primary level. Reflecting the priorities of President Johnson's ETV Task Force, the U.S. representatives encouraged the Salvadorans to give televised instruction as full a test as possible, and one that, if successful, could become a genuine showcase for the rest of the hemisphere. In accord with this view, they felt that the greatest impact could be made at the primary level where six out of seven Salvadoran students were enrolled.

The Salvadorans were somewhat staggered by the size of the project envisioned by the American visitors and they felt that such a massive undertaking at the primary level would be difficult, given the operating costs of such a system and their lack of experience in ITV. They also put forward an articulate case for instituting televised instruction at the Plan Basico level, where their own analyses had revealed the most serious problems. The Salvadorans' commitment on this point and their supporting evidence eventually convinced the Americans.

*This document is on file at USAID, El Salvador.

Accordingly, agreement was reached to begin broadcasting at the Plan Basico level with the provision that, if the system could be successfully established there, eventual expansion to the primary grades would be undertaken.

In the matter of teacher training, the American advisers emphasized the vital need for some sort of systematic preparation of the teachers who would be teaching with television in the schools. The Salvadorans, on the other hand, had continued to envision a more passive, monitoring role for their classroom teachers. Indeed, one of their prime reasons for instituting a television system at the Plan Basico level was to compensate for what they considered to be an ill-prepared teacher corps. However, the Americans' suggestions in this area, coupled with the advice of the original UNESCO team, caused the Salvadorans to broaden their concept of the teacher's role and to adopt an extensive teacher training program as part of their system's design. Similarly, in other areas relating to the utilization of television in the classroom, the NAEB/USAID consultants helped the Salvadorans to anticipate a variety of opportunities and problems that the installation of an ITV network would imply.

Through their first negotiations with USAID in the late Spring of 1967, the Salvadorans reaffirmed their essential commitment to the use of television in the Plan Basico and, at the same time, they gained a fuller understanding of the concomitant changes that would be required in other areas of their educational system in order to maximize television's effect.

The last significant difference of opinion between USAID and the Salvadoran government at this early stage of the ITV project concerned the best place to rest overall responsibility for the new system. The Salvadorans, fearful of bureaucratic obstacles within their own Ministry of Education, continued to favor the establishment of a semi-autonomous institute which would be directly under the president of the republic. In this manner, they felt, it would be possible to import needed technical equipment in a more efficient manner and to hire people at better salaries than those the Ministry could afford. The USAID representatives, on the other hand, were wary of giving too much administrative autonomy to the ITV project. They believed that while freedom in the areas of equipment purchases and personnel recruitment would be desirable, close collaboration with the Ministry of Education was absolutely essential if ITV was to be integrated into the formal school system. For this reason, they argued that ITV should be developed within the Ministry of Education where planning could be done in concert with those Ministry officials who had jurisdiction over Salvadoran schools.

The debate over where to place responsibility for the ITV project was not settled on the merits of the arguments outlined above, but rather by the fortuitous naming of Walter Beneke as Minister of Education in July, 1967. With Beneke as Minister, ITV was guaranteed strong political support at the highest level. Utilizing the experience and the knowledge he had gained as chairman of the ETV Commission, Beneke made television the cornerstone of El Salvador's Educational Reform.

INSTRUCTIONAL TELEVISION

Although the development of a national ITV system received priority among the numerous educational reforms undertaken by the Beneke administration, school broadcasts did not begin until February, 1969--18 months after the new minister had taken office. Such a delay was necessary for various reasons: to obtain adequate financial support for the construction of a production studio, to recruit and train additional personnel to work in the ITV section, and to delineate ITV's role and responsibilities vis-a-vis those of the older, established sections of the Ministry of Education. As planning for the ITV section progressed, Beneke and his advisers became increasingly aware of the need to coordinate ITV with other educational reforms such as curriculum revision, teacher training, and school supervision. However, the task of coordination was complicated by the fact that virtually all departments of the Ministry were undergoing major changes during this same period.

An additional cause of delay was the failure of USAID to act promptly on the recommendations of its feasibility study team. Following their initial meetings in the Spring of 1967, the Salvadorans were asked by USAID representatives to submit a formal request for assistance. Such a proposal was prepared and sent to Washington by the end of that summer. Despite President Johnson's personal interest in the project, no decision was communicated by USAID to the Salvadoran government during the remainder of 1967. Fearing that the United States

had lost interest in the plan, a formal inquiry was addressed directly to President Johnson by President Sanchez Hernandez. Shortly thereafter, the Salvadorans received word that tentative approval for the project had been obtained and that a USAID loan team would come to El Salvador to negotiate a project agreement. The formal project agreement was signed in the early Spring of 1968 and work began immediately thereafter on the implementation of the ITV system.

Production facilities

Of prime importance to the members of the ITV section of the Ministry was the construction of their own production center. For over a year, they had produced experimental programs and conducted training courses in the studios of one of San Salvador's two commercial stations. However, the continuance of this arrangement was judged unsatisfactory for many reasons. Because the local commercial station broadcasted a preponderance of imported programs, its own production facilities were quite modest and did not adequately fulfill the needs of the ITV producers and directors. The station had only a minimum amount of film equipment and virtually no capability in the area of graphic arts. These deficiencies limited the approaches the ITV directors could take in their subject areas. Such limitations could probably have been overcome or at least tolerated had it not been for the cold reception the ITV personnel received from their counterparts at the commercial station. The latter, who had been ordered by the station manager to collaborate with the ITV staff, resented the imposition on their time, and

this attitude made the task of producing the experimental programs much more difficult. Confronted by these problems and by the long range challenge to produce within three years enough weekly programming to serve each of three Plan Basico grades in five subject areas, the ITV staff felt a critical need for its own production facilities.

From their earliest association with the project, the USAID representatives were also convinced of the need to provide the emerging ITV system with a home of its own. Accordingly, under the terms of the project agreement, USAID agreed to donate the equipment for a complete production facility. The Salvadorans in turn would provide a suitable building for the establishment of the production center, as well as the center's operating budget. In addition to studio equipment (cameras, videotape recorders, etc.) USAID provided film production equipment as well as graphic arts materials and the machinery necessary to produce supplementary printed matter such as teachers' guides and student workbooks. USAID also supplied transmission equipment and 100 television receivers. All told, USAID contributed \$653,000 to the starting-up costs of the ITV system and related programs.

The USAID grant was made on the condition that during the first year of school broadcasting (1969), the Salvadorans would themselves undertake the expansion of their production facilities. This second step would be financed by a 1.9 million dollar USAID loan and would include the equipping of a second production studio and the purchase of enough additional receivers to extend coverage to the entire Plan

Basico level. Included in this second step would be the purchase of additional transmission equipment which would eventually give the ITV system two channels of its own. With this extra transmission capability, an estimated ninety per cent of the country's schools could be reached by the broadcast signal.

A major deterrent to the smooth development of the ITV system was the failure of the \$1.9 million U.S. loan to receive approval in time to allow the project to expand at the predicted rate. The loan money was to become available early in 1969, permitting the construction of a second studio in time for the 1970 school year. A series of delays prevented this schedule from being met. First, the Salvadoran National Assembly, which had to approve and then authorize the spending of the loan, did not act upon the matter until the late Spring of 1969. This meant that additional production facilities could not be readied before January of the following year. Second, when El Salvador and Honduras went to war in July, 1969, aid funds to both countries were frozen by the United States. This freeze was not lifted until the beginning of 1970, and by that time the ITV project was almost a year behind schedule on the expansion of its production facilities. The final source of delay came again from the Salvadoran Assembly. Although it had passed the loan agreement a year before, the Assembly subsequently delayed its final authorization. When such authorization was finally obtained in October, 1970, the project was effectively two years behind its original expansion schedule.

Despite the numerous delays to the ITV loan's implementation,

the ITV staff adapted quite well to the situation. In 1970, the second year of broadcasting, all 7th grade programs from 1969 were revised, and five 8th grade subjects were added, as planned, to the production schedule. In 1971, five new series of 9th grade programs were produced, and the 7th and 8th grade series from previous years were partially revised. By adopting a taping schedule which kept the single ITV studio operating twelve hours a day, and by leasing the transmission facilities of San Salvador's second commercial TV station, the production teams were able to meet their schedules and service was provided to all three Plan Basico grades.

In October, 1971, a full year after the Salvadoran Assembly had authorized the disbursement of the ITV loan, the addition of a second studio was still far on the horizon. A new building was completed to house the original studio (San Andres) as well as a second, complete studio. However, the machinery of the Salvadoran government was unable to cope efficiently with the USAID procedures required for drawing up specifications for new equipment. As a result, soliciting bids from foreign manufacturers and actually ordering new equipment took many months. Part of the delay also lay in the cumbersome bureaucracy of the Salvadoran government which ensnared the project's leaders in seemingly endless redtape. Another problem stemmed from the fact that the Salvadorans had neither participated in nor learned from the experience of equipping the first ITV studio. That job had been handled largely by USAID personnel. Likewise, when problems had arisen concerning the ordering of additional equipment or spare parts, the

U.S. advisers were relied upon. Indeed, virtually all major equipment and spare part purchases during the project's first two years were made by or through USAID advisers. This habit prevented the Salvadorans from gaining experience in many technical areas of the project.

The location of the original ITV studio was another issue that created administrative difficulties during the first three years of the project. During the feasibility studies and afterward, various sites were considered by the Ministry of Education and the foreign advisers who were associated with the project at that time. The prime selection criterion was that the studio had to be constructed on land owned by the Ministry. The choices were soon narrowed to two: Santa Tecla, a large town on the outskirts of the capital, and San Andres, the site of a rural normal school that had been constructed with USAID funds but had never been utilized. The buildings of the rural normal school had become, in fact, an embarrassment to both USAID and to the Ministry of Education because they had remained vacant after a considerable amount of money had been invested in them during the middle sixties.

Two considerations favored the placement of the ITV center at San Andres. First, the buildings of the normal school could be remodelled and their activation would remove a white elephant from the consciences of both Ministry and USAID planners. Second, under the educational reform, San Andres was to be activated as a teacher training institution. The appealing logic of placing the new ITV studio at San Andres was

that it would allow for the close interaction between the TV production teams and the teachers who would ultimately be using the televised lessons in the schools. It was hoped that through this proximity a cross-fertilization of ideas and experiences would result.

Despite these advantages, San Andres also had certain liabilities as an ITV production site. Its distance from San Salvador (15 miles) created a problem because all of the ITV staff lived in the capital city. Bus service was provided, but an hour was consumed getting to and from San Andres. The distance made it difficult to quickly obtain spare parts or other materials from San Salvador. San Andres personnel had difficulty holding other teaching jobs or pursuing their own studies after work hours--two patterns that were very common among the teachers who made up over 85% of the ITV staff. Second, the single telephone line from San Andres to San Salvador was in frequent need of repair, and communication between the ITV Division and the capital was difficult. Third, San Andres was located at a lower altitude than San Salvador and the difference was enough to account for considerable physical discomfort. In addition to the heat, high humidity during the wet season and dust during the dry season created serious maintenance problems for the studio engineers, particularly during the first broadcast year. The air conditioning system presented numerous problems due to the necessity of maintaining it at full force most of the time. To further complicate matters, electric power and water services were highly erratic at San Andres. The frequent loss of power interrupted the taping of programs on an average of three

times a week during the first three years, and the periodic curtailment of water service endangered health and lowered staff morale.

It was neither the isolation nor the physical discomfort of the original site, however, which prompted the project's leaders to move the production facilities to a new location, but rather the lack of any compelling reason to stay at San Andres. Despite the best intentions of the project's planners, and for reasons which will be discussed below, a productive working relationship never developed between the San Andres Normal School and the adjoining ITV production center. Had such cooperation been fostered over the first few years, there would most likely have been stronger pressure to maintain the association, even though most of the original Plan Basico teachers who participated in the retraining courses had completed their programs by the end of 1971.

In the original plan of the ITV project, a second studio was to be constructed and equipped at San Andres during 1969. This timetable was scrapped with the long delay over the ETV loan and for reasons outlined above. Midway through the 1970 school year the project's leaders decided to build an entirely new studio complex at Santa Tecla, the site initially considered along with San Andres. When the planners discovered that the costs of constructing a new facility would not be prohibitive when compared with those of simply expanding the existing San Andres center, the decision was taken to move the whole operation to Santa Tecla at the end of the 1971 school year. At this writing, it appears that the transfer will be carried out as planned, although the

delay in the purchase, delivery, and installation of new studio equipment make it unlikely that a second studio will be in operation before October or November of 1972--three full school years behind the original expansion timetable.

Recruitment and training of the ITV staff

One of the most noteworthy features of the Salvadoran ITV project, and one which distinguishes it from other projects that have been founded before and since, is that major responsibility has clearly rested in Salvadoran hands from the very beginning. In other projects, foreign advisers have often been charged with setting up and producing the first series of programs. As these systems have grown, more local personnel have customarily been taken on, but the foreigners have more often than not retained a disproportionate control over the administration of the project. In El Salvador, a number of highly-motivated UNESCO and USAID advisers played an instrumental role in getting various aspects of the ITV system off the ground, but final Salvadoran authority for the project was never in question. This fact helped generate a feeling of confidence among the Salvadoran staff and contributed to the rapid expansion of the system.

As we have pointed out, the prospect of a large ITV system did not become a reality until the formal project agreement was signed by El Salvador and the U.S. in the Spring of 1968. At that time, the entire ITV section of the Ministry of Education contained fewer than 20

people. Although this group was the nucleus of what became a much larger ITV section within the Ministry--reaching a total of 200 persons by the end of 1971--its original members were classroom teachers who had only the barest training in television teaching techniques. The experimental programming they had carried out during 1967 had given them a rudimentary knowledge of the techniques of television production, but it had not prepared them for the rigors of a full production schedule. Furthermore, the young ITV division had no cameramen, no filmmakers, and no graphic artists--these talents had hitherto been borrowed from the commercial station. It was clear to the project's leaders that such skills would have to be provided before serious programming could begin. The problem was that there were very few Salvadorans who possessed such skills and, of those that did, few were willing to leave better paying jobs with commercial broadcasters. In fact, only one technician from the commercial side went to work for the new ITV system. He was an experienced studio engineer who was hired away from his former position by the attractive salary USAID was able to offer him.

At first, only employees of the Ministry of Education were considered for positions in the ITV division. This meant that the vast majority of teleteachers, directors, and technicians were drawn from the nation's teacher corps. Such a prerequisite had a clear rationale: the new division could be assembled without straining the Ministry's budget by creating all new positions, and as former teachers, the new ITV staff would be sure to have a firsthand knowledge of the conditions

and needs of the Salvadoran schools. There was also a large number of classroom teachers who had expressed an early interest in the ITV project and the leaders had no trouble attracting many candidates for the new jobs.

It was difficult to identify the best possible people for the new positions. Because virtually none of the candidates had the sort of training or experience that would be required to act competently as a television teacher, director, or guide writer, the task of evaluating the candidates for these positions was extremely frustrating. To narrow the field, the leaders placed a heavy emphasis on the candidates' academic credentials. Accordingly, all members of the production teams were required to be graduates of the Superior Normal School. In addition, achievement tests were administered to determine which candidates had the greatest mastery of the particular subjects which were to be taught on television. For the candidates who scored well on these tests, a screen test to select teleteachers was held in which general appearance, voice quality, and stage presence were rated by a panel of judges that often included one or more USAID advisers. Candidates who passed the selection procedure were assigned positions on the production teams. Regretably, the vast majority of such assignments were permanent. That is, once a teacher was named as a teleteacher or a subject specialist (i.e. lesson planner and guide writer) he retained that position from that time forth. Little effort was made to review or modify assignments during the first two years of broadcasting. In retrospect, this policy seems to have been

unnecessarily rigid, especially when we recall that 1969 was designed to be a "pilot" year during which changes could be made to achieve the best possible working combinations.

Finding qualified people to fill studio crew positions of the ITV system proved to be a more difficult problem. Such jobs do not necessarily require a great deal of formal academic training, but rather considerable practical experience. Unfortunately, an adequate means for identifying and then recruiting good studio people was not arrived at during the project's first three years. Primary school teachers were relied upon to fill positions such as cameraman and switcher, and they were given only minimum training before being put to work.

For other positions where some prior technical training was essential, the project's administrators were forced to look beyond the manpower pool provided by the Ministry of Education. A number of young technical school graduates were hired to maintain the studio equipment as well as the television receivers; however, despite their technical training, these men were paid a wage below that of the project's other employees. The resentment of this group grew, along with that of the artists and filmmakers, when the Ministry neglected to pay them for the first three months of 1969. Their salaries were released only after they had threatened to strike and Minister Beneke had intervened in their behalf. A feeling of second class citizenship developed among members of the technical staff and studio crew, as well as in the film and graphics sections, but this situation was not corrected by the project's leaders.

With the exception of the six teachers who had taken the original UNESCO training course in 1966 and then begun experimental programming in the following year, most members of the ITV staff were given relatively little training before undertaking their jobs in the new system. This meant that the majority of television teachers, directors, and guide writers were forced to learn on the job. Such a sink or swim situation had some advantages: it forced different sections of the project to work together, and even more important, it generated pride and self-confidence among the production teams. Such self-confidence might have been much longer in coming had the Salvadorans relied upon the alternative training model of letting foreign advisers take charge of programming until such time as local personnel could be prepared thoroughly in an apprenticeship program.

Yet, this on-the-job training also had certain negative side effects. Above all, it made the organization of any continuous, formal training program very difficult, and one of the great frustrations of the USAID advisers during the first three years was their inability to organize such a program. Facing the pressure of a rigorous taping schedule, most members of the production section regarded time devoted exclusively to training as a waste. Likewise, their criterion for success became not the quality of the telelessons produced, but rather the number of lessons produced ahead of schedule.

When a training seminar in pedagogy was organized midway through 1969 by the USAID adviser to the adjoining San Andres Normal School, lack of interest among the ITV staff resulted in a high rate of

absenteeism and the eventual cancellation of the seminar. The demise of this seminar and the subsequent refusal of both sides to renew such a training program virtually eliminated formal collaboration between the Normal School and the ITV production teams.

Although members of the production teams received very little formal training once they began taping programs, the courses they were required to attend in order to qualify for a position on the ITV staff provided them with a rudimentary knowledge of television production techniques. Unfortunately, the same cannot be said for the studio staff, the men who worked as cameramen, switchers, and lighting consultants. These individuals were hired and put to work with only the barest orientation. Over time, they were expected to master the operation of complicated equipment and to respond professionally to technical direction from the control room. By the end of the first year, the studio staff was working in a reasonably efficient manner, although some programs had to be remade in the second year due to technical errors that might have been avoided had more attention been given to the training of studio crews during the early stages of the project. The continuing lack of foresight in this area was exemplified again in 1970 when a second studio crew was hired and put to work with less than one day's preparation.

An exception to the above pattern was found in the graphics section, where training was continually carried out. Here, working with a small number of people, the USAID adviser was able to exert a strong influence and to balance the need to get a job done (in this case

provide graphic materials for the telelessons) with the need to conduct a systematic training program. Over time, the graphics department became the most efficiently managed section of the ITV division and the USAID adviser was able to be completely phased out. Ironically, the high quality of training given the graphic artists had a boomerang effect in the project's third year when several members of the section were offered better paying jobs with commercial firms. While none have yet left the ITV project, several of the graphic artists have taken on part-time, commercial work.

During the third year of broadcasting, 1971, a consciousness grew among leaders of the ITV division that additional training was needed among all segments of the project if program quality was to improve. Having successfully met the challenge of producing an average of three lessons a week, the telemaestros and their teams began wondering how they could use the medium in more imaginative and effective ways. Specifically, they became more interested in the student learning associated with different teaching strategies and, accordingly, in the need for more systematic feedback from the classrooms that were using their programs. For the first time, they began to examine the test results collected by the evaluation and testing section and to request help in television teaching methodology.

Coordination of activities within the ITV division

The management of a television production facility requires, above all, the effective coordination of diverse tasks and talents. Scripts

must be prepared far enough in advance so that graphic artists and film crews can prepare appropriate visual materials; rehearsal time must be provided so that television teachers can become thoroughly familiar with their scripts; and accompanying classroom materials must be prepared and distributed well in advance of the transmission dates. The effective coordination of such activities is of critical importance if high-quality programs are to be produced.

Many of the administrative problems encountered by the ITV project in its early years were due to the complexity of the system itself and the inexperience of ITV's personnel. These problems can best be understood in terms of the work carried out by the individual production teams.

Each production team was responsible for one television series-- 7th grade math, 8th grade social studies, etc. The teams were generally composed of five persons: two subject matter specialists, one television teacher, one producer-director, and one production assistant or "coordinator." The subject matter specialists were in charge of the overall content of the series. Beginning with the national curriculum for their grade and subject area, the subject specialists selected the concepts which were to be taught by television. They also divided the concepts into lessons and prepared an outline of what the television teacher should cover in a 20 minute segment. Finally, they wrote the accompanying classroom teacher's guide and student workbook. The television teacher was responsible for preparing his own script and, of course, for presenting it on the air. Working from the television

teacher's script, the producer-director prepared a shooting script for the lesson which determined the type of set, the camera positions, the length of various scenes, and so forth. The production assistant (generally a primary school teacher) was chiefly responsible for acquiring the visual materials necessary for each program--the charts, slides, film clips, and sometimes pupils or other guests who were introduced in the programs from time to time.

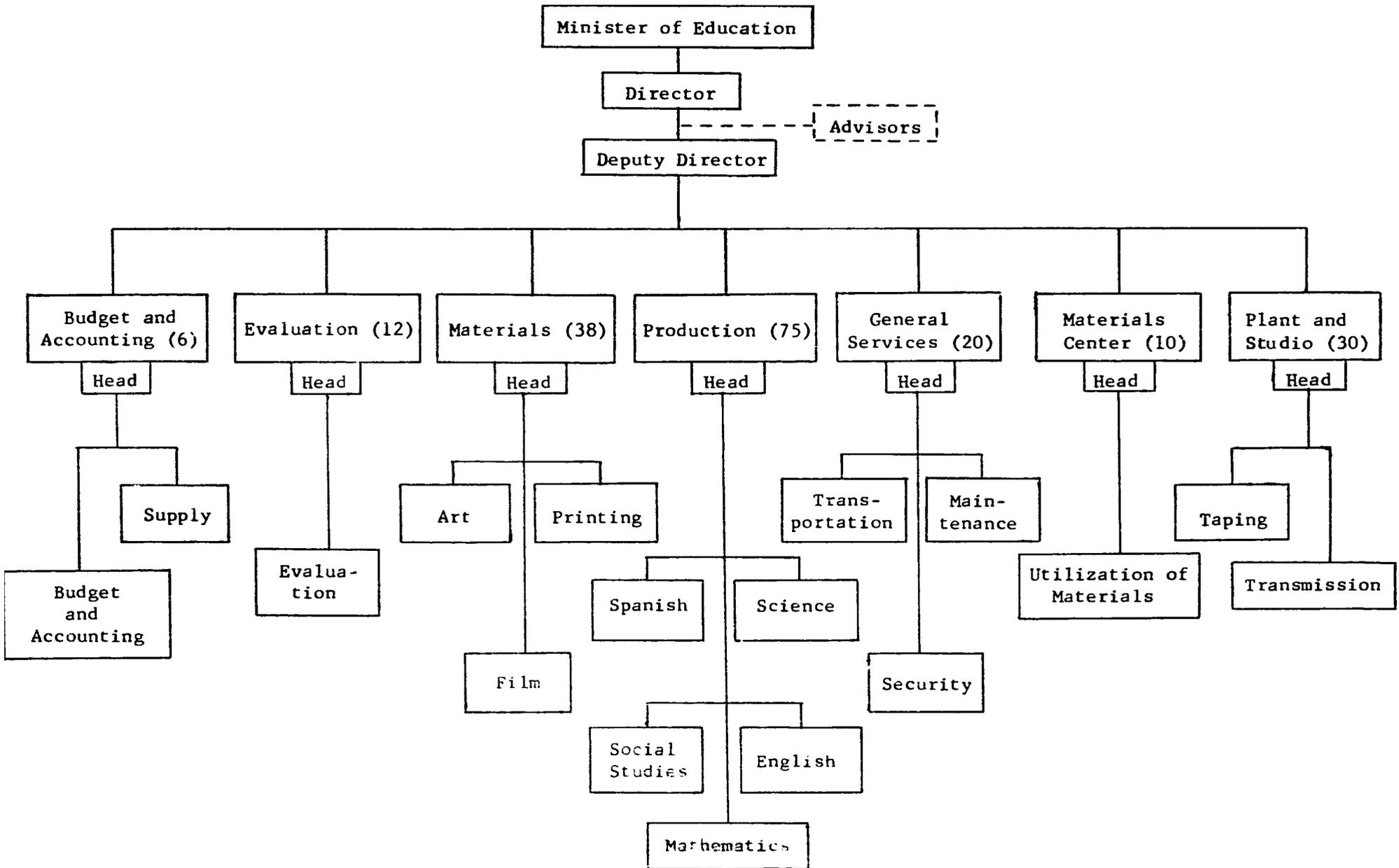
Although the job descriptions presented above might give the impression of a highly fragmented production scheme, the teams themselves discovered in the first year of broadcasting that the secret to successful programming lay in a high degree of common planning and preparation for each telelesson. Through experience, the teleteachers and subject area specialists found they had to work closely together if the telelessons, guides, and workbooks were to complement one another. Otherwise, the guides and workbooks, which had to be prepared well in advance of the telelessons, might be geared to concepts that the television teacher might not emphasize in his own presentation. Similarly, the producer-director and production assistant had to be brought in at the early stages of lesson planning to guarantee that the teleclasses planned by the subject area specialists and the teleteachers were possible from a technical point of view. Each newly-formed production team wrestled with such problems of coordination during its first year of programming, but by the second year most problems had been ironed out and the teams were working well together.

More serious difficulties arose in coordinating the work of the

production teams with that of other sections of the ITV Division (see chart). These difficulties were caused by a combination of factors: lack of understanding between sections, lack of effective leadership from above, and the constant pressure of time. In the first category, a common problem was the excess demand placed on the film and graphics sections by the production teams. It was clear throughout the first two years of broadcasting that the production teams had no realistic concept of the time required to fill orders for art materials. As a result, orders for individual programs were impossible to fill in many instances and this resulted in bitterness and accusations that the graphics department was not doing its job. Similar charges were levelled at the film department, which lacked skilled personnel and had no film processing capability of its own until the second year of taping. These handicaps prevented the film section from filling many of the production teams' orders on time. However, that did not prevent members of the production teams from making unrealistic requests or from losing their tempers when their requests were not met.

In retrospect, another deficiency of the ITV system during its early years was the lack of collaboration or mutual respect among various section leaders. This was partly a function of the individuals themselves and partly a function of the leadership style of the project's chief administrator. The leaders of the production, utilization, and evaluation sections were men whose ambitions were whetted by the fact that the job of sub-director of the ITV division went

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unfilled for more than a year. Each of the section leaders considered himself a prime candidate for the position. Each man also took it upon himself to point out the deficiencies of the other candidates. Thus, instead of working out common solutions to common problems, a negative spirit of fault-finding and fixing blame soon emerged among these individuals. Unfortunately, the project director did little to discourage this unproductive, competitive approach to problem-solving.

To the credit of the ITV system, coordination among the various sections improved as the project grew. An outsider was eventually brought in to fill the sub-director's job, and this individual's capable management of many of the day to day administrative matters left the chief administrator free to foster better communication among the sections. Without the sub-directorship to tempt them, and with a year or two of experience behind them, the section leaders were able to develop a more harmonious working relationship.

From as early as 1966, when a five-man UNESCO team conducted a training course in television production techniques, the Division of ITV employed numerous technical advisers in nearly all aspects of its operation. Beginning in 1968, USAID supplied the vast majority of these advisers, in such diverse areas as studio production, graphics, film, printing, utilization, and evaluation. USAID also provided its Ministry curriculum advisers for two days each week to work with the subject matter specialists of ITV's production teams. From 1968 through 1971, nearly thirty foreign advisers collaborated in one way or another with the ITV Division.

In reviewing the difficulties encountered and the successes achieved by these many advisers, one conclusion clearly emerges: the more specific an adviser's job, the more likely he was to be successful. That conclusion is based on the important and clearly apparent contributions made by the three USAID advisers who trained graphic artists and film crews, and organized procedures for reviewing and printing teacher guides and student workbooks.

Conversely, in less specific tasks, such as advising in studio production and helping ITV's subject specialists, advisers encountered many more problems and their contributions are less readily apparent. Part of the difficulties in these areas stemmed from the advisers themselves. None of USAID's curriculum advisers had any experience in television, and they were consequently uncertain about how to help the production teams translate the curriculum into teleclasses, guides, and workbooks. The USAID production advisers had experience in television, but both suffered from language inadequacies. They were additionally hampered in their efforts to train studio personnel by the time pressures under which they and the Salvadoran production teams and studio crews were forced to work.

Despite the variety of problems it encountered, by mid-1971 El Salvador's ITV system was serving over 34,000 students in some 596 public school classes, and almost 5,000 children in private schools were receiving the broadcasts on a voluntary basis. The first three years of school broadcasting were difficult ones, owing to the handicaps of insufficiently trained personnel and inadequate physical

facilities. The fact that 15 individual series, in three different grades, were produced during this time is a noteworthy accomplishment and one that the Salvadorans can be proud of. The fact that the programs did not live up to everyone's standards should not be a surprise. Sometime during the 1972 school year, it is expected that the entire production facility will be moved to the new Santa Tecla site. Here, with three studios and more adequate work space and equipment, the production crews will hopefully be able to improve the quality of their Plan Basico programming and perhaps extend their service either downward to the primary level or upward to Bachillerato, or even into the areas of adult and out-of-school education.

CURRICULUM REFORM

Curricular reform in El Salvador was stimulated by the introduction of instructional television, and that fact is clearly illustrated in the following statement from Minister Beneke's 1968 Plan Quinquenal (Five-Year Plan): "The present curriculum is archaic and is not responsive to the real needs of life. Since television is only an instrument for implementing curriculum, the quality of the whole educational system depends on the quality of the curriculum. The effective establishment of instructional television requires at the very least the elaboration of new and better curricula."

At the time the above statement was written, the curricular situation in El Salvador was somewhat confusing. Elementary and secondary curricula written in 1956 had the official approval of the Ministry of Education, but teachers actually used a 1958 revision of those curricula. The 1958 programs were judged to be deficient in several respects. First, they suffered from a lack of continuity between the primary and secondary school levels. They were also overloaded with information at every grade level, prompting Minister Beneke to remark that they were designed to produce "human archives"-- students who would learn by rote and mechanically reproduce on examinations large numbers of facts and concepts having little practical relationship to the needs of the country or to the problems graduates would have to solve during their lifetimes.

For these reasons, one of the important goals of the Educational Reform was to completely rewrite the school curriculum from the first grade through secondary school. The Ministry's Technical-Pedagogical Division was given that responsibility, while a special, ad hoc Curriculum Commission (composed of other Ministry division chiefs, the director of the San Andres Normal School, one representative each from the business community and from the national university, and the Ministry's chief UNESCO adviser) was created in 1968 to review and approve the new programs prepared by the Technical-Pedagogical Division.

Before beginning its task, the Technical-Pedagogical Division decided to conduct a survey of several hundred primary and secondary teachers, to elicit their opinions of the strengths and weaknesses of the 1958 curricula, and their suggestions for possible improvements. This survey was initiated in early 1968, but by late summer it was not yet concluded. At that time, three USAID technical advisers arrived to help the Ministry's curriculum writers in mathematics, science, and social studies. USAID had provided a curriculum generalist in June, 1968, to work at the administrative level of the Technical-Pedagogical Division. In addition, USIS loaned a person during part of 1968 to help revise the junior secondary English curriculum.

From the beginning, curriculum reform encountered many problems. The most important of these was deciding how to achieve that reform. A basic decision in this regard came from the Minister: he believed that El Salvador's need for "middle-level manpower" demanded the

extension of basic, pre-vocational education from six to nine years. The practical consequence of the decision to extend basic education was to reduce the eleven existing junior secondary subjects to the four general academic areas (math, science, social studies, and language arts) that were studied in primary school, with the addition of English. This meant that, henceforth, junior secondary students would study only general natural science, and the specialized study of biology, chemistry, and physics would not begin until the bachillerato, or upper-secondary level. The same was true for the other junior secondary subjects: civics, morals, history and geography were to be reduced to a single social studies course oriented toward the study of El Salvador and Central America; algebra, geometry, and trigonometry were replaced by a single, modern mathematics course.

Once the subject areas were determined, there still remained the problem of determining how the format of the new curricula should differ from the old. In this respect, two difficulties prevailed within the Technical-Pedagogical Division, the first being that only one Salvadoran curriculum writer worked in each subject area. Thus, one individual, with the help of a USAID adviser, was given the difficult task of preparing for his subject the entire program of study for grades one through nine.* Second, the curriculum writers who were to reform the existing curricula did not all share the view that those programs were "archaic," and they resented the fact that their opinions

*New upper-secondary (grades 10-12) curricula were prepared with the assistance of El Salvador's National University.

had never been solicited. This resentment was coupled with hostility toward the Division of ITV, which they viewed as the instigator of the move to change the curricula.

The Ministry curriculum writers began their task in a most leisurely manner. As mentioned earlier, during the first months of 1968 they were reviewing the existing curricula and administering and analyzing a survey of teachers. When August came and went and no actual curriculum writing had begun, the Director of ITV, whose personnel could not start taping 7th grade teleclasses without a new curriculum, began to feel desperate. The subject matter specialists of ITV's production teams were sent to the Ministry in an effort to spur completion of the 7th grade curriculum.

This move merely increased the curriculum writers' resentment of ITV, and they pointed out the difficulty of beginning a first through ninth grade curriculum reform with the seventh grade, rather than starting with grade one and moving upward. In other circumstances, the curriculum reform would most probably have proceeded in the latter fashion, but because the Minister was committed to beginning 7th grade TV broadcasts in early 1969, the Division of ITV had a legitimate and pressing need for the new curriculum of that grade. When work on the curriculum finally began in earnest in September of 1968, it soon became obvious that the Ministry curriculum writers and ITV subject matter specialists could not establish a fruitful working relationship.

The ITV people consequently abandoned the Ministry to return to their San Andres production facilities. In an effort to bridge the

gap between the two groups, the USAID curriculum advisers reluctantly agreed to divide their working time between the Ministry's curriculum writers (three days per week) and San Andres' subject specialists (two days per week). The problems created by this arrangement will be discussed later.

In any event, by November of 1968, a tentative version of the 7th grade curriculum was completed, and after being approved by the Curriculum Commission, it was given to the ITV production teams and the instructors at the San Andres Normal School. The former began translating the curriculum into TV lessons, taping programs, and writing the teacher guides and student workbooks that would accompany the teleclasses. Instructors at the normal school introduced the new curriculum in a three month retraining course to the teachers who would implement it in 1969 in 28 experimental classrooms.

The first version of the 7th grade curriculum was not considered by the Ministry curriculum writers as their own handiwork, but rather as the product of the ITV subject matter specialists and the USAID advisers. For that reason, and because the curriculum was genuinely a tentative effort, the 7th grade program of study was substantially revised and amplified during 1969.

During that same year, a new 8th grade curriculum was also prepared, and it occasioned renewed disputes between ITV personnel and Ministry curriculum writers. A draft of the new 8th grade program was sent to the Division of ITV for review, where it was rejected as inadequate by ITV's subject matter specialists, who then prepared

their own version of an 8th grade curriculum. This was rejected, in turn, by the Ministry curriculum writers. The Minister was forced to intervene, and in October of 1969 the curriculum writers began from scratch to prepare an acceptable 8th grade curriculum. This situation, and a further delay caused by the need to seek approval of the program from the Curriculum Commission, meant that for a second time a new curriculum was not available for ITV until the eleventh hour, a circumstance which kept the inexperienced, 8th grade production teams under enormous time pressure throughout 1970.

The basic question of how a curriculum reform should be achieved was never really faced nor fully answered before the demands of ITV forced the writing of the new curricula. The curricula that emerged, however, did differ in many important ways from the previous programs of study. The previous programs were little more than long lists of unrelated facts to be taught and memorized, while the new programs emphasized understanding and applying concepts rather than remembering facts. The new programs were also much more complete than the old ones, containing not only the content to be taught, but also the objectives to be achieved, possible classroom activities, methodological suggestions, strategies for evaluating student learning, and bibliographies. The thematic content of each grade level was reduced, and the continuity between the primary and the junior secondary curricula was vastly improved.

The entire new program of study for grades 1-9 was completed in late 1970. During that year the relationship between ITV and the

Ministry curriculum writers had greatly improved, although it is difficult to pinpoint the causes of this improvement. One probable reason was the relative success of each endeavor--teachers and students at the junior secondary level were highly favorable not only toward television, but also toward the new programs of study. The Division of ITV was first viewed with suspicion by the Director of the Technical-Pedagogical Division, who perhaps feared that the new division would infringe on his area of responsibility and power. As ITV was successfully integrated into the Ministry's structure, those fears proved largely unwarranted. Also, as time passed, elements of the Educational Reform other than television received increasing attention and publicity. In any event, while the Division of ITV and the Technical-Pedagogical Division still occasionally complain about some aspect of the other's work, there is no longer any open hostility between them. In fact, a review of the new 7-8-9 grade curricula is scheduled for the near future, and the Director of the Technical-Pedagogical Division plans to invite the ITV people to participate in this revision.

Because the Ministry curriculum writers were at first unconvinced of the need for curriculum reform, and because of their initial hostility toward ITV, the USAID technical advisers in the curriculum area encountered a difficult working situation. From 1968 through 1971, seven different advisers worked in the areas of curriculum administration, social studies, science, mathematics, and English. Some individuals, naturally, were more successful than others, but as a group

these advisers had certain characteristics and problems in common. Most were high school teachers with almost no experience in curriculum writing. Ministry curriculum writers expressed two main criticisms of their USAID counterparts: they felt the advisers' curriculum ideas did not take into account the realities of El Salvador, and they believed the advisers lacked sufficient experience in primary school. For their part, the USAID advisers complained that their Ministry counterparts lacked adequate professional preparation, and were unwilling to seriously consider new concepts of curriculum development.

The decision to split the advisers' time between their Ministry counterparts and the production teams at San Andres engendered additional difficulties. First was the problem of finding time to do two different jobs when either one could have been a full-time endeavor. Further, none of the curriculum advisers had any previous experience in television. In retrospect, it seems unrealistic to have placed so many and such diverse demands on the curriculum advisers.

The pressure to produce curricula to meet the demands of the expanding ITV system affected the work of the USAID advisers just as it affected the attitudes and work of their Ministry counterparts. Professional goals frequently had to be sacrificed to meet deadlines, and the time pressure also prevented the advisors from organizing any formal training for their counterparts in the techniques of curriculum preparation. Despite the time pressure, the initial hostility they encountered among their counterparts at the Ministry, and the difficulties arising from being assigned two different tasks, the

USAID curriculum advisers were still able to make important contributions to the development of the new programs of study for grades 1-9.

UTILIZATION SUPERVISION

In its early planning, the El Salvador ETV Commission placed little importance on the utilization aspect of the proposed television project. Because the vast majority of Plan Basico (grades 7-8-9) teachers had received insufficient professional preparation, Commission members initially felt that television should carry the burden of instruction. With minimal retraining, they felt that primary teachers could serve as monitors in television classrooms. A quite different view was introduced by the five-man UNESCO team during its 1966 visit.

The UNESCO team stressed the importance of adequately preparing teachers to utilize television, and of carefully organizing and overseeing the utilization effort. They also felt that if television were to help improve the quality of instruction in junior secondary schools, classroom teachers would have to play a role far beyond that of monitor. These same views were reiterated by the NAEB/USAID team in 1967.

Project leaders consequently came to change both their views regarding the length and type of teacher retraining that would be necessary, and also their views regarding utilization. They decided that a utilization team should be formed, to help teachers adjust to the new television system and to provide classroom feedback to production teams. Accordingly, in January of 1967, a utilization section was established within the Division of ITV. In mid-1968, USAID provided a technical adviser for the section, which then included only the

head of the section and his assistant.

At that time, the section had three principal activities. The first was to oversee the remodeling of the 28 classrooms that had been selected by the Ministry to participate in the pilot year of television. The remodeling was done by the General Services Division of the Ministry, and it generally involved improving a classroom's acoustics and providing door locks and adequate windows as protection against thieves. The utilization section checked to make sure that repairs were completed on schedule so that television receivers could be installed before the beginning of school in February, 1969.

A second task of the section involved public relations. The head of utilization and his assistant spoke to many teacher and parent groups about the merits and potential benefits of the television system. Many parents had the notion that television would damage their children's eyes, and those sessions helped allay that fear.

Finally, the section had the task of preparing and teaching the course on television utilization that was included as part of the retraining program at San Andres. The first utilization course was given during the November, 1968-January, 1969 retraining session. It included such basic information as where in a classroom and at what height to place a TV set for best viewing; how to adjust a TV set, and how and where to report sets needing repairs; the structure and function of teachers' guides and student workbooks, and how to use them; and how to prepare and use several different kinds of audio-visual aids.

Another important feature of the utilization course was that it stressed the importance of the classroom teacher in the television system, helping to reduce teachers' fears that, even if television did not replace them, it would reduce their significance in the classroom. That notion had been given currency in several articles that had appeared in Salvadoran newspapers, and it was widely held by teachers. The utilization course advanced the view that ITV was an audio-visual aid that could present material otherwise inaccessible to classroom teachers, and it stressed the idea that teleteachers and classroom teachers were equal partners in the educational process.

The utilization section was to undertake two new activities in 1969: the supervision of television classrooms and the distribution of guides and workbooks. The additional personnel required for those activities was selected from the group of teachers attending the first summer retraining course at San Andres. Twelve outstanding students were given special training in the techniques of supervision, and six were finally selected to become the first utilization supervisors. Inadvertently, this means of selecting and training the utilization supervisors placed them at a certain disadvantage--the teachers who had been their classmates were not completely convinced that the utilization supervisors knew more about using television than they themselves did.

During 1969, however, the utilization supervisors established generally good relations in the schools. Weekly visits were made to all TV classrooms, following which a resume of teachers' reactions to

programs, guides, and workbooks was prepared for production teams. Unfortunately, a fierce rivalry developed between the head of utilization and the head of production, causing a progressive disintegration of relations between the two sections. Production teams came to view utilizations' weekly resumes not as constructive criticism from the field, but rather as personal attacks by the utilization section. In the atmosphere of mutual hostility, utilization ceased to function as an effective link between the classrooms and production teams.

Two events in the summer of 1969 served to improve this situation. The first was the transfer of the utilization technical adviser to the production section. The adviser recognized the importance of feedback from the field, and tried to smooth some of the ruffled feathers in production. He also encouraged teleteachers and other members of production teams to personally visit schools and talk to teachers and students. Even more important in breaching the impasse between the two sections was the intervention of ITV's evaluation section. To overcome production's charges that utilization's resumes were too subjective, the evaluation section drew up a standard form for teacher evaluation of programs, guides, and workbooks. The form was distributed and collected by utilization supervisors, but results were tabulated and given to production by the evaluation section.

Anticipating the expansion of the ITV system scheduled for 1970, the utilization section began in 1969 to expand and alter its own functions. Inspecting classrooms and recommending and overseeing

repairs became the full-time job of a specially hired individual. Then, because the introduction of television into many new classrooms would require increasingly complex arrangements for the distribution of guides and workbooks, additional people were hired to work specifically in that area.

The section's relationship to the utilization course at San Andres also changed. The normal school hired two full-time teachers for the course, and formal jurisdiction for the program passed from the utilization section to the San Andres Department of Education. The head of utilization and his second technical adviser helped revise the course during 1969 and early 1970, but thereafter their participation was minimal.

As another response to ITV's expansion, utilization's personnel was to be increased in 1970 from 6 to 18 supervisors. As important as expanding the section, however, was improving the quality of its work in the schools. The novelty of the enterprise was such that in 1969 the work of the section was largely improvised. Although classrooms were visited weekly, the visits consisted mainly of passive observing, with the supervisors' suggestions for improvement being given to teachers during the breaks between classes. At an end-of-the-year evaluation session, members of the section and their technical adviser made plans for greatly improving the organization, execution, and evaluation of utilization supervision in 1970. Changes projected included establishing specific goals for utilization supervision, developing a general plan of work, pre-planning school visits,

establishing criteria on which to assess both teachers' and supervisors' work, and initiating supervisory activities other than observation.

Before those plans could be carried out, an event occurred that completely altered the role of utilization supervision. In December, 1969, the Minister transferred utilization from the Division of ITV to the Division of Secondary Education. Underlying that decision was the problem of overlapping authority--Secondary Education and ITV each had a group of supervisors, and as the TV system expanded to include all junior secondary classrooms, there would eventually be two sets of supervisors for the same schools. Also contributing to the transfer decision were the attitudes of the Director of Secondary Education and the Director of ITV. The former felt that independent utilization supervisors undermined his authority, and the latter was really more concerned with producing programs than overseeing their utilization. Both were therefore agreeable to the transfer.

The absorption of the head of utilization (as head of secondary supervision) and the utilization supervisors into the regular supervision system of the Ministry forced a complete change in the focus of their work. As part of the Division of ITV, they had been freed from dealing with administrative and personnel problems in the schools, enabling them to concentrate on solving technical, pedagogical problems. As part of Secondary Education, that would no longer be true. Further, while formerly they were responsible only for television classrooms, as part of Secondary Education they became responsible

for all non-TV classrooms as well. Expanded jurisdiction and duties presented many new problems, but even before those problems were confronted, more serious difficulties arose.

The first difficulty involved the new supervisory personnel. As the transfer to Secondary Education took place, the utilization supervisors were attending a special training course at San Andres with thirty candidates for 14 newly-created supervisory positions. After the course was completed in January of 1970, two months passed while a ministry evaluation committee considered the candidates' qualifications. In March, with the school year well underway, the committee declared all 30 candidates unacceptable because none had been graduated from the Superior Normal School. By the time other candidates were selected and trained, and eight of the 14 new positions were filled, only ten weeks remained of the 1970 school year.

During most of the year, therefore, more than 900 secondary teachers were overseen by only ten supervisors--four former utilization supervisors* and six regular secondary supervisors. Whatever might have been accomplished by so few supervisors was nullified by a clash of philosophies between the two groups. The leaders of Secondary Education and the regular supervisors viewed supervision as an administrative activity in which supervisors functioned primarily as fiscal officers and inspectors; the previous utilization group wanted to reduce administrative duties so they could function

*Two of the six utilization supervisors resigned for personal reasons in late 1969.

primarily as consultants to help teachers solve pedagogical problems. While the latter view reflected the goals for supervision established in the Ministry's Five-Year Plan, it was not the view of the leaders of Secondary Education. Work plans and ideas submitted by the original utilization supervisors were rarely rejected outright, but neither were they given sufficient backing to allow them to be put into practice. The regular secondary supervisors ignored the new head of supervision and took their direction from the Sub-director of Secondary Education.

Owing to the above circumstances, supervision during most of 1970 was a haphazard affair in which administrative activities predominated. The leaders of Secondary Education came to assume more and more of the decisions and responsibilities that nominally belonged to the new head of supervision. Completely discouraged, he finally resigned at the end of August, 1970.

Although a coherent plan of school visits was finally carried out during the last two months of the year, 1970 as a whole was a disaster. The secondary schools in general received few visits, and teachers new to television therefore received virtually no help. The previously tenuous link between the classrooms and the TV production teams was severed entirely. Most important, the unwillingness of the leaders of Secondary Education to reduce the administrative and inspection functions of their supervisors prevented any progress being made in improving the system of school supervision. Given the leadership of Secondary Education, it seemed unlikely that the situation would

improve in 1971.

In December of 1970, however, the Ministry underwent a major re-organization that removed the 7th, 8th, and 9th grades from the jurisdiction of secondary education and merged them with primary education to form a new Division of Basic Education (grades 1 - 9). The former head of utilization and secondary supervision was re-hired as the Division's Sub-director of Supervision, and the majority of secondary supervisors were transferred to the new division to supervise grades 7, 8, and 9.

This change presented an abundance of new problems and challenges. The Sub-director of Supervision is now in charge of 100 elementary supervisors, 11 junior secondary supervisors, and nine itinerant supervisors (regional leaders). To organize so many people is a difficult job. In fact, during March, April, and May of 1971, all 120 supervisors completely ceased school visits to attend orientation sessions and to write various plans for the year's work. It is interesting to recall that supervision was chaotic and inefficient in 1970 owing largely to lack of planning. Ironically, it was inefficient during much of 1971 owing to too much planning. Compounding the irony, soon after the supervisors completed their marathon planning session, there was a lengthy teachers' strike. The combined effect of these events was that little was accomplished to improve supervision during 1971.

However, certain important changes had already been made in primary supervision in the three years prior to 1971. Improvements

had been made by establishing minimum employment prerequisites, by equalizing supervisors' salaries, by increasing personnel from 69 in 1967 to 100 in 1971, and by providing all primary supervisors with a year's training at San Andres.

The crucial improvement--that of changing the supervisor from a policeman to a consultant--has yet to be made in either primary or junior secondary supervision. In late 1971, supervisors continued to spend from 60 to 90 percent of their time on administrative affairs. Inadequate official transportation caused many to spend far too much time in their offices. And during the 1971 teachers' strike, supervisors were asked to keep records of non-striking teachers, an activity that created teacher enmity and reinforced the teachers' image of supervisors as policemen.

Minister Beneke's goal of making supervision "the base on which the Educational Reform rests" is far from accomplishment. The abortive effort in utilization supervision, with its emphasis on helping teachers solve classroom problems, was a step in the right direction. The spirit of that effort has not disappeared completely, but its application in general school supervision has proved to be a difficult and slow process.

Two technical advisers were provided by USAID for utilization supervision. The first worked from mid-1968 until mid-1969, and the second from mid-1969 through December, 1970. Both advisers encountered difficulties, although for quite different reasons. The initial adviser was a studio production man with limited experience in

utilization supervision and no formal background in education. He was hindered also by a lack of proficiency in Spanish. While this adviser was helpful in planning the utilization course at San Andres and in organizing school visits, his concept of utilization supervision was limited, perhaps because of his lack of experience in the area. He stressed helping teachers in schools with television to prepare instructional aids, and in this area, a great deal was accomplished. At the same time, the utilization supervisors lacked orientation in other supervisory activities that would help teachers improve many additional aspects of their teaching.

The second adviser had none of the handicaps of the first, but she was likewise unsuccessful in helping to establish an effective system of utilization supervision. The causes of this second lack of success lay partially in the changed working conditions encountered by this advisor, and partly in her reaction to those conditions. As stated previously, when utilization supervision was transferred from the Division of ITV to the Division of Secondary Education, the utilization supervisors and their ideas were greeted coldly by both the leaders of Secondary Education and their personnel. Being identified with the utilization supervisors, the second adviser and her ideas also received a cold reception.

Frustrated by that reception, and desiring to help introduce new practices into secondary supervision, the adviser tried to outflank the leaders of Secondary Education by convincing others in the Ministry of the value of such new practices, seeking particularly to

persuade the man to whom the head of Secondary Education was responsible. In this way, she hoped to bring pressure from above on the leaders of Secondary Education. This practice merely increased the recalcitrance of the heads of Secondary Education. In retrospect, then, the adviser's behavior in this respect can be seen as unproductive, if not counterproductive.

On the positive side, the second adviser did work closely and well with her direct counterpart, and also with most of the supervisors. While they were unable to introduce the innovations they had planned prior to being transferred to Secondary Education, this group retained the hope that they would be able to do so in the long-run.

The December, 1970, transfer of junior secondary supervision to the new Division of Basic Education, and the re-hiring of the former head of utilization as head of supervision, re-opened the possibility of changing the supervisor's role from inspector-supervisor to consultant-supervisor. As of this writing, however, that possibility had not yet become reality.

TEACHER TRAINING

The decision to retrain El Salvador's more than 900 secondary teachers was a direct outgrowth of the decision to introduce television. In their earliest deliberations, ETV Commission members did not envision the need for any sort of teacher retraining beyond a brief orientation to television. As stated elsewhere, Commission members initially felt that classroom teachers would serve as monitors in the ITV system; therefore, they believed that retraining could consist of a brief course on TV utilization.

Influenced by the UNESCO and NAEB/AID teams, the Commission changed its view of the importance of classroom teachers in upgrading the quality of secondary instruction. This changed viewpoint, together with the decision to prepare new secondary curricula, led to the commitment to provide a full year's retraining that would include the study of the new curricula, methodology, and various other topics in addition to TV utilization. In economic terms, this was a costly decision, since it required not only paying the salaries of teachers attending the retraining course, but also hiring classroom substitutes for them. Because of the relatively small number of secondary teachers, it was believed all could probably be retrained over a three-year period. The Salvadorans felt the expense would be more than compensated by the benefits of increasing the professional preparation of secondary teachers, 80 percent of whom were certified to

teach only primary.

When Walter Beneke left the TV Commission in 1967 to become Minister of Education, he soon became aware of another grave problem in the area of teacher preparation. Years of uncontrolled expansion had resulted in the establishment of more than 60 official and private primary normal schools. Not only was the quality of instruction provided by many of these schools questionable, but they also produced far more graduates than the school system could absorb. By 1967, more than 2,000 graduates of these schools were unable to find teaching jobs. To stem the tide of primary school teachers and open up teaching opportunities for recent graduates who had been unable to find positions, Minister Beneke closed all the primary normal schools. There was to be a moratorium on primary teacher training until a new primary normal school of high quality could be organized.

The Minister decided that all future teacher training, both primary and secondary, could be concentrated in one new normal school. The same school could also provide the secondary retraining program. Fortunately, appropriate facilities for such a school already existed at San Andres, an area some 15 miles north of San Salvador. There, in 1966, USAID had completed the construction of a rural normal school that had never been occupied. The Minister selected San Andres as the site of his retraining program and of all subsequent pre-service teacher training. In January of 1968 he appointed a director* and two

*The director of San Andres had formerly been a member of the ETV Commission.

subdirectors for the school.

During 1968, San Andres was devoted to completing the training of the last entering classes of the old primary normal schools and the Superior Normal School (secondary teacher training). That, however, was easier said than done. Two years of abandonment had left their mark on San Andres' facilities--the grounds were totally overgrown and the buildings had begun to deteriorate. The cafeteria and dormitories had no equipment, the classrooms no desks, the library no books. Equipment, desks, and books were procured from the old normal schools, and faculty was selected from the same source. When students arrived in February of 1968, however, the facilities were anything but ready to receive them. The cafeteria had only 15 percent of the necessary equipment, and major repairs to buildings went on around the students. The need to rush into operation meant that administrative services could not be properly planned and organized in advance. Had more time for planning been available at the outset, subsequent problems with administrative services (food, lodging, equipment) could have been reduced.

The programs offered at San Andres in 1968 were simply a continuation of those that had previously existed. Primary normal students completed their course and left San Andres at the end of 1968. Superior Normal School students required an additional year's training, but they and their faculty also left at the end of 1968 to complete their course at another location in San Salvador.

San Andres then turned its attention to the secondary retraining

program. Retraining was co-ordinated with the gradual expansion of ITV, so that all teachers who used television would have previously received retraining at San Andres. Because ITV was to be inaugurated in 28 experimental classrooms in February of 1969, the retraining course for teachers of those classes was scheduled for the vacation period of November 1968 - January 1969.

In planning the retraining course, the first problems of communication and co-ordination arose between the Ministry and San Andres. Course instructors recommended by the San Andres administration were not approved by the Ministry. The staff ultimately selected by the Ministry included Ministry curriculum writers, four San Andres faculty members, and personnel from ITV's utilization section. This displeased the San Andres administrators, who felt that bringing in people not directly responsible to the school was detrimental to the development of a strong, modern faculty. The point subsequently was won, and after the first vacation course people not directly responsible to San Andres rarely participated in the retraining program. A second collision between the Ministry and San Andres came when one of the course instructors was temporarily reassigned to the Ministry, causing cancellation of his part of the vacation course.

Despite these problems, the vacation course was well-received by the 100 teachers enrolled. They studied subject matter content, the new seventh-grade curriculum, methodology, ITV utilization, and principles of secondary education, and they also did some practice teaching. The vacation course provided an opportunity for additional

development of the school's resources. New textbooks were ordered, and an Instructional Materials Center was started to control the distribution of books and other teaching materials. Closed circuit television was also inaugurated at the laboratory school, to be used for demonstrations and micro-teaching. To improve internal communications, a school bulletin was initiated.

The 1968 academic year and its vacation course were a sort of shake-down period for San Andres. By the end of the year fundamental repairs were completed, administrative services were functioning fairly well, and essential equipment and teaching materials had been procured, allowing the school's directors to turn more attention to developing the quality of the school. Their hope was to develop a program that would include a maximum of modern educational practices.

A first step toward that end was to include department chairmen in the planning of the 1969 retraining course. While retaining the basic framework of the previous vacation course, the 1969 program was strengthened by the addition of courses in evaluation, guidance, techniques of investigation, and library science, as well as by including optional offerings in homemaking, fine arts, industrial arts, and music. In addition, the program organization introduced a number of innovations in Salvadoran teacher education: students were administered achievement tests in their subject specialties so they could be taught in relatively homogeneous groups; students' schedules included free hours, during which they could study, use the library, confer with professors, or relax; faculty teaching loads were reduced

from the standard 35 hours per week to 15 hours, to encourage better preparation, more rapid correction of papers, and increased interchange with students. To increase the quality of instruction, professors were encouraged to use text books and other teaching aids, and they were asked to submit lesson plans to the academic subdirector.

Before the 1969 course got underway, two problems developed. First, as had happened during the vacation course, the Division of Secondary Education fell behind schedule in assigning teachers to the retraining course. A few days before the course's supposed inauguration on February 1, Secondary Education had selected only 180 of a projected 280 participants. It is not difficult to imagine the San Andres faculty's consternation at the delay, since their pre-testing and individual scheduling required a certain lead time between teachers' assignment to the course and its initiation. Eventually, 262 teachers began their course a full month behind schedule.

The second problem was more serious in terms of its consequences on the development of the school. Largely because of the personalities of the people involved, there was no clear delineating of responsibilities and authority among the director and his two subdirectors. The director did not communicate well with the staff in general, and often he seemed unwilling or unable to delegate authority. Because he frequently assumed leadership and made decisions in areas nominally delegated to one of the subdirectors, the latter were uncertain of their positions. Naturally, a modus vivendi developed,

but this situation did not contribute to the development of the school.*

As the 1969 course progressed, certain weaknesses in the program were manifest. The Plan Basico school at San Andres, created to serve as a laboratory school and as a center of practice teaching, was not fulfilling either function to the satisfaction of San Andres' directors. The administrative staff and teachers of the lab school felt themselves somewhat autonomous from the rest of San Andres. The school did little experimenting with innovative education practices, and in fact was highly traditional in its teaching. Further, its facilities were not suitable for large group observation.

To facilitate improvement in the lab school, a new principal and several new teachers were appointed for 1970. The problem of improving facilities was relatively easily tackled by organizing a demonstration center from which two different classrooms, wired for sound, could be observed separately or simultaneously.

Another weakness at the beginning of the program at San Andres was the faculty's inadequate use of textbooks and other teaching materials. It was apparent that more supervision of instruction was needed, as well as more in-service training of faculty members themselves. Several things were done to improve in these areas: a library consultant was requested of USAID to help re-organize and

*The situation improved greatly in January of 1971 with the appointment of a new director. The previous director became head of Secondary Education, and his transfer improved the co-ordination between Secondary Education and San Andres.

develop the San Andres library; the Instructional Materials Center was re-organized; a rating form was developed for observing faculty; demonstrations in the use of texts and audio-visual aids were organized for 1970; weekly in-service seminars were instituted; and a student bookstore was inaugurated with funds from USAID. The latter enterprise was highly successful and did a great deal to stimulate the use of text books.

Another significant development of the 1969 school year involved a change in the evaluation techniques applied by San Andres faculty. In mid-1969 a special faculty committee was appointed to study the problem, and although its final recommendations were hardly earth-shattering, the very appointment of the committee was an important event, marking the first time that faculty members participated in establishing major policy of the school.

1969, then, was a crucial year at San Andres in terms of organizing the basic retraining program, recognizing instructional weaknesses, and establishing the school's general direction of development.

When plans were being made for the 1969 vacation period, problems arose once again between Secondary Education and San Andres. Two days before the courses were to begin, San Andres was finally informed of how many students it would be sent. The students were also notified at the last minute, a fact that perhaps contributed to the problems that developed in a course for 186 graduates of the Superior Normal School. These were teachers who had completed the

training considered necessary for secondary teachers, and it was therefore felt that their need for retraining was minimal. A special, seven-week course was organized for them, and it included condensed versions of the usual retraining courses. The Superior Normal School graduates had thought that they would study only ITV utilization, and they resented having to study subject matter content, methodology, etc. They also resented having to give up their vacations without extra pay. Most of all, they believed they had nothing to learn from the staff of San Andres.

The Superior Normal students threatened a walkout, but after representatives of the Ministry and the directors of San Andres explained in detail the purposes of the course, and after faculty members redoubled efforts to make their classes interesting, the vast majority completed the seven-week course. Even so, the San Andres professors felt the course was a bust, and that the Superior Normal School graduates had not been sufficiently prepared. The problem might have been avoided if the Ministry, and especially the Division of Secondary Education, had notified these teachers with reasonable anticipation and explained to them the purposes of their retraining.

Two other courses offered during the 1969 vacation period encountered no problems. The first of these was for 30 candidates for utilization supervision. Second was the continuation of retraining for the 100 teachers who had attended the 1968 vacation course. This group ultimately studied during a third vacation, to make its retraining equal to a full academic year.

1970 witnessed an increase in the number and variety of programs offered at San Andres in addition to secondary teacher retraining. For two of these new courses, San Andres' facilities were used, but its faculty did not participate in planning or executing the courses. The first of these was a special two year course to prepare physical education instructors. It began in 1969, and continued through 1970 to the present, under the direction of a group of Japanese "Peace Corps" volunteers. The second autonomous course was for 44 diversified high school principals, and this course was planned and taught by special personnel hired by the Ministry of Education.

Two courses for primary school personnel were also given during 1970. A group of 39 primary teachers was given special training to enable them to teach the seventh grade. Fifty-nine primary school supervisors studied the new primary curricula and techniques of supervision. The latter course occasioned some disagreements between the Division of Primary Education and the San Andres staff over the course's content, but these differences were resolved.

Two vacation courses were held during November, 1970 - January, 1971, without incident. One hundred teachers completed their third cycle of vacation studies, while a group of 153 began their first of three such courses.

Currently, 201 secondary teachers are attending the retraining course at San Andres. When they complete their program in late November, they will bring the total of retrained secondary teachers to over one thousand. Increasing enrollments at the junior secondary

level from 1968 through 1971 have increased the number of teachers at that level, so that there will probably be a small group of teachers to retrain in 1972. Even so, by the beginning of 1971, San Andres was ready to shift its major emphasis from secondary retraining to pre-service training of both primary and secondary teachers.

This shift in priorities represents a critical phase in the school's development. In the retraining phase, San Andres had relative autonomy in the development of courses, and its own faculty had the major responsibility for teaching those courses. Quite a different situation has thus far prevailed in the pre-service programs. No instructors from San Andres were included in planning the curriculum for the new, two-year Superior School of Education (secondary teacher training), which was scheduled to open in July of 1971.* In addition, several ex-university professors have been hired to teach in this new program. Both facts seem potentially dangerous to faculty morale at San Andres.

Although San Andres was invited to plan a curriculum for the new, three-year Pedagogical High School (primary teacher training), San Andres' proposals clashed with plans already made at the Ministry, and on most points of difference the Ministry plan prevailed. The Pedagogical High School is currently functioning at San Andres with a first-year class of forty students.

*A two month teachers' strike delayed the opening of this program, and as of September 1, 1971, it was not yet in operation.

Only four years ago San Andres was a group of abandoned, rundown buildings. Today it has dormitory space for 700 students, a cafeteria that can serve 900 hot meals, a library with 17,000 volumes, science laboratories, a demonstration center with closed circuit TV, an Instructional Materials Center with a full-time staff, and an increasingly improving lab school that will soon encompass grades 1 - 9. Its full-time faculty has grown from 23 in 1969 to 40 in 1971, and its administration and staff from 69 to 78 in the same period. Above all, as the school's quality has increased, so has its acceptance and prestige.

Technical assistance certainly contributed to the quality of development at San Andres. The bookstore was able to get underway with a small grant from USAID, and it continues a close association with USAID's Regional Technical Assistance Center in Mexico City. The closed circuit TV equipment was also donated by USAID. Two technical advisers at the library helped train its personnel, and were instrumental in making that facility of central importance to the school's academic program. In recognition of its importance, the library's budget was greatly increased. Through the participant training program, the San Andres librarian received a year's training in Medellin, Colombia. Several other key faculty members are scheduled for participant training programs, most of them in Puerto Rico, in the near future.

A full-time adviser worked at San Andres from mid-1968 through mid-1971, and he contributed significantly to the school's

development. This individual had excellent professional credentials, and he was able to overcome initial difficulties with communication in Spanish. He developed a close working relationship with the academic subdirector of San Andres, and with her support and respect he was able to successfully introduce many innovations into the organization and curriculum of San Andres.

The teacher retraining program at San Andres has been a success. The school is currently undergoing an important transition from retraining to pre-service training, in which its role in program planning and execution is in question. Whatever the outcome of this transition, if one place could be designated the hub of the Salvadoran Educational Reform, it would have to be the San Andres Normal School.

SOME CONCLUSIONS FROM EL SALVADOR'S EXPERIENCE

The history of El Salvador's Educational Reform is by no means complete. In many areas the dust from so much activity has just begun to settle and more time must pass before the full effects of so many far reaching educational changes can be adequately appraised. For this reason, it may seem presumptuous to draw many conclusions at this time. Yet the Reform has received considerable international attention and it has intrigued planners from other countries who are also considering the application of television or other technological innovations to help solve educational problems. These planners would like to duplicate many of El Salvador's accomplishments and, at the same time, avoid the difficulties she has encountered. We feel justified, therefore, in summarizing our research in terms of the administrative "lessons" that have emerged so far from the Salvadoran experience.

The importance of local initiative and control

In contrast to many other nations which have relied upon foreign models and foreign advisers to institute instructional television projects, El Salvador drew heavily upon its own resources and insisted upon strong local control from the outset. The energy and sense of purpose which characterized the ETV Commission under Walter Beneke were carried through in the establishment of the ITV Division within the formal framework of the Ministry of Education. Beneke insisted that Salvadorans assume responsibility for all phases of the Educa-

tional Reform, including television. Accordingly, Ministry of Education officials were justly credited with the project's successes but also held strictly accountable for its shortcomings. In some instances, as we have pointed out, local officials were unable to cope with the complex tasks of coordinating the reform programs and some glaring administrative inefficiencies remain to this day. In retrospect, however, this seems a relatively small price to pay for maintaining the Reform's strong national character.

The importance of integrated change

El Salvador's reform experience suggests that the introduction of an educational tool such as television is best considered in terms of a country's entire educational system. ITV for core teaching was not simply imposed over existing programs and structures in El Salvador; rather, an effort was made to define broad system needs and to fit television to those needs. It was discovered early in the Reform that most elements of El Salvador's traditional educational system would have to be changed if television were to be employed effectively. As a result, the curriculum was revised extensively so that its focus would be on relating and applying concepts rather than on remembering facts; an extensive teacher retraining program was carried out so that teachers could become familiar with the new curricular content and their new teaching roles; and classroom materials for teachers and students were developed to accompany each televised lesson.

These broad, across-the-board changes in Salvadoran education

often required teachers and even Ministry officials to accept and implement policies they had not made. Frequently, their acceptance was hard won. Some felt that the new ITV system was exerting too much pressure on other areas of the Ministry. The curriculum writers, for example, balked at the idea of reforming the existing programs of study for television.

Likewise, Beneke's sudden closing of the nation's normal schools caused resentment, although the reduction in teacher unemployment, as well as the widely-recognized quality of the retraining provided at San Andres, have produced a generally positive reaction among teachers and mollified resentment considerably. Even so, directors of the former teacher training institutions and graduates of the Superior Normal School, who feel their status has been undermined by the new retraining programs, remain unaccepting. The least successful aspect of the Reform has been the attempted transformation of the school supervisor from inspector to consultant. Most supervisors are resistant to this change because they fear that their authority and prestige will be sacrificed if they act as advisers rather than as policemen.

The importance of strong leadership

An extremely important factor in the history of El Salvador's Educational Reform has been the support it has received from the highest levels of government. President Fidel Sanchez Hernandez made educational reform the prime focus of his administration, and that commitment, coupled with the fact that Salvadoran presidents are limited

constitutionally to one, five-year term, meant that the reform programs were designed to be implemented in a relatively short period of time.

The job of carrying out President Sanchez' mandate was given to Lic. Walter Beneke, one of the first advocates of instructional television in El Salvador. As chairman of the ETV Commission and later as Minister of Education, Beneke displayed a relentless commitment to upgrading the quality of El Salvador's educational system. Working from a detailed, five-year educational reform plan, and using the new ITV system as a vital pacesetter, Minister Beneke became personally involved in the day-to-day progress of each one of his programs. Whether the reform in El Salvador would have taken place without him cannot, of course, be proved; in any case, it would almost certainly have come later.

In retrospect, Beneke's forceful leadership also seems to have had certain negative side-effects. By entering directly into many of the day-to-day problems of his various divisions, the Minister inadvertently impeded the growth of problem-solving abilities among his chief subordinates. The majority of the Ministry's division leaders were, in fact, dependent on Beneke's judgment, and most were fearful to act without his approval. This tendency retarded horizontal communication among divisions, and forced the Minister to deal with many matters that could properly have been handled at a lower administrative level.

As the motivating force behind the Educational Reform, Beneke also became the target for a great deal of criticism from ANDES, El Salvador's principal teachers' union. During this period of rapid change,

the teachers' feelings of being underpaid were exacerbated and their protests became increasingly strong. Curiously, the union's criticisms were directed at the Minister personally, and only occasionally at his reform programs. In July and August of 1971, the union conducted its second major strike in three years, which was settled ultimately on terms favorable to the Ministry of Education. In September of 1971, Beneke was appointed Minister of Foreign Affairs, and his former sub-secretary named Minister of Education. How this change will affect the reform programs and the union's behavior is not yet clear.

The contribution of foreign advisers

While maintaining the principle of local control, the Salvadorans were able to make good use of many foreign advisers. The advisers were helpful in getting many of the reform programs underway, but their contributions varied greatly according to their Spanish-speaking abilities and the degree to which their particular skills were directly transferable to Salvadoran counterparts. Foreign advisers working in the more culturally and politically sensitive areas of curriculum reform and school supervision encountered many more problems of acceptance and cooperation than did those in the technical areas of ITV production.

Two advisers deserve special mention for their contributions to El Salvador's Educational Reform. They were Dr. Bruno Stiglitz, the Ministry's senior UNESCO adviser and Dr. Stanley Handleman, USAID's Chief Education Officer. Dr. Stiglitz worked at the right hand of

Minister Beneke on a day-to-day basis, helping to plan and implement all of the reform programs. Dr. Handleman, an expert in ITV who had been a member of the original NAEB/USAID feasibility study team, helped design the ITV system and was an important force in developing and carrying out the notion that ITV would be most effective as part of a broader system change.

Looking ahead

In November of 1971, the first group of students to complete a full three years of study under the Educational Reform graduated from El Salvador's Plan Basicos. Their graduation symbolizes the success that the Salvadorans have had in carrying out the reforms they began in 1968. In a sense, that achievement represents only the first plateau of educational reform. Getting the system into operation (i.e., revising curricula, retraining teachers, and transmitting teleclasses) has been accomplished. As the Salvadorans themselves recognize, however, many qualitative aspects of the Reform must be improved. To do so will require additional in-service training of ITV's production teams, better evaluation techniques and feedback mechanisms, and improved school supervision to aid teachers' implementation of the Reform's programs.

The recent resignation of Walter Beneke from the Ministry of Education has removed the Reform's principal architect and leader. As a result, the Educational Reform faces the problem of continuity, and

that problem will come into sharper focus after El Salvador's presidential election in March of 1972, when it is likely that a new Minister of Education will be appointed. A crucial task facing the new Minister will be to strengthen the foundation of the Reform by improving the quality of the programs initiated during the last four years.

APPENDIX

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Revista La Universidad, Universidad de El Salvador, San Salvador, Mayo-Agosto, 1969. This volume is composed of 6 articles dealing with public primary and secondary education in El Salvador.

FEASIBILITY STUDIES

Japan Broadcasting Corporation (NHK) Study, 1966: This document is on file at the office of the Director of Educational Television, Ministry of Education, San Salvador.

National Association of Educational Broadcasters/USAID Study, The Feasibility of Using Television for Educational Development in El Salvador, 1967: This document is on file at the office of USAID's Chief Education Officer, American Embassy, San Salvador.

World Bank Study, 1967: This document is likewise on file at the office of USAID's Chief Education Officer, American Embassy, San Salvador.

INTERVIEWS

Tapes of the interviews with the 29 individuals listed below are on file at the Institute for Communication Research, Stanford University, Stanford, California.

<u>Person</u>	<u>Position</u>
Gilberto Aguilar Aviles	Formerly a member of the ETV Commission, then Director of the San Andres Normal School, now head of the Division of Secondary Education.
Alejandro Armas Reyes	Sub-director of the Division of ITV.
Gidalberto Bonilla	Formerly Director of the San Andres Normal School, now sub-director of the Division of Secondary Education.
Carlos Antonio Burgos	Formerly head of production section, now head of Materials Center, Division of ITV.

<u>Person</u>	<u>Position</u>
Richard Burke	USAID adviser in Production, Division of ITV.
Irma Lanzas de Chavez Valasco	Formerly a member of the ETV Commission, now Director of the Division of ITV.
Roberto Henrique Coto	Head of technical department, Division of ITV.
Lois M. Garry	USAID adviser in counseling to Ministry of Education and San Andres Normal School.
Stanley D. Handleman	Chief Education Officer, USAID, El Salvador.
Sidney Lang	USAID adviser in science curriculum at the Technical-Pedagogical Division and the Division of ITV.
Julio Rosa Manzano	Director of the Technical-Pedagogical Division.
Judith Mayo	USAID adviser in utilization supervision at the Division of ITV and the Division of Secondary Education.
Roman Mayorga Quiros	Formerly a member of the ETV Commission and CONAPLAN, now vice-rector of Universidad Jose Simeon Canas.
Roberto Murray Meza	Head of COPLACE (Planning and School Construction) at the Ministry of Education.
Eugene Nuss	USAID adviser to the San Andres Normal School.
Manuel Olguin	USAID adviser in science curriculum at the Technical-Pedagogical Division and the Division of ITV.
Jose Oscar Ramirez Perez	Administrative sub-director of the San Andres Normal School.
Dwayne Rogers	Formerly sub-director of USAID's Education Office, El Salvador.

<u>Person</u>	<u>Position</u>
Pierre Schwartz	Formerly a member of the ETV Commission.
Soledad Celis de Sosa	Formerly a subject specialist in mathematics, now Head of Production Section, Division of ITV.
Inocente Antonio Soto Gomez	Formerly a subject specialist in social studies, now Head of Plant and Studio, Division of ITV.
Bruno Stiglitz	Formerly chief UNESCO adviser to the Ministry of Education, now regional head of UNESCO in Central America.
Juan Antonio Tijiboy	Formerly head of ITV's utilization section, then head of supervision in the Division of Secondary Education, now sub-director for supervision in the Division of Basic Education.
Benjamin Trujillo	USAID adviser in mathematics curriculum at the Technical-Pedagogical Division and the Division of ITV.
Luis Fernando Valero Iglesias	Head of evaluation section, Division of ITV.
Cristina de Vasquez	Formerly academic sub-director of the San Andres Normal School, recently appointed Director of the San Andres Normal School
Herbert G. Vaughn	USAID adviser in social studies curriculum at the Technical-Pedagogical Division and the Division of ITV.
Reynaldo Zamora	USAID adviser in mathematics curriculum at the Technical-Pedagogical Division and the Division of ITV.

MONTHLY AND FINAL REPORTS

Monthly and final reports written by the 12 USAID advisers listed below were consulted. These reports are in the files of the Chief Education Officer, El Salvador.

<u>Person</u>	<u>Position</u>
Robert Browne	Adviser in general curriculum development at the Technical-Pedagogical Division.
Richard Burke	Adviser in studio production at the Division of ITV.
John T. LaDuke	Adviser in film and photography at the Division of ITV.
Sidney Lang	Adviser in science curriculum at the Technical-Pedagogical Division and the Division of ITV.
Judith Mayo	Adviser in utilization supervision at the Division of ITV and the Division of Secondary Education.
Eugene M. Nuss	Adviser to the San Andres Normal School.
Manuel Olguin	Adviser in science curriculum at the Technical-Pedagogical Division and the Division of ITV.
James Spear	Adviser in utilization supervision, subsequently in studio production, both at the Division of ITV.
Benjamin Trujillo	Adviser in mathematics curriculum at the Technical-Pedagogical Division and the Division of ITV.
Herbert Vaughn	Adviser in social studies curriculum at the Technical-Pedagogical Division and the Division of ITV.
Maria Vaughn	Adviser in graphic arts at the Division of ITV.
Reynaldo Zamora	Adviser in mathematics curriculum at the Technical-Pedagogical Division and the Division of ITV.