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COOPERATIVE INSTRUCTION BY TELEVISION IN THE SCHOOLS OF  
AMERICAN SAMOA, AN OUTLINE OF THE ORGANIZATION AND  
PROCEDURES.

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NATIONAL ASSN. OF EDUCATIONAL BROADCASTERS

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\*CURRICULUM DEVELOPMENT, TEACHER INTERNS, TESTING PROBLEMS,  
MULTICHANNEL PROGRAMING, ELECTRONIC EQUIPMENT, AMERICAN SAMOA

THIS OUTLINE DISCUSSES THE ESTABLISHMENT OF A NEW  
TELEVISION-BASED SYSTEM OF INSTRUCTION IN AMERICAN SAMOA.  
AFTER LISTING 12 MAJOR PROBLEMS IN THE EDUCATIONAL SYSTEM AS  
OF 1961, THE OUTLINE RAISES POLICY QUESTIONS AND REPORTS ON A  
PROPOSAL TO APPLY EDUCATIONAL TECHNOLOGY TO THESE PROBLEMS.  
THE DISCUSSION OF THE EDUCATIONAL PROGRAM IS BROKEN DOWN INTO  
(1) TECHNICAL ASPECTS, (2) THE PROGRAM OF ELEMENTARY  
EDUCATION, AND (3) THE PROGRAM OF SECONDARY EDUCATION. THE  
TECHNICAL ASPECTS INCLUDE PROVIDING A MULTIPLE-CHANNEL  
TELEVISION BROADCASTING SYSTEM AND A PRODUCTION CENTER TO  
FEED THE TRANSMISSION SYSTEM. THE OUTLINE THEN PROCEEDS TO  
OBJECTIVES, TECHNIQUES, MATERIALS, AND RATE OF DEVELOPMENT OF  
THE ELEMENTARY EDUCATION PROGRAM, AS WELL AS THE TEACHER  
TRAINING PROGRAM. THIS IS FOLLOWED BY A DISCUSSION OF THE  
TRANSITION, BASIC CHANGES, CURRICULUM DEVELOPMENT AND LESSON  
CONSTRUCTION, TESTING PROBLEMS, AND PRODUCTION OF LOCAL  
INSTRUCTIONAL MATERIALS IN THE SECONDARY EDUCATION PROGRAMS.  
(JO)

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**COOPERATIVE INSTRUCTION BY TELEVISION**

**IN**

**THE SCHOOLS OF AMERICAN SAMOA**

**AN OUTLINE OF THE**

**ORGANIZATION AND PROCEDURES**

by

**Vernon Bronson, Executive Consultant**

**National Association of Educational Broadcasters**

**February, 1966**

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# I

## BACKGROUND

When Governor H. Rex Lee assumed responsibility for the Government of American Samoa in 1961, one of his first concerns was the improvement of the educational system. Over a period of years, several study groups had reported on the educational system of American Samoa. The major contributions of these reports were the documentation of the significant events in the history of the educational system and the assessment of the major problems.

At the request of Governor H. Rex Lee, a new team was organized in the fall of 1961 by the National Association of Educational Broadcasters (NAEB) to study the entire educational system in American Samoa and to suggest a feasible plan to modernize and upgrade the instructional program. The team was headed by Vernon Bronson, Director of Research and Development for the NAEB, and included W. G. Harley, Professor of Radio-Television Education, University of Wisconsin; Lawrence H. Shepoiser, Superintendent of Schools, Wichita, Kansas; and William J. Kessler, Professor of Electronic Engineering, University of Florida, and Design Engineer for the Florida Educational Television Commission.

The study group conferred with a number of persons, including: Lowell D. Holmes, Professor of Social Anthropology at the University of Wichita; Richard B. Hull, Professor of Education, University of Ohio; Harold E. Hill, Vice President of the NAEB and formerly Assistant Professor of Communications at the University of Illinois; and James A. Fellows, Director, School of the Air, Syracuse University.

After a detailed study of conditions then existing in the educational system of American Samoa, the study group in its summary noted:

1. A lack of clearly-established goals for the schools
2. A poorly-defined elementary curriculum
3. A failure to successfully teach the fundamental skills
4. The elementary school program provided no base for an effective secondary education
5. The method of teaching English was based upon class drill and rote memory and had no structural foundation

6. Methods of instruction emphasizing memorization with little attention given to the development of meaning and understanding
7. A lack of appropriate instructional materials
8. No audio-visual materials in the elementary or junior high schools
9. Overcrowding in the elementary and junior high school buildings
10. A prevalence of poorly-educated and unprepared teachers
11. Inadequate supervision of instruction
12. Ineffective teacher preparation and in-service training programs

As a result of their findings, the planning group recommended a complete remodeling of the school system and the instructional program in American Samoa. The recommendations stated that if the Islands were to have a first-class school system, it would be necessary to establish immediately an entirely new system of instruction based on specific goals with new standards of achievement.

A new educational structure and outlook should be established that would provide the Samoan children of the ensuing generations with the skills, knowledge, and insight that would enable them to participate in the modern world without sacrificing the desirable values of their Samoan culture. The new structure should also provide for the development of educational opportunities for the adult population of the Islands.

## II

### PLANS AND PROCEDURES

In determining a specific and workable plan for the improvement of the educational system in American Samoa, a number of questions were raised:

1. Could an adequate number of new schools be constructed at a feasible cost and within a reasonable period of time?
2. Would it be possible to employ several hundred qualified and dedicated stateside teachers?
3. If such teachers could be employed in such numbers, would it be possible to provide adequate housing for them?
4. Would the cost of recruiting such large numbers of stateside personnel, transporting them and their families to the Islands, and providing housing and other services be economically feasible?
5. Would it be desirable to replace all Samoan school personnel with stateside personnel?

A serious consideration of all of these questions indicated conclusively negative answers. The next step was a study of the application of technology to the problem.

A geographical survey of American Samoa and a study of the problems of electronic radiation indicated that it was technically possible to use television for all the schools. It was also determined that such service could be made available to Western Samoa if desired.

An organizational study indicated that only by the extended use of television would it be financially feasible to train adequately the best of the existing Samoan school personnel and develop new Samoan teachers. At the same time, it would be possible to upgrade the instructional system and increase the achievement level of the Samoan children.

An educational study indicated that in order to use television effectively, it would be necessary to develop a completely new instructional technique that would make direct teaching by television the core of an instructional program based on cooperative planning, presentation, and reinforcement. It would also require a system of continuing in-service teacher education and general adult education as a major supporting factor.

After due consideration by the Administration of American Samoa, specific technical and educational plans were developed and presented

by the Governor to the President and the Congress. Funds were provided by the Congress.

### III

#### THE TECHNICAL ASPECTS OF THE SYSTEM

The initial problem was to provide a multiple-channel television broadcasting system that would cover Tutuila Island and reach all the projected schools and village sites with an adequate signal. The system should also have height and power enough to radiate over approximately 70 miles of water to east and west to serve the villages and schools on the outlying islands and Western Samoa.

To accomplish this, a transmitter building and the necessary towers and antenna are located on Mount Alava overlooking the harbor at Pago Pago. In the first phase of the program there were transmitters operating on VHF Channels 2, 4, and 5. In the second phase three transmitters, operating on Channels 8, 10, and 12, have been added. The power of the transmitters and the angle of radiation of the antenna were planned to be low enough to be well received at various points on Tutuila and yet high enough to be picked up by translators on the Manua Islands.

The second stage in the development was to provide a television production center to feed the transmission system. The Television Center contains the facilities for producing instructional materials, the workrooms and research library, the master control room for the electronic transmission system, four television studios, supervisory offices, and technical shops. This year these facilities have been enlarged to provide instructional programs and materials for secondary schools.

### IV

#### THE PROGRAM OF ELEMENTARY EDUCATION

##### A. ELEMENTARY INSTRUCTION

The new system of elementary instruction in the schools of American Samoa has two major objectives: to improve the quality of instruction and

to raise the achievement level of the children.

The techniques designed to accomplish these objectives have two major aspects:

1. The core of all instruction is the teaching that is done by television. The teaching is more concerned with ideas, understandings, and insights than with the memorization of relatively unrelated facts.
2. The planning, presentation, and reinforcement procedures are developed cooperatively. This is "team teaching" in a very broad sense.

This group composed of the classroom teachers and Principals develops the content, scope, and sequence of the instructional program.

There are enough teachers in the Television Center to provide complete instruction in the eight elementary grades. This staff is made up of well-qualified stateside teachers skilled in television techniques.

Each of the television teachers has a Samoan teacher as an assistant who is a working intern. This Samoan assistant helps the television teacher to understand the customs and language of the people.

In the primary grades the Samoan assistants to the television teachers may give instructions in the Samoan language during a lesson or may provide Samoan language introductions to non-verbal exercises arranged and presented by the television teacher. The extent of participation by the Samoan teacher is of necessity determined by the stateside television teacher, who is responsible for the direct presentation of the lesson material on the air.

In addition to the Samoan assistant, each television teacher has a producer-director to guide the production of the lesson presentation. The television teacher is also able to call upon the assistance of the research assistants, artists, photographers, and other technicians of the production staff.

Each elementary school is headed by a stateside Principal trained in elementary administration and education and in the techniques of television utilization. These Principals are directly responsible to the Director of Elementary Education.

The elementary classrooms in grades one through eight are in the charge of Samoan teachers trained and oriented in the use of television in the classroom. They are closely supervised in their classroom activities by the Principal.

The teaching schedule in the elementary classrooms is planned in connection with the television lessons. All activities in the schools follow the same general schedules both as to time and reinforcement activities. The daily and weekly schedule of lessons and activities, and the related classroom instructional materials, are furnished on a daily and/or weekly basis from the Television Center.

Continuing feedback information from the television Principals to the Television Center enables the staff to modify and adjust the pace and the content of lessons and schedules to meet the demonstrated needs of the pupils. Such coordinated feedback also enables the Principals to evaluate instruction in their own schools.

Each school Principal has a Samoan Assistant Principal to help him in handling the administrative affairs of the school, especially problems involving school and village matters. The Assistant Principal teaches a regular schedule of classes.

The teaching schedule is being established gradually over a period of one or more school years. Regardless of modifications that may be made in the schedules as a result of day-to-day experience, the basic concepts, attitudes, and understandings are all taught by the television teacher. The reinforcement and follow-up activities are structured in coordination with the total television program.

Pupils who will receive the greatest benefit from the reorganized educational program are those children who entered the first grade in the television schools in 1964 and thereafter. Other children now in school will receive diminishing benefits from the new system in inverse proportion to their present grade level.

It is believed that literacy in the English language is the major key to effective learning in the Samoan schools. A report of the South Pacific Commission Seminar on the Teaching of English in 1962 gave specific recommendations for the improvement of the teaching of English in the South Pacific. The Seminar report recommended:

1. That because of the complex nature of language teaching, the strongest emphasis be placed on the necessity for high-quality teaching at the primary level in order to insure a sound foundation and to reduce the excessive amount of remedial work now necessary at secondary and tertiary levels,
2. That any English language teaching curriculum be based upon a structural approach and the sentence pattern be made the unit of instruction,
3. That territories adopt an existing structural syllabus in English devised within the region while their own is being developed,
4. That the main emphasis in classroom teaching be placed in the aural-oral approach, especially in the first six years.

Under a structural English program the use of textbook materials and discussions in English are deferred until the mechanics of the language have become automatic. Content teaching in English will progress more rapidly and more effectively when preceded by definite mastery in language usage.

A structural approach is being used in teaching English by television in American Samoa. The syllabus used is that developed by Professor George Pittman, English Language Consultant for the South Pacific Commission.

Grades one through eight are now combined into a four level instructional program: grades one and two the first level, grades three and four the second level, grades five and six the third level, and grades seven and eight the fourth level. More levels of instruction will be developed as experience and rate of achievement indicate.

Most pupils entering the first grade are not able to speak or understand English. They receive beginning instruction in structural English. Other instruction and directions are given to them in the Samoan language. When stateside television teachers are unable to do this, they are helped by their Samoan assistant teachers. The use of the English language as the basic language of instruction will be achieved as rapidly as is consistent with good communication and understanding. The transition

from the teaching of English at the first level to the teaching in English must be based on valid communication values.

All development in the language arts is based upon planned experience. The development of skills in reading and writing in the English language is paced by the program in structural oral English.

Televised instruction in the low primary grades is demonstrative and participatory in nature. Much of it is non-verbal and designed for motivation and emulation. Classroom activities at this level are cued by the television presentations and by the structured lesson plans and guides furnished to the classroom teachers from the Television Center.

While the teaching of English is stressed from the very beginning in the elementary grades, all areas of the curriculum are taught. Special attention is being given to relationships of the child in his home, school, village, nation, and the world.

In the progressive development of special and broad concepts and understandings, direct television instruction will take an increasing portion of the total instructional program.

In the primary grades, coordinated classroom activities may exceed television presentation time by the ratio of two or three to one. This ratio will be reduced as English becomes the major language for communication.

The specific amount of time allotted to a television lesson and to the coordinated introduction and reinforcement follow-up may vary from subject to subject in each level. The precise determination of these periods, as well as the degree of coordination, is one of the major responsibilities of the cooperative planning groups.

## **B. ELEMENTARY INSTRUCTIONAL MATERIALS**

The proper use of appropriate instructional materials is a significant factor in any effective school program. The original planning group emphasized that few significantly pertinent instructional materials were available in the schools of American Samoa. Because of this, the teachers and staff of the new school system have an essential responsibility to produce the major portion of the instructional material used both on television and in the classrooms.

In the new system it is futile to continue to use materials for reference and for direct instruction that have no real meaning to the Samoan children. The production of appropriate instructional materials increases the burden of responsibility shared by the total school staff and particularly upon the faculty and staff of the instructional television program, but there is no other way to procure appropriate materials for television instruction and for classroom follow-up and reinforcement.

Each television lesson is produced with instructional manuals for the classroom teachers, and when necessary, lesson sheets for the pupils. The teachers' manuals contain information, explanations, and directions for the classroom teacher that enable him to coordinate his introductory and reinforcement activities with the aims and objectives of the television lesson and of the total course.

In time, the material developed in the teaching manuals and in the lesson and information sheets furnished to the teachers and pupils may be organized into textbooks that will be published by the Department of Education for use in Samoan schools. One of the advantages of being forced to produce an original mass of instructional materials is that the material becomes a living textbook and is subject to constant modification and up-dating.

One of the salient responsibilities of the Principal is to instruct and supervise the classroom teachers in the proper and effective use of planned and coordinated audio-visual materials and equipment. The Principal also has a significant responsibility in developing the library service in each elementary school and in encouraging the teachers and the pupils to use the library materials as a reference, in conjunction with their classroom instruction and as an extension and reinforcement of such instruction.

It must be emphasized, however, that the selection of instructional materials cannot be the responsibility of any one individual. The selection must be the result of the coordinated and cooperative efforts of a representative group of all those involved in the instructional program. In this cooperative system articulation between the grades is vitally important; and there must be a program of continuing cooperation on an inter-grade and inter-department basis in the selection, preparation, and use of instructional materials.

### **C. RATE OF DEVELOPMENT OF THE ELEMENTARY TELEVISION PROGRAM**

The first television instruction went on the air at the beginning of the 1964-1965 school year. The first schedules were gradually expanded to cover the whole range of curriculum. By the end of the first school year, the entire curriculum in the elementary schools was firmly established with the television technique.

The television program for the elementary grades started with seven consolidated schools equipped with television receivers and headed by stateside Principals. These first consolidated schools were located at Nua, Ili'ili, Lauli'i, Aoa, Vatia, Fagasa, and Utulei.

Prior to being involved in the new schools, all Samoan teachers received special training and orientation before assuming responsibilities for a television classroom. This is a significant factor in the development of the new system. The utilization of the television material in the classroom and the coordination of all classroom activities with the television lessons are equally important to the quality of instruction emanating from the Television Center.

Five additional consolidated elementary schools were built and put into operation during the school year 1964-1965. During the ensuing school year the remainder of the 26 proposed consolidated elementary schools are expected to be in operation under the instructional television system.

### **D. ELEMENTARY TEACHER EDUCATION**

One of the major objectives of televised instruction in the schools of American Samoa is to make it possible to use the indigenous teacher in the classroom and at the same time to improve the quality of instruction. It is hoped that in time Samoans will be able to operate their own school system without importing any significant number of teaching personnel from the United States or elsewhere. This places great emphasis on a program of teacher education. This problem is being resolved in several ways:

1. A two-year Teacher Training School will accept a selected number of high school graduates each year by competitive examination. These students will be given approximately two months' intensive classroom

instruction in teaching procedures and techniques related to the new elementary school system, English comprehension, and subject matter review.

They will then be placed in an elementary school as a student-intern under the direct supervision of a member of the staff of the Teacher Training School. At the end of each school day, they will participate in the regular in-service teacher education program and have assigned homework. At intervals during the school year, the location of the assignment of the student-teacher will be varied. At the end of the first school year as a student-intern under supervision, the student-teacher will return to the Teacher Training School for two more months of intensive classroom instruction.

The second year assignment will be a repeat of the first year's assignment, but in different locations; and at the end of the second school year, the student-teacher will get another two months of intensive classroom instruction.

There will be regular tests and measurements conducted during the entire two years. These will be emphasized in the field of subject matter knowledge, English comprehension, and classroom teaching techniques. If the student-teacher successfully completes the two-year course, he will be assigned a teaching position in a classroom subject to his performance during the ensuing year of classroom teaching.

2. One of the advantages of this instructional television system is that the classroom teacher is taught along with the pupils. The teacher is exposed to good English and to good teaching techniques on television.
3. The Samoan teacher is also guided by a structured program of daily activities that is outlined for him as precisely as the schedule of televised lessons. His individual success is largely determined by the

initiative and enthusiasm with which he implements the schedule and carries out his role of leader, guide, and counselor in the classroom.

4. However, these daily precepts and examples will not be entirely sufficient to do the job of preparing the Samoan teacher. In order to reinforce his beginning understanding, there is now an organized program of in-service teacher education. This is continued throughout the year on a daily basis. At the end of the regular school day, the Principal meets with his faculty and discusses the problems of instruction, subject matter understandings, rate of progress, and problems of program coordination. Telecasts for these daily teacher education programs are beamed to the schools to reinforce and in some measure to guide the work of the Principal.

The content of the televised in-service teacher education programs is worked out cooperatively between the Director of Elementary Education and his school Principals. These in-service programs include development of English use and comprehension, expansion of subject matter, techniques of reinforcement, methods of coordination, and general and specific education philosophy.

The increasing level of achievement of the graduates of the high schools, the program of the Teacher Training School, and the program of in-service teacher education will make formal college preparation possible for a greater number of Samoan students. In addition, this program in teacher education will gradually raise the education level of the Samoan people and make it possible for more and more Samoan teachers to replace the imported stateside teachers.

## V

### THE PROGRAM OF SECONDARY EDUCATION

#### A. TRANSITION

Universal secondary education in American Samoa began its fourth year in the school term of the years 1965-66. In order to provide adequate

plant facilities for the increasing high school population and to distribute such facilities among the population centers of American Samoa, new high school buildings have been constructed at Leone and Manua, and the high school plant at Utulei has been modified and adapted to the changing program.

The enrollment for grades 9 through 12, as of October 1, 1965, was 1695 pupils in the 3 high schools. The high school enrollments were approximately as follows: Utulei, 848 of whom about 100 were in the regular program and 748 in the new standardized program; Leone, 600; and Manua, 250 pupils.

During this period the entire secondary program is being involved in the change-over from the traditional classroom system (where one teacher was assigned to teach 25-30 pupils) to the cooperative system of instruction by television. The instructional television system is designed to provide equal learning opportunities in all the secondary grades in all the high schools in American Samoa. It is also designed to make possible a gradual build-up of Samoan instructional personnel and administrative staff.

To effect the application of television instruction to the secondary schools, it was necessary to make some basic changes in the organization of courses and in the general scheduling of classes. Each of the three high schools operates on approximately the same class schedules, and all students taking the same subject at the same grade level and/or the same achievement level are scheduled at the same hour and receive all basic informational and conceptual instruction by television.

The new buildings at Leone and Manua have been designed to facilitate the new class structure. The buildings at Utulei have been modified and extended to accommodate the new patterns of organization, and the new Eastern District high school will be constructed with the same design.

## **B. BASIC CHANGES**

### **1. Structure**

There are three basic changes that affected the secondary school system in American Samoa in the introduction of the new system of instruction. They are the physical structure of the classrooms,

organization of instruction teams, and method of instruction. The first is structural in nature. The structure of the classrooms is different. They are designed first and foremost to accommodate large class groups that can be supervised, directed, and motivated by a single teacher. They are also planned to have maximum flexibility, so that they can accommodate areas for individual study, and small special and remedial classes without impairing the efficiency of the instruction in the large central group. The basic structure of the new system is also changed by the inclusion of the television receiver and the television studio as an integral part of its function.

## 2. Staff and Faculty

The second basic change is in the make-up and organization of the staff and faculty. Each of the high schools has an American Principal who not only understands secondary curriculum, but who is experienced in the cooperative television technique of instruction. Each American high school Principal is assisted by a Samoan Vice-Principal.

In addition to the Principal, there are also qualified Americans as Supervisors of Classroom Instruction. At Utulei and at Leone there are two such instructional supervisors, and at Manua there is one.

It is the responsibility of the Classroom Instruction Supervisors to actively supervise the procedures and the activities in the large classrooms. They guide the teachers in their subject-to-subject, period-to-period, and day-to-day efforts in relation to the basic instruction being received by television. The Classroom Instruction Supervisors also act as liaison personnel, in conjunction with the Principal, with the American television subject-matter teachers, and with the Director of Secondary

**Instruction.** It is also the responsibility of the Classroom Instruction Supervisors, under the direction of the Principal, to conduct regular and continuing in-service teacher education for teachers. Such in-service teacher education, of course, is designed to reinforce and improve the techniques of the instructional television methodology.

Vocational education or skills training employs Samoan instructors in the shops and classrooms. The vocational teachers are under the direct supervision of a Supervisor of Vocational Education on the staff of the Department of Education. Academic classroom work and related technical instruction for vocational students are received by television in the same manner as all other basic instruction. The scope, sequence, and relative difficulty of such related vocational instruction are determined by the Supervisor of Vocational Education in conjunction with the Director of Secondary Instruction.

The basic teaching staff in the secondary system consists of a qualified television teacher for each subject matter area of the curriculum. Each of these teachers is assisted by a Samoan counterpart, by adequate qualified research teachers, and producer-directors. The secondary television instructional staff is directly supervised by the Director of Secondary Instruction. The Director of Secondary Instruction maintains systematic liaison with the Classroom Supervisors of Instruction, and through them with the classroom teachers. The Director of Secondary Instruction brings together the subject matter television teachers and the classroom personnel at such times and as often as is consistent with maintaining a satisfactory instructional program.

The last major element in this faculty and staff change is the Curriculum Development Committee. More will be said about the curriculum later; but

the make-up of the curriculum committee necessarily includes the Director of Secondary Instruction, the Classroom Instruction Supervisors, the Principals of the schools, the television teacher, and the Director of the Department of Education as ex officio chairman. This committee is a permanent and continuing committee and is concerned with the responsibilities that will be enumerated under the reference to curriculum.

### 3. Methods

The third basic change after structure and staff and faculty is in the general methodology of instruction. Heretofore, in the secondary schools of American Samoa, instruction generally had been the responsibility of a single subject-matter teacher in a more or less self-contained classroom. In the new system of cooperative instruction by television, the core of the instruction is by television. The development of the scope and sequence and depth of each course of study is the result of a cooperative effort on the part of a group of qualified persons and is subject to continuing constructive criticism and modification. The activities of the Classroom Instruction Supervisors are designed to amplify, relate, and reinforce ideas and understandings developed through the television lessons.

When each lesson of each course of study is planned for the television presentation, there is a concomitant planning of drill, investigation, self-study, and other reinforcement activities in the classroom and outside the classroom following the television lesson. This, of course, strongly suggests that each class in each subject area in all the schools is doing the same thing at the same time in their non-television activities. As far as general directions go, this is true; but the extent of initiative, creativity, organization, and energy that goes into the development of the reinforcement

activities in the classroom is the range of latitude between what happens in one school or in one class and another.

The structuring of the basic course of study and the uniform quality of instructional presentation on television enhances the potential of equal learning opportunities for all the children in American Samoa, but it does not stifle nor inhibit in any way creative activities designed to reinforce learnings and to enable the Samoan child to relate his learned concepts and ideas to his own needs, aspirations, and environment.

### C. SUBJECTS TAUGHT BY TELEVISION

There has been some question as to what subjects would be taught by television. The ultimate penetration of the system of cooperative instruction by television into the curriculum cannot be precisely anticipated at this time. However, in the beginning of this system provisions were made for the teaching of all basic subject matter at all grade levels.

The science laboratory areas in the new secondary schools at Leone and Manua, and in the modification of the school at Utulei, were planned with special four-student laboratory tables, each of which is equipped with its own television receiver for basic laboratory demonstration and instruction. The problem here is one of supervision and of discipline.

In business education, typing, shorthand, bookkeeping, filing, etc. are taught by television, and can be so arranged in classes that large groups can be taught as easily as small groups.

In the beginning of the secondary television school program, there is a "core" program in the ninth and tenth grades which is taught in much the same manner as an elementary school curriculum. This was necessary because of the present low level of achievement among the Samoan students who entered the ninth and tenth grades this year; and the core program is expected to bridge the gap between the eighth grade of elementary school and the specialized subject matter instruction of the high school.

As long as the core program is continued, it will be taught in large classes, but may be divided into two or more achievement levels as

the situation requires.

It is the objective of the planned system, however, to eliminate the core programs in the beginning of the secondary schools as rapidly as possible, and as the better-taught and higher-achieving students move up from the elementary schools in the years ahead to move such students directly into the regular specialized secondary school program.

There will undoubtedly be need from time to time for special remedial classes for slow learners and academically advanced classes for fast learners. If these classes are extremely small or in a particular subject area isolated to one school, it would perhaps be better to use direct classroom instruction; however, if in any subject area these classes are numerous enough, with the proper scheduling they can be adapted to television instruction.

Even where small, isolated areas of instruction cannot easily be adapted to television, such classes may benefit significantly from supplemental teaching materials generally televised. It will be the policy of the secondary schools to make as much use of this kind of supplemental instruction as possible, whenever and wherever it is required.

#### D. CURRICULUM

The general areas of curriculum have been pretty well established in the secondary schools in American Samoa. By general areas of curriculum, we simply mean "what to teach," or the priorities of subject matter. However, the specific areas of the curriculum are not as well defined. By this, we mean not only what to teach, but the scope and depth of the selected subject matter and the sequence in which it is to be taught. The development of these larger and more specific aspects of the secondary school curriculum in American Samoa must be based upon the stated aims and objectives of the education program, and upon the observed rate of achievement of the students in the secondary schools. Because of this guiding principle, which is in line with the findings of the Educational Policies Commission, the secondary curriculum in American Samoa must be in a continuing process of evaluation and modification; and the persons best qualified for this assignment are the television teachers, the classroom instruction supervisors, and the classroom teachers. The American television

teachers and the American classroom instruction supervisors shall all be on the Curriculum Development Committee, and a representative group of Samoan classroom teachers should be selected in equal number to serve this continuing process. The Director of the Department of Education is the ex officio chairman of this committee, but the working chairman is the Director of Secondary Education.

This committee meets at regular intervals and considers not only the priorities of subject matter, but subject matter application to grade levels and to educational objectives. It also considers the particular emphasis to be given to the various subject matter areas, the scope of each subject in the entire program and at particular levels of achievement, the depth of understanding to be achieved, and the sequence in which bits and portions of subject matter are to be taught.

#### **E. CURRICULUM DEVELOPMENT AND LESSON CONSTRUCTION**

Too often there is confusion in educational planning between curriculum development and the development of lessons and courses. Because the preparation of instructional material for television must necessarily be more precise and more orderly, it is important that the two developments be well distinguished from one another. Curriculum development, carried on by the larger committee, must be guided by the over-all aims and objectives of the total educational program. The development of a series of lessons to constitute a course must be guided by the factors of the teaching-learning process, the principles of educational communication, and the demonstrated rate of achievement of the students.

Because of this, it naturally follows that the effectiveness of instructional procedures must be constantly evaluated and must be modified as may be required in much the same manner as the over-all curriculum.

#### **F. TESTING**

This brings up the matter of testing in the cooperative television instruction program. By testing, we usually mean some scheme of determining the specific achievement of a student during any given period, or a device for measuring the retention by a student of specific learnings. No precise or foolproof ways have yet been devised to accomplish these objectives. Certainly, most of the traditional methods of testing for learning have been less than satisfactory. In spite of this, it is important that some degree of measurement be applied to both the ability and the inclination of the

student to learn. But such a device should be primarily a measurement of pupil understanding and success in motivating the student and guiding him to learning.

In the instructional television system, any device for testing the students must be, as in all the rest of the process, a cooperative effort among all of the instructional personnel involved. Such a device may consist of activities producing required results and supervised by classroom teachers; it could be study or research assignments given by the television teacher and written results cross-graded\* in the classroom; or it may be a quiz-type of procedure with questions asked and answers checked by teachers or students. Whatever the device, it must be something that will apply to the particular situation existing in this system at this time and understood by both teachers and students. In any event, there must be one guiding principle in developing tests and measurements for a secondary television school system -- whatever is done must be as much of a teaching device and a learning reinforcement device, as it is a testing device.

#### **G. INSTRUCTIONAL MATERIALS**

It will be possible for the secondary television schools to use some commercially-produced material and textbooks from the United States. There are many areas where really effective materials will have to be produced in Samoa and oriented to the particular instructional needs of the Samoa students.

Such material will not only be needed in the television production Center for direct instruction, but will be needed in the classrooms for follow-up and reinforcement activities.

Much of this material is produced in the Center. But each of the high schools is provided limited facilities for producing and reproducing as much specific reinforcement material as possible. It is the responsibility of the Classroom Instruction Supervisors in each of the high schools to instruct the Samoan classroom teachers and to assist them in producing such material. In the successful production of any instructional material, there must be a coordination of effort between the Television Center and the Library-Media Center of each of the high schools.

\* exchange of papers by students

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SUMMARY

The use of television in the educational system of American Samoa is designed to make the maximum use of a minimum number of American teaching and supervisory personnel during a developmental period in which as many Samoan teachers, supervisors, and technicians as possible will be used and up-graded to the extent of their abilities. It is also designed to provide maximum and equal learning opportunities to all Samoan children of American Samoa at a more rapid pace than has heretofore been accomplished.

The end objective of the total effort is to provide the Samoan people with an adequate, modern educational system that will be within their social and economic resources.