DEVELOPMENT OF TELEVISION AND ITS POTENTIAL ROLE IN THE STATE UNIVERSITY OF NEW YORK

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ABSTRACT

THE DEVELOPMENT OF TELEVISION AND ITS POTENTIAL ROLE IN STATE UNIVERSITY OF NEW YORK

by Robert C. Rowe

This study examined the status of educational television in all aspects both nation-wide and in New York.

The results of the study were related to the resources, facilities, staff and program of State University to determine if the hypothesis that the potential for the development of a state-wide university network was feasible. It was further hypothesized that not only was it feasible but essential to meet the future needs for education in the State of New York.

Evidence demonstrated that television has been used effectively and efficiently on all levels of instruction and in a multiplicity of patterns of utilization.

The sources of financial support were examined. Research related to the use of television in instruction were also examined in relation to the problems facing State University.

The findings show that the development of television in the State of New York has been unique from the standpoint of the cooperative support on both the state and local level, but has been slow in comparison to other sections of the country. Prevailing conditions in the State of New York have led to a slow growth pattern. It has, in turn, helped to solidify the various elements of the

educational community in their support of educational television.

The plan that evolved was one that helped the three supporting elements in the field of education. To develop a strong plan of cooperation which should lead to rapid growth and maximum coverage of the State of New York by State University television network.

Recommendations are made for implementing and developing a University of the Air under the aegis of State University. This development will entail:

- 1. a comprehensive analysis of needs
- 2. the establishment of appropriate relationship between television courses and regular courses
- 3. cooperation among colleges and universities
- 4. the development of detailed programs of instruction, supervision, and testing, and
- 5. the creation of a realistic and feasible tuition system.

These steps will involve problems whose complexity must not be minimized.

The policy of using the latest and best media of instruction has already been recognized by the agencies of State University concerned in developing plans and specifications for new campus schools, science buildings, engineering buildings and other specialized instructional buildings. In each of these buildings instructional television will be provided with the necessary production and distribution facilities. This policy has been recognized by the fiscal authorities because of the present increasing demands for student instruction in existing

colleges, the need for improved teaching programs that will challenge the best efforts of quality students over the shortest possible period of time and the recognition that the new buildings must keep abreast of the very best teaching and learning devices and media now available.

With the addition of broadcast television network, the various State

University units will be able to develop a comprehensive program for exchange
of courses and personnel in areas of shortage and need as well as to reach
beyond the campuses to a much larger adult population.

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CONTENTS

| Chapter | | Page |
|------------|--|-------------|
| I | THE PROBLEM | 1 |
| | Introduction | 1 3 3 |
| п | REVIEW OF THE LITERATURE | 6 |
| Ш | ORGANIZATION AND STRUCTURE OF EDUCATION IN THE STATE OF NEW YORK | 32 |
| IV | DEVELOPMENT OF EDUCATIONAL TELEVISION IN STATE OF NEW YORK | 35 |
| v | ORGANIZATION AND STRUCTURE OF STATE UNIVERSITY OF NEW YORK | 58 |
| VI | DEVELOPMENT OF TELEVISION IN THE STATE UNIVERSITY OF NEW YORK | 62 |
| VII | SUMMARY, CONCLUSIONS AND RECOMMENDATIONS | 5 79 |
| BIBLIOGRA | рну | 88 |
| LIST OF AF | PENDICES | 93 |

LIST OF APPENDICES

| | | Page |
|------|--|------|
| I | Individuals Involved in Dean Asheim Survey | 93 |
| II | Temporary Study Committee in Educational Television | 94 |
| Ш | Comment of the Board of Regents before the Federal Communication Commission | 95 |
| IV | Temporary Study Commission Appointed by Governor Dewey | 96 |
| v | Organizational Chart of the State University of New York | 97 |
| VI | Outline Map of State of New York with Locations of State University Campuses | 98 |
| VII | Chart I (1965-67) Microwave Network Facilities | 99 |
| 7III | Chart II (Future Development) Microwave Network Facilities | 100 |
| IX | Report of State University Conference on Television Recordings | 101 |
| X | List of Organizations Supporting Educational Television | 102 |

. CHAPTER I

THE PROBLEM

Introduction:

In 1956 a program was implemented in the state of New York to promote and supplement the activities of the educational programs of the various schools and colleges. It was expected that such an endeavor would stimulate the use of educational television as a vehicle for the improvement of instruction. The author has explored the various aspects of the program to determine whether a coordinated effort, among the various units of the State University of New York, would result in developing a program of television to enlarge, supplement and complement the teaching-learning aspects of its educational programs.

This study is designed to identify and classify the role of television as an instrument in achieving this goal. A survey of the literature in the field, reviews program developments in states outside New York. This study presents the roles played by the Board of Regents, through its operating agency, the State Education Department of New York; the Educational Television Councils and the State University of New York. The activities of these agencies which influenced the development of the program and the understandings and misunderstandings of the individual roles are revealed as this document is developed.

Significance of the Study:

Estimates of classroom shortages in New York indicate that as many as 189,000 qualified students may be unable to find places in the state's colleges

and universities by 1970. Even if this figure proves to be somewhat exaggerated, the shortage of space will still deny college opportunity to thousands of potential students. It is evident that physical facilities are inadequate at the present time, in the public and private institutions of New York State, to care for the forty percent increase in qualified college applicants which will be applying for college entrance between 1965 and 1970.

In September of 1963, 76,510 full-time students registered at State University of New York. There were also 46,669 students in part-time degree credit courses, for a total of 131,904 students actually attending classes in State University units.

It is projected that by 1970 there will be 160,500 full time students and 114,000 part-time students enrolled in the State University of New York, 3

The scope and urgency of the problem are such that new methods must be employed to meet it. No one approach will suffice. It is necessary to use every practical means to intensify and extend the use of regular facilities and to institue new program approaches to alleviate the pressures resulting from the

New York State Education Department, Current Events and New York Higher Education in the Mid-Sixties, A Report from the Office of Planning in Higher Education, (Albany: New York State Education Department, 1963).

²Figures obtained from the Office of Admissions, State University of New York.

³Figures obtained from State University of New York, <u>The Master Plan</u>, <u>Revised</u>, 1964, (Albany: State University of New York, 1964).

increase in enrollments.

Educational television is one of the methods which lends itself to the solving of this problem. Fortunately, developments in the use of television for education, coupled with current research and experience in television teaching, testing and programming, pave the way for the introduction in the state of New York of a program of college credit for adults by this medium.

Delimitations

This study is limited to:

- the three University Centers located at Albany, Stony Brook and Buffalo and the eleven colleges located at Brockport, Buffalo, Cortland, Fredonia, Geneseo, New Paltz, Oneonta, Plattsburgh, Potsdam, and Harpur.
- 2. the present physical facilities and those planned for the years 1965-67.
- 3. the period from 1950 through 1964.

Assumptions

- 1. Educational television is one of the methods that can be used in instruction.
- 2. Television is both practical and economical when compared to traditional instruction.
- 3. Each unit in the State University of New York may broaden the scope of its offerings and requirements through educational television.
- 4. Many subject areas or components of areas may be taught best by television.
- 5. It is the intent of the State University of New York to improve and extend its educational program beyond the borders of the various campuses.

Methodology

- A survey of the literature on Educational Television on the national level and the State of New York was completed.
- 2. Personal interviews with the central administration personnel of the State University of New York and the State Education Department personnel who participated in the early planning stages for educational television were conducted.
- Interviews with personnel of the Office of Facilities and Planning of the State University of New York were included.
- 4. The results of the above have been analyzed, conclusions drawn and recommendations made.
- 5. The descriptive method of reporting has been used.

Hypothesis

The establishment of a State University of New York broadcast television service is essential to the accomplishment of the objectives set forth in the Master Plan for the State University of New York.

It is further hypothesized that the essential ingredients and basic facilities, planning and personnel exist within the State University of New York.

Definitions

- 1. Educational television that body of programming that deals with cultural, informational and non-systematic education.
- 2. Instructional television systematic courses of instruction that are offered for credit by educational institutions.
- 3. Broadcast television the signal is transmitted by radio frequencies

- and picked off the air by antennae connected to television receivers.
- 4. Closed-circuit television a television system that transmits its signal on a cable to the receivers. It can be as simple as one camera, one receiver or it can cover multiple rooms and multiple buildings separated by long distances.
- 5. VHF television channels 2-13 that are transmitted on a very high frequency wave length.
- 6. UHF channels 14-82 which are broadcast on ultra-high frequency wave length. These, more so than the VHF channels, are subject to terrain characteristics and atmospheric interference.
- 7. Reserved channel channels that have been reserved and allocated for non-commercial and educational use.
- 8. University of the State of New York the administrative body that controls all education in the state of New York. The Board of Regents is its governing body.
- 9. State University of New York comprised of all state-supported institutions of higher education with the exception of the colleges that make up University of New York City.

CHAPTER II

REVIEW OF LITERATURE

PART I

National Developments in Educational Television

In the review of the literature only those studies and reports that relate to future developments and use of television within the State University of New York will be reported.

Television has made such rapid strides and penetration into the educational picture, it is now possible to find someone, somewhere who has given a television course in about every subject and at every level of instruction. McKune reports in a survey of educational television that:

Tabulated from 7,637 sources, including departments of public education, schools boards, educational television commissions, councils and state networks, institutions of higher learning, high schools, grade schools and special schools, Volume 11 reports 11,678,512 enrollments, nearly one million of which are in higher education. An additional 4,200,330 enrollments are estimated on the projection of average class sizes in institutions which did not record actual enrollments for 1963-64.

A total of 284,373 classes or sections represented 72,050 sections in Science; 40,146 in English; 22,109 in Art; 20,550 in Music; 19,543 in Social Science; 17,609 in Spanish; 12,459 in Health and P.E.; 11,117 in Mathematics; 10,433 in French; 7,539 in Reading; 7,511 in Geography; 6,528 in History; 1,664 in Education; 679 in Business; 442 in Philosophy; 424 in Political Science; 373 in Medical-Dental-Nursing area; 263 in Driver Education; 90 in Engineering; 58 in Home Economics; 14 in Agriculture; 11 in Russian; and 28,842 sections listed without subject title. Kindergarten through 8th grade reported 88% of all sections, high school, 6.4% and higher education 5.6%.

A number of institutions now use small inexpensive closed circuit units for magnification to give every student an opportunity

to view clearly and at close range. In this connection 240 closed circuit systems were reported in use 1963-64 — many so reported comprise several units. 1

There are in existence a vast number of evaluative² and descriptive³ reports of the various patterns of use and effectiveness of televised education.

In Chicago, it is now possible to get the first two years of college education by television. If one is an early riser, he can learn physics, chemistry, political science and math over a television network from some of the foremost authorities and teachers in the country. The high school student in rural Nebraska or Oklahoma can get courses in mathematics and science by television that are not offered in small schools. If he is a medical or biology student he can get an unobstructed close-up view of surgical techniques or details of cell structure and relationships.

The NAEB Journal⁴ recently listed a chronological index of 271 television research reports. Without doubt, in the short span of its existence, educational television has been subjected to more research and reporting than any other area of education.

¹McKune, L.E., <u>National Compendium of Educational Television</u>, Vol. II (East Lansing Michigan, 1964).

²Holmes, Jr., E.D., <u>Television Research in the Teaching Learning Process</u> (Detroit: Wayne State Division of Broadcasting, 1959).

Kumata, H., An Inventory of Instructional Television Research (Ann Arbor: Educational Television and Radio Center, 1956).

⁴National Association of Educational Broadcasters, Chronological Index of Television Research, NAEB Journal, Jan.-Feb. 1965 (Urbana)

Television and the Educational Process

Before further development of the report it is essential to examine what there is about television in relation to the educational process that has stimulated such extensive use over such a short period of time.

The following definition by Clarence Faust, of the essence of education, will serve as a frame of reference to relate the uses and techniques of television to education. He stated in a speech to a conference on College Teaching by Television, that the essence of education can be described as:

that activity of the learner's mind in which facts are clearly apprehended, ideas are formulated, facts and ideas are related, conflicts of facts and ideas are faced, and judgments are reached—may take various forms.

First, it may occur when a challenging lecturer excites the attention and interest of students, arouses their minds to activity in weighing what he has to say, stimulates them to seek understanding, to arrive at conclusions, to estimate the degree to which the judgments they make are to be held as tentative or conclusive.

Second, educational dialogue may involve the student and a book from which the student gathers not only information but ideas. He is led to mull over what he reads, to weigh it, to reach judgments of his own.

Third, educational dialogue may involve not the lecturer merely or the book, but students and a teacher who is expert in the conduct or discussion and the confrontation of minds. Such discussion, indeed, may be among the finest hours of a student's education. With the skillful assistance of a more mature and informed mind, the student is likely to clarify his thinking, to pursue profitable lines of inquiry rigorously, to meet the challenge of the ideas of his fellows, to toake increasingly sure steps toward knowledge and wisdom. The teacher who can direct this process effectively is surely operating at the very highest educational level.

Education is not limited to these processes, those in which the lecturer communicates orally, the book communicates silently, the formal discussion groups carry the art of fruitful thinking to its difficult and exciting heights.

There is a fourth stimulus of thought and one perhaps too frequently overlooked. I believe that all of us in reflecting upon our own experience as students would recall the importance of good talk among students themselves, where the process of a discussion may be less orderly, less fully informed, less efficient than in the classroom, but where we began to discover and take an appropriate delight in the play of our own minds without the guidance of our elders, and to which the exciting beginnings of our own sense of intellectual independence may, in good part, be traced. \(^1\)

If we appraise the role of television in education in the above framework what advantage does it have for the stimulation of thought and the development of intelligence.

The way in which television can function effectively as part of the educational process will necessarily vary from one subject matter to another subject matter and in various levels of education.

From a report of a Leadership Seminar on the Role of Television in Instruction held under the auspices of the National Association of Education, some basic understandings and principals emerged.

Technically — Television can offer certain unique experiences which have not otherwise been available in the schools. It can also extend certain other valuable experiences which have been available only to a few. Sound and picture can be transmitted simultaneously as they are created. Almost anything that can be seen and heard can be presented on the television screen. In technique, television is intimate; in area coverage, it is instantaneous. From the viewer's vantage point, it is mobile; it can move in for a closer look, swing around for a better look, back away for a broader look. These are some of the unique technical advantages of the medium.

Adams, John C., et. al. ed., <u>College Teaching by Television</u>, (Washington: American Council on Education, 1958), pp. 145-146.

Providing motivation and stimulation — Television can be used effectively to transmit experiences often novel to the class-room, which can be highly stimulating both to teachers and pupils. Television can be a key to new doors, providing an insight into interests otherwise unknown. It can, for example, show the drama of life devoted to exploring the frontiers of scientific knowledge, and spark a young viewer's desire for such a career. Through television, learners can be motivated to undertake a new unit of study or be stimulated to discover the "why" of a phenomenon.

Developing attitudes — Because of its immediacy and its personal quality, television can be particularly valuable in providing concrete experiences which will help to mold constructive attitudes. Good citizenship, understanding people of different background, appreciation for the value of teamwork — these are some of the highly intangible, vitally important attitudes which can be directed through televised images of an inauguration day parade, an interview with a foreign exchange student, or a baseball double-play.

Developing intellectual skills — Television can serve as one means of helping pupils learn to analyze component parts of a problem and understand the steps of problem-solving. It can be exceptionally useful in presenting several viewpoints on an issue so that students may learn to evaluate conflicting ideas and to detect distortions, misstatements, and propaganda techniques. It can serve as one means of acquiring data on a subject or problem.

Demonstrating processes — Through its ability to provide close-ups and to focus on step-by-step procedures, television may be used with success in demonstrations.

Already television is being used successfully for demonstration purposes in many advanced educational programs. Medical training utilizes televised courtroom procedures; and teacher training includes televised classroom scenes. These uses may be expected to expand.

Similar demonstration purposes may be served in elementary and secondary schools. For example, demonstrations over television may be effectively used for:

- . Presenting science techniques and experiments
- . Showing manufacturing processes and techniques in community industries
- . Displaying art processes

Providing information and experiences — Television offers a tremendous potential for presenting a variety of information

and resources which often would not otherwise be available. These experiences may motivate learning, stimulate creative activity, provide a common background of information, or promote problem-solving and critical thinking. They may also contribute to building desirable attitudes — not only toward learning itself but also toward the realization of personal and social goals.

Television can be helpful in transmitting pictures and voices of persons who are of current significance — city government officials, heads of industry and business, philanthropists, spokesman for vocational fields, world travelers. Both live telecasts and filmed interviews may have frequent use in the study of local history, occupations, and government. Bringing resource people to the classrooms by means of television is highly economical of the time of both the resource persons involved and the pupils and teachers.

Television can also provide a means for observing current happenings — sessions of Congress, rocket launchings, city council meetings, arrivals of foreign dignitaries. When made a meaningful part of the regular classroom program, experiences like these can do much to expand the learner's outlook and background of information.

Thus in some instances, television can be used as a substitute for a field trip; in others as a means of accommodating large numbers of pupils; or in still others as a way to bring unavailable experiences into the school. Employed in such fashion, television can effectively supplement the field trip program and can narrow the gap between first-hand and vicarious experience. But it cannot entirely eliminate the need for direct learning experiences through field trips and in the laboratory.

Challenging pupils to assume more responsibility for their own learning — Through its ability to present such a diversity of new experiences, instructional television can often provide the impetus for learners to go forward on their own, exploring ideas and facts which interest them. ¹

Events and Organizations

The potential of television was early recognized by many groups and organizations concerned with the problems of education and a brief summary of their efforts and successes is here related to the development of television in

¹Television in Instruction: An Appraisal, (Washington: DAVI, National Education Association, 1958) pp. 8, 11-14.

education. The list of organizations, individuals, committees and conferences that have sustained and supported educational television is impressive.

For the purposes of this study these efforts will be related to the highlights of the chronological development and growth of educational television.

In 1948 when the existing allocation plan for television channels would not serve the demand for the flood of new station applications, the Federal Communications Commission held preliminary hearings to develop new plans. A new allocation system was announced and, according to regulations on procedures, testimony in support or protest was allowed. During this period, 1950-1952, the Federal Communications Commission imposed a "freeze" on all new applications.

There were a number of national educational groups preparing petitions to the Commission during this period. In order to reconcile differences in these petitions and to present a unified effort, the Joint Council on Educational Television was created. Many other organizations and individuals contributed to testimony during the hearings but it was the Joint Council on Educational Television that was the unifying body that spearheaded and directed the successful presentations.

In 1952 the FCC issued its Sixth Order and Report which reserved 242 channels for educational non-commercial use. (Under recent allocations this number has been increased to over 300).

With the assurance of the reservations of channels for educational use, there still remained the problem of the costs that are attendant on broadcast

¹In 1958 the name was changed to Joint Council on Educational Broadcasting. See Appendix for list of members.

television. Fortuitously for education, the Ford Foundation was expanding its activity and support in the search to find new and more effective ways to provide better education. In the beginning, through the Fund for Adult Education, support was provided to establish thirty television stations, programs, state and regional networks and the National Educational Television Center. Through this agency the Fund provided subsidies for the production of programs produced by individual stations and the means to exchange programming between its member stations.

Educational Television

The early programming philosophy of these stations was the extension of continuing education to adults and general information and cultural programming to supplement and complement the type of programming that was available on commercial networks. The role and character of the early television stations can be summed up in the following report from a seminar held at the University of Wisconsin in 1952.

Established primarily to disseminate information, increase the range of cultural choices, and promote free and critical inquiry into problems of general public concern, the educational television station should make its facilities available, so far as practicable, to any agency or individual having a contribution to make to the public interest and welfare.

The educational television station should be a community station rather than the outlet for a single institution or group of schools and public service organizations. But this concept does not preclude its addressing special interest groups which at times may be very small in number; often the general welfare can best be served by broadcasting to a small group on the community's behalf.

The spirit of the educational television station in operation should be one of enthusiasm and confidence about our world. It should be prepared to help people understand where they have

been, where they are now, how they got where they are, and where they are going. It should point out to viewers what might have been, as well as what is. It must be inventive, expressive and creative rather than routine in programming, ready to experiment with the techniques of the medium, and willing to be guided by research findings bearing on its activities.

To all people the educational television station can offer the enrichment of life through their exercise of the Freedom of Look. 1

Instructional Television

At first, the term "educational television" meant broadcasting. Initially the focus was on the efforts to provide an alternative national television service centered on public affairs, general non-systematic education and cultural entertainment. Beginning in 1955, the Fund for the Advancement of Education focused the attention on instructional television by underwriting experiments in the systematic and regular use of television as part of the regular instructional program in schools and colleges.

The Fund for Advancement of Education provided financial support to investigate and provide initial support for new methods and patterns of use of television in education. The intent was to implement programs which were too costly for individual institutions to support and to investigate the effectiveness of television as a teaching medium.

Initially, the Fund provided support on the elementary and secondary school level to a project in Washington County, Maryland in 1956.² It has been

¹Paulu, Burton (ed.), <u>Lincoln Lodge Seminar on Educational Television</u>

<u>Proceedings</u>, (Urbana: National Association of Educational Broadcasters, 1953).

²Washington County Closed Circuit Television Report, (Hagerstown: 1953).

continued on an increasing scale up to the present time. From the favorable results reported from the initial stages of the Maryland project, the Fund supported a project on a nation-wide basis to determine whether television, when used as a powerful resource in the teaching of very large classes during part of the school day, could bring about substantial savings in classroom space and teaching positions while at the same time improving the quality of education. This project was known as "The National Program in the Use of Television in the Public Schools." Nearly 40,000 students in more than 200 schools participated in the experiment. Significant changes and improvements in instruction and saving of staff time and better use of school facilities were reported.

On the college level, two projects were implemented. One to investigate the use of "closed-circuit" television for instruction in the Pennsylvania State University and the other an experimental study of college instruction using "broadcast" television at San Francisco State College. A summary statement of the Pennsylvania State project follows:

..... The effectiveness of television as a medium for both secondary school and college teaching has been tested extensively. This represents closed circuit transmission which in turn offers an opportunity to set up controlled laboratory situations conducive to scientific research.

In 1954, the Fund for the Advancement of Education made a grant to Pennsylvania State University for a systematic inquiry into such questions as, how well could teachers really teach before televisions cameras, how well can students learn in front of receiving sets? Would students and faculty members accept the new medium? And what would televised instruction cost in comparison with the

¹The National Program in the Use of Television in the Public Schools, A Report on the Second Year (New York City: Ford Foundation, 1960).

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cost of conventional instruction? This was the beginning of the extensive program in the use and evaluation of televised instruction in American higher education. By the spring of 1958, some 3700 of Penn State's 14,000 students were registered for one or more of the 13 courses taught over closed-circuit TV.

The comparative effectiveness of televised instruction is seen in this summary of results up to 1958.

- 1. In 29 out of 32 controlled comparisons in seven different courses, there were no significant differences in achievement between students taught via closed circuit television and those taught in the conventional manner.
- 2. In three different courses there were no significant differences between scores on course related attitude tests taken by students taught via TV and those taught by the same teachers in the conventional way.
- 3. No significant differences in students, achievements were found when proctors of varying status were used to supervise classroom groups of students in televised classes. Proctors included peers, seniors, graduate students, and faculty members.
- 4. No significant differences in student achievement were found in comparison of classes of various sizes taught via television. Size of classes ranged from 11 to 119 students.
- 5. Several methods of providing for teacher-student interactions were studies in different courses. These included the use of questions and answers over an intercommunication system between the TV class-rooms and originating room, and the rotation of students through the TV originating room. Neither of these methods produced measurable increments in learning, but the students strongly favored the use of the intercommunication system. 1

The Penn State Television project provided a realistic model which demonstrated how, and to what extent, television can be used on a large university

¹A Report from the Ford Foundation and the Fund for the Advancement of Education, <u>Teaching by Television</u>, (New York City: Ford Foundation, 1959).

campus. It makes a very significant contribution toward solving the problem of quantity, but as stated in Report Number Two:

The quality problem still remains to be solved. It may be possible to demonstrate that televised instruction can be so conducted and supplemented as to instigate superior academic achievements by students when compared with conventional and generally employed methods of direct teaching. Adequate evidence supporting this proposition is not yet available.

In this connection there arises a fundamental issue of American education: To what degree do differences in methods and means of presenting instruction to college students result in positive differences in their academic achievement and intellectual development? In order to answer this question basic and intensive research is needed in the areas of methods of instruction relative to human personality, perception, motivation, learning and retention.¹

Another typical project sponsored by the Fund for the Advancement of Education was An Experimental Study of College Instruction Using Broadcast Television. This project was carried out at San Francisco State College. The over-all purpose of the study was to explore the feasibility of presenting General Education courses to college students using the medium of broadcast television. The results again showed that as far as students achievement was concerned, there was no significant difference when compared with regular class-room students. An additional group of high-ability high school seniors were allowed to take the course in Psychology. The results were satisfactory and the

An Investigation of Closed-Circuit Television for Teaching University Courses, Report Number Two, (University Park: The Pennsylvania State University, 1958), p. 108.

²An Experimental Study of College Instruction Using Broadcast Television, Project Number One, (San Francisco: San Francisco State College, 1958).

courses were used for advanced placement of these high school students.

Another project, supported by the Fund, investigated the feasibility of inter-institutional exchange of teaching by television network. The participating institutions were Oregon College of Education, Monmouth, Oregon State University, Corvallis; Portland State College, Portland and the University of Oregon at Eugene. The long-range objectives were

- 1. To determine whether inter-institutional television teaching can be utilized for the improvement of instruction.
 - a. Can inter-institutional television be used to bring outstanding professors to students who otherwise would not have had contact with these professors?
 - b. Can inter-institutional television be used so that the outstanding curricular strengths and specialties of each institution can be made available to students at other institutions?
 - c. Does the use of inter-institutional television effect more economic and efficient utilization of teaching personnel and result in:
 - effective redeployment of faculty to upperdivision and graduate courses?
 - increased opportunity for research among faculty?
 - consolidation of course offerings among institutions?
 - teaching more students simultaneously than can be done in conventional classrooms or by intrainstitutional television?
 - consideration of inter-institutional television as a possible means of combating future shortages of college and university faculty?
 - d. In what other ways can inter-institutional television be used to improve instruction?

- 2. To determine whether inter-institutional television results in increased cooperation and communication (free exchange of ideas, etc.) among the participating institutions.
- 3. To determine to what extent inter-institutional television instruction might extend the influence of the college and university into the community.

The systematic research activity which has been carried out since 1957 has made some inroads upon the long-range objectives cited above, but the problems involved in full utilization of inter-institutional instruction by television are so complex that much more study and evaluation are needed. 1

In a statement by John R. Richards, Chancellor of the Oregon State System of Higher Education, he says:

Oregon has been honored to be chosen for the conducting of this inter-institutional experiment.it seems that the Oregon public colleges will in the very near future incorporate inter-institutional television teaching in their instructional programs on a permanent basis. As the experiment is wound up at the end of a five-year period, a regularized television teaching program will take up the released transmission time.²

In the terminal report summation of the five-year project the following statement points up some of the conclusions and continuing directions:

The Inter-institutional Television Teaching Project has introduced the faculties and administrators of all of the state institutions of higher education to the potential of television and video tape recordings in solving some problems and fulfilling some needs in educational-instructional areas. This undoubtedly has stimulated interest in the development of closed circuit television facilities at each of the participating institutions.

¹Inter-Institutional Teaching by Television in the Oregon State System of Higher Education, Final Report, 1964 (Eugene: Oregon State System of Higher Education, 1964), p. 4.

²Inter-Institutional Teaching by Television in the Oregon State System of Higher Education, Report Number One — 1957-1959 (Eugene: Oregon State System of Higher Education, 1960) Foreword statement.

The present plans for the utilization of television on a closed-circuit, intra-institutional basis suggest that there is currently more instructional use on single campuses than for the expansion of inter-institutional open-circuit television. Faculties seem more likely to accept television instruction, even with its perceived deficiencies, on an intra-institutional basis. Presumably, they feel that they have a greater amount of control in the use of the medium when it is employed on a single campus and that local decisions can reflect to a greater degree their convictions regarding curriculum development and instruction.

The entire Inter-Institutional Television Teaching Project in Oregon has been marked at times with hope, frustration, challenge, wonder, success and despair. Overall, it has been a most worthwhile adventure in educational innovation, both in the utilization of television and as an exercise in inter-institutional cooperation and administration. Although there have been continual administrative problems, and less than enthusiastic acclaim in acceptance of inter-institutionally inspired televised courses, the experiment has proven beyond any doubt that the television has the potential to become an effective tool in education. It is not magic. It will not necessarily improve quality or decrease costs of instruction. It will not transform mediocre teaching nor will it destroy superior instruction if the necessary adaptation is made to television's limitations and advantages. As an innovation in instruction, it disrupts some established patterns in the teaching and learning process and it can be expected to meet with some resistance. In the final analysis and over a period of time, however, as each of the Oregon institutions become more familiar with the use of television on its own campus it may be that a future demand will develop for further exploration of inter-institutional television as a means of strengthening the State's pool of instructional resources.1

Additional projects which have demonstrated various patterns of use may be illustrated by the following descriptive reports. In 1956 the Chicago Board of Education initiated an open circuit broadcast television plan to present a terminal program from the Chicago City Junior College. TV College, a service of the Chicago City Junior College, is now completing its eighth year of service.

¹Op. Cit., pp. 37-38.

Started in 1956 as an experiment financed, in part, by a \$500,000 grant from the Ford Foundation, the TV College program since 1959 has been supported entirely by the Chicago Board of Education.

The following figures have been taken from "Eight Years of TV College: A Fourth Report."

Over 80,000 individuals in over 120,000 course registrations — roughly 1.5 course registrations per individual

Over 34,000 students enrolled in over 53,000 courses for credit.

An "unseen audience" soaring from 10,000 viewers per telecast in Fall 1956 to over 200,000 viewers per telecourse in 1964.

Retention rate (number of students who complete a semester or trimester's work) now averaging 75%.

Almost 60 different college courses offered for credit, plus 3 additional courses telecast not-for-credit. (Many of the credit courses repeated in subsequent semesters, raising the total course offerings to almost 150.)

95 students already awarded the Associate in Arts degree (60 hours of college work of "C" or better average) entirely by TV.

Over 900 students graduated with the AA degree who took, on an average, one semester of their work by TV.

Concurrent registrations (students taking TV and on-campus classes in the same semester) growing from 3% in Fall 1956 to 40% in Fall 1962.1

An imaginative project was the Continental Classroom series which has served about 270,000 persons in the first Physics Course and about 500,000 in the second course in Chemistry. Modern Algebra has also been added to the series. This bold adventure has involved the cooperation of a national TV net-

¹Eight Years of TV College: A Fourth Report, (Chicago: Board of Education, 1964), p. 34.

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work, a foundation, industries, and hundreds of educational institutions.

Another dramatic development was the Midwest Airborne Instructional Television Project which is an air-to-ground transmission system. The plane equipped with video tape machines, suitable transmission equipment and recorded course materials circles at 22,000 feet and will have eventually the capability of transmitting six instructional programs simultaneously. The telecasts reach all or parts of six states or an estimated potential population of 5,000,000 public school pupils and college students. Like the Continental Classroom series, Airborne is predominantly an operational development which may be a long step upward toward using communication satellites for distributing information and instruction over large geographical areas to within the grasp of very large populations of people who want and need to learn.

It was described by the first president John G. Ivey, Jr. in the following statement:

Here is an exciting new adventure in education. An increase in educational quality and economic efficiency are prime goals. Airborne television to assist classroom teachers, and the evolution of a system of local-state cooperation for permanent management of the regional program, are the prime means. Rigorous evaluation of the educational, economic and management prospects will be incorporated into local, state and regional discussion and action.

Further impetus to television utilization and research has been provided by the National Defense Educational Act Title VII.

Title VII is directly concerned with research, experimentation, demonstration and dissemination of informaton concerning educational uses of all

¹<u>Midwest Program on Airborne Television Instruction</u>, (Lafayette: Purdue University, 1960).

media as well as television. It is aimed at gathering facts, information experience, research and evidence which will show how to more effectively employ modern communications to meet our increased pressures facing education.

Most of the projects supported under Title VII have gone beyond the objectives of doing comparative research with television versus conventional classroom teaching and more emphasis has been put upon the context and pattern of use. Illustrative of this is the cooperative project between the Communications Research Center in Stanford University and the Denver Public Schools. The project was officially titled "Four Years of Research on the Context of Instructional Television."

The following was included by John L. Hayman, Jr. in a report to the National Conference on the Improvement of Teaching by Television.

Beginning with the 1960-1961 school year, the Denver Public Schools made foreign language mandatory for all fifth and sixth graders, and pupils were allowed to choose between Spanish and French. Some 80 percent each year chose Spanish and thus became part of the research project. This provided approximately 6,500 subjects each year at each grade level. These pupils were scattered throughout the Denver school system. Some 90 elementary schools and about 180 classroom teachers at each grade level were involved. We were operating, therefore, in a field research setting in which the precise control of the laboratory was not possible. In spite of the obvious difficulties, however, we feel that the field setting constitutes one of the great strengths of the project. Our research was conducted under real-life conditions, and we can, therefore, be certain that what we found holds true in real life.

To summarize the research design, field research was conducted through three full school years, beginning with 1960-1961. Fifth-grade pupils were involved all three years, and sixth graders were involved the last two. Televised lessons, each 15 minutes in length, provided the basic instruction for all pupils. Fifth-grade lessons were seen each Monday, Wednesday, and Friday, and sixth-grade lessons were seen each Tuesday and Thursday.

All fifth-grade instruction was audio-lingual, that is, it dealt with the understanding and speaking skills. The research design at fifth grade provided for evaluation of several types of classroom practice, of a second viewing of the TV lessons, of electronic aids with and without feedback, and of parent participation in the instructional process. 1

Parallel development in support of the use of television in education is evidenced by the support given a study to determine the needs and possibilities of establishing an exchange of distribution centers for in-school telecast materials.

The results of "A Study of the Use of In-School Telecast Materials Leading to Recommendations as to Their Distribution and Exchange", led to the creation and support of the Instructional Television Library Project, There are three distribution centers located in Cambridge, Massachusetts; New York, New York; and Lincoln, Nebraska.

In the Instructional Television Materials catalogue of 1964 are listed a total number of 324 courses available for elementary, secondary, college and acult educational use.

A new United States Office of Education Contract under Title VII will create a National Center for School and College Television. This will be located at Indiana University in cooperation with the Indiana University Foundation. The

¹Griffith, Barton L. and MacLennan, Donald W. (editors), <u>Improvement</u> of <u>Teaching by Television</u>, Report by John L. Hayman, Jr., (Columbia: University of Missouri Press, 1964), pp. 34-36.

²A Study of the Use of In-School Telecast Materials Leading to Recommendations as to Their Distribution and Exchange, (Lincoln: The University of Nebraska, 1960-1961).

³Instructional Television Materials, (New York: Instructional Television Library Project, National Instructional Television Library, 1964).

initial contract is for \$1,104,652 for a period of two years. After that it is expected the center will be self-supporting from the fees received from courses. Further Legislation

Since the original Sixth Order and Report was signed preserving 242 channels for the exclusive use of non-commercial educational television the number of channels had been increased to well over 300 by 1962. Only one-fourth of those channels were in actual use by educational television stations.

Two factors contributing to the reluctance to construct new educational television facilities were

- 1. Most of the existing reserved channels are in the ultra high frequency wave band which have been subject to limited broadcast areas and poor reception due to technical characteristics inherent in the present broadcast and reception equipment.
- 2. The cost of constructing a television station is still a very expensive undertaking and large sums have to be committed to construction and operating costs. There has been reluctance on the part of the administrators to commit large sums to television in the face of other budgetary costs.

Two significant acts of federal legislation have contributed to the building of new television facilities. First, the passage of legislation which made it mandatory that all television receivers built after 1964 had to be capable of receiving all channels through the UHF as well as VHF frequency bands. The second, and much more significant federal legislation, was the Television Facilities Act, Public Law 87-447 which was signed into law on May 1, 1962.

The general purpose was to stimulate construction of educational television broadcasting facilities so as to:

- 1. Increase the instructional resources of our schools and colleges
- 2. Equalize educational opportunity throughout the States
- 3. Provide convenient means for the adult population to pursue further education
- 4. Enrich the cultural life of the home, school, and community 1

The act authorizes appropriations totaling 32 million dollars over a five year period for federal matching grants to be used in the acquisition and installation of transmission apparatus necessary for non-commercial educational television broadcasting. Federal money is available only for educational broadcast operations on channels reserved by the Federal Communications Commission for educational use.

Since the enactment of the Educational Television Facilities Act there has been tremendous activity on the part of educational institutions to take advantage of the potentials and possibilities provided. Under the stimulus of the provisions of the act, there is now a total of 108 educational television stations in operation. Many more are in process of getting on the air in the near future. Some Future Predictions of Television Development

The following is a report of a survey conducted by Lester Asheim, Dean of the Graduate Library School, University of Chicago, and is included because

¹The Educational Television Facilities Act of 1962, Public Law 87-447.

²NAEB Newsletter, Oct. (Urbana: National Association of Broadcasters, 1965).

it represents an informed opinion of educators who have been involved in educational television since its inception. These opinions were expressed in answer to a request to make some ten-year predictions as to the future of educational television. The complete listing of those involved in the survey can be found in Appendix I.

Not every school, rural and urban, will have television by 1971, but probably every major school, college and university will have at least one closed-circuit system, and there will not be many school children who will not have had some television in their educational experience.

Although this increase in use can be expected, educational television will probably reach a plateau very soon. Other technological developments (teaching machines, for example) will appear to challenge it, and in the competition among devices and methods the proper place of each will be more clearly defined, with no one of them seen as the universal panacea for education's many problems.

One certain development will be the use of ETV to provide teaching and demonstration in specialized subject fields (the sciences, for example) where teachers or equipment are in short supply.

While there may be some instances of "total teaching" by television, particularly in the more routinized subject matters, the major use of television for more conceptualized content will be supplementary. This will not be only "enrichment" in its narrower sense; there will likely be some large-group instruction as well. But television will be seen as an instructional tool, not as a replacement for good teaching.

One very probable development is the use of closed-circuit television to distribute taped programs, derived from open circuit. In this area. "a revolution is afoot."

The greatest changes will be apparent in teaching method. ETV will spearhead the movement toward the better use of instruction materials of all kinds, with the emphasis, not on the gadget, but on communication. There will be a tendency for the discussion groups to be even smaller than the present classroom, with ability groupings to facilitate the discussion. The emphasis on ability groups will lead to greater attention to the most able students, with greater reliance upon independent study and the development

of responsibility for learning in the learner himself. The class-room teacher will not be replaced, generally speaking, except for certain highly specialized content where a specialist is required to present the core content; the emphasis will be on team teaching, with the consequent influence upon teaching method which the shared "master teacher" can introduce.

There will be an increasing recognition of superior teaching ability, and differential in salaries in school systems will begin to be based upon this kind of talents. At the college level, teaching ability will begin to be considered, along with publication and research, as a basis for academic recognition.

Although in 1971 the normal road to the college degree is still likely to be residence instruction, it is not impossible that as much as 50 percent of the college degree program will be available for credit via television. The traditional insistence on classroom instruction will begin to crumble as the conviction grows that demonstrated mastery of the subject matter should be the criterion, no matter how the mastery is acquired.

The local grass roots will prevail, however, even in the use of airborne. The local school, quite rightly, wants control over content and its use; anything coming from outside must be adapted and screened to be most effective. Pooling of resources at the local level, and state and regional networks, will provide the wealth of materials from which to choose, but national syndication (except for some in-service and general education at the adult level where there is agreeement on certain standard content) is not a major probability in the classroom situation.

The developing pattern will be that of cooperation between the state system of higher education and the school system, with legislative support. Already state plans are being built into ETV legislation.

By 1971, school administrators will have learned not to use a Rolls-Royce where a Rambler will do. Tape, produced at some central spot and "bicycled around," or telecast widely via airborne, can be extremely inexpensive per user if the costs are shared. Thus the production center may well be the solution to the present impossibly high line charges and the other time-staff-money problems that seem to be hurdles today.

One thing on which both opponents and proponents of educational television are agreed: the changes are going to come about much more rapidly in the future, if for no other reason than the increasing exchange of ideas through meetings, publications, and

other channels of communication within the profession. The traditional "fifty-year lag," that presumably occurs between the introduction of a new idea in education and its actual adoption by a majority of the schools, will be much reduced. Thus the ten-year predictions made here are not too unrealistic. But this speed-up could be harmful if ETV is rejected too quickly because of wide public exposure of the natural mistakes that occur during a period of experimentation. This could frustrate the best development of the medium. \(^1\)

This review of the literature, on the national scale, gives positive evidence that educational television is "coming of age" and it will contribute more substantially in a time of critical need for education.

The development of educational television, to the point it has now reached, was due to the following factors that point out directions and needs for future growth.

- 1952 FCC decision to reserve television channels for non-commercial educational use.
- 1950-52 Positive and energetic leadership by all agencies of the educational community. By cooperation through the Joint Council on Educational Television educators were able to muster great strength.
- 1951-54 Massive financial support from the Ford Foundation for Adult

 Education for construction of television facilities and creation

 of a National Educational Television and Radio Center.
 - 1954 Continuing financial support from the Ford Foundation for ex-

Asheim, Lester, "A Survey of Informed Opinion," Educational Television The Next Ten Years, (Stanford: The Institute for Communication Research, 1962) pp. 33-35.

- perimental research in the various methods and patterns in which television could improve instruction.
- 1958 Passage of the National Education and Defense Act. Under

 Title VII research has been further stimulated in television
 and all media of instruction. Establishment of a National Center
 for School and College Television.
- 1962 The Educational Television Facilities Act.
- 1965 The Elementary and Secondary Education Bill and The Higher

 Education Bill. Both of these are bound to have some effect on
 television as well as on all instructional methods and media.

Television, because of its high visibility, has occupied a dominant place in the recent literature on educational innovation. However, under Title VII the financial support for research and utilization of other technological media is stimulating wide use and acceptance. We are approaching a period when there will be a better awareness of the job television can do as it is absorbed into a system or systems approach to learning and teaching.

Armand L. Hunter pointed the way to the future in an article entitled "The Way to First Class Educational Citizenship," in which he states that we have passed the gadgetry technician stage in educational television. He talks of providing a learning center to encompass the whole communication and technological complex devoted to the teaching and learning process. An excerpt from this article stated:

This could be provided through the establishment of what might be called a "Learning and Instructional Resources Center." This center would encompass the whole communications and technological complex devoted to the learning and teaching process —

the library, instructional radio and television, film, graphics, audio and visual aids, language laboratories, and teaching machines. It would provide a professional and technical staff for the installation, maintenance, supervision, operation, and production of these services. It would provide an academic staff for instruction in the media and their utilization, and for consulting and working in closed cooperation with the teaching faculty of all departments. It would collect, analyze, and make available all research findings and results relating to the use of the communications media. It would serve as a focus for research in all technological developments, and on the problems of more effective learning and instruction. And, it would provide the creative "programming" required for the full realization and application of the total "systems" concept and design. I

We are entering an era of change in educational procedures and programs.

Television has played a large role in concentrating the attention of the educational community on new ways to accomplish the task of providing better and equal opportunities at all levels and in all regions of the United States.

The role of television in education is now recognized as a neutral carrier, of no meaning in itself, drawing life and significance only from the imaginative uses to which it is put. It can magnify the effectiveness of the good instructor, bring to the classroom teacher specialists in all fields of learning and provide a second and continuing opportunity to those whose education has been interrupted. Finally, it can enlarge the intellectual dimensions of education for all by providing a "window on the world."

¹Hunter, Armand, "The Way to 1st-Class Educational Citizenship," NAEB Journal, July-August, 1961, (Urbana: National Association of Educational Broadcasters, 1961), pp. 21-22.

CHAPTER III

ORGANIZATION AND STRUCTURE OF EDUCATION IN THE STATE OF NEW YORK

The roles, functions, duties and responsibilities of the units and individuals that constitute the educational system of New York State are complex and confusing to one not familiar with its structure. A brief description of the system is included here so as to make meaningful the following review of the development of educational television in the State of New York.

The Board of Regents of the State of New York has a traditional and constitutional responsibility of leadership in solving problems related to the quality and character of education. Its principal role is to stimulate and encourage, through guidance and financial assistance, the development of sound progressive programs.

"The Regents, incorporated by the Legislature in 1784, are the oldest, continuous, policymaking board of education in the world. They exercise broad authority over New York State's education system. The Regents, in addition to setting education policy, have legislative, executive and judicial powers. They are 13 in number, elected by the Legislature at a joint session, for terms of 13 years, one term expiring each year. They serve without compensation."

The Regents have overall jurisdiction with respect to the following matters: control of all public funds for educational purposes; maintenance of adult education in the State; incorporation and revocation of charters; maintenance

¹Corey, Albert B., Flick, Hugh M., Morse, Frederick A., <u>The Regents</u> of the University of the State of New York, 1784-1959, (Albany: The University of the State of New York Press, 1959).

of standards and accreditation of courses of study in institutions of higher education, including several hundred out-of-state colleges and universities; the equivalency of courses in private elementary and secondary schools; incorporation of libraries and distribution of library funds; incorporation and supervision of museums; control and management of historic sites; the licensing, disciplining and establishment of standards of admission to all professions (except law) and the conducting of examinations for these professions.

The University of the State of New York is the corporate legal entity which is governed and directed by the Board of Regents. The Commissioner of Education is appointed by the Regents to execute the policies of the Board of Regents. The Commissioner has the supporting responsibility of providing professional leadership and of providing the board with facts, figures, and recommendations upon which policy determination is based. The State Department of Education is the operating agency through which the Commissioner carries out his responsibilities; various advisory committees of public spirited citizens serving without compensation are appointed by the Board of Regents.

The State University of New York is responsible for the administration of public higher education and as such come under the general supervision of the University of the State of New York. The similarity of names leads to confusion and misunderstanding, of roles and functions of these two bodies, on the part of individuals who are not familiar with the structure of education in New York State.

Recent developments and changes in the Education Law have given State

University more autonomy and freedom of action. State University of New York

now goes directly to the Executive and Legislative branches of the state government for approval of its plans and budgets. The one restriction is that they must operate with a Master Plan which has been approved by the Board of Regents. This plan, by law, must be revised every four years.

In the following chapter, references to the Regents and the State Education department are included in some of the sources quoted. The names are used interchangeably and are referring to the same thing, namely, The University of the State of New York, I hope the reader will not be as confused as the writer has been at times.

CHAPTER IV

DEVELOPMENT OF TELEVISION IN STATE OF NEW YORK Regents' Supported Program

The early development of Educational Television in the state of New York closely follows the pattern of development nation-wide up to the point where Legislative action was needed for the state to own and operate stations. As of 1964 there had been no appropriation for station facilities. Other means and methods had to be developed.

The laws of the state of New York impose upon the Regents, as the head of its educational system, the duty to "extend to the people at large, increased educational opportunities and facilities" and "to stimulate interest therein." Therefore, with the rapid acceptance of television by the American public and because of the limited number of television channels, the Regents were concerned that education should have access to this restricted medium.

In 1948 the Federal Communications Commission suspended all new stations.

In 1950 the Commission held hearings to determine the policy to be applied on the contemplated lifting of the "freeze" of television channels which had been in effect for some years. The then Chancellor of the Board of Regents appeared before the Commission and urged that in the allocation of new channels an adequate number be "earmarked" for non-commercial educational purposes. The following statement indicates the interest and early recognition by the Board of Regents in the contribution television could make to education. From the minutes of the Board of Regents the following report to the Regents by the then

Chancellor Wallin was noted:

With our Counsel, Mr. Brind, I attended a hearing before the Federal Communications Commission held in Washington, D.C., on November 28, 1950, in relation to the allocation of television frequencies. The time for the Board of Regents formally to appear had expired, but through the courtesy of General Taylor, counsel for various educational bodies, I was given an opportunity to testify. I was on the stand for about an hour and many questions were put to me.

I file a copy of my direct testimony.

All but three channels in television as now operated have been licensed in New York State. But I learned that there will probably come into use many ultra bands which will be subject to allocation.

I pleaded for a channel or channels which would afford statewide coverage on a band or bands for education given to an educational authority, with the right to sell time for commercial use when not required for educational purposes.

Cross-examination by members of the commission indicated that the commission wanted to know how the money would be provided, how the time would be distributed to educational institutions and how partisan political use would be avoided. I suggested that a New York State Television Education Authority might be established. This could be the Board of Regents, or an authority under the control and supervision of the Board of Regents.

I stated that any such proposal would require the approval of Governor Dewey and the Legislature and that we would take the matter up with Governor Dewey; and that we would more fully explore what New York State, with its long tradition of unity in education, could do to outline how television could serve education at all levels, not only formal education but comprehensive as well as skills of all kinds, the care and promotion of health, adult education and use of leisure time.

I recommend that a special committee of the Board be appointed to deal with the matter and notice of its appointment filed with the Federal Communications Commission. 1

¹Journal of Meetings of the Board of Regents of the University of the State of New York, XXVII (1950-51), pp. 278-9.

Following the recommendation of Chancellor Wallin the Regents voted to create a committee of three members to deal with the matter of the allocation of channels for education.

In the Spring of 1951, the Federal Communications Commission announced tentative plans which recognized a policy of allocating a number of channels for non-commercial educational purposes and invited "comments" by all parties in interest.

Taking advantage of the opportunity afforded, the Regents, on May 7, 1951, made public their plan in "Comments" filed with the Commission. It called for the establishment of a state-wide network of educational non-commercial television stations.

On September 4, 1951, evidence was filed with the Commission in support of the plan. The Regents requested that there be reserved, for the exclusive use of non-commercial educational television stations, channels in the areas of Buffalo, Rochester, Syracuse, Utica-Rome, Capital District, Binghamton, Ithaca, New York City and Long Island (2 stations), Poughkeepsie and Malone areas, serving a population of 95% of the residents of this state.

The statement further pointed out that the State of New York contained not only the City of New York, but several other cities which rank among the largest of the country; that it contained a population of millions residing in widely scattered communities; that such plan would tend to raise and equate the standards of education throughout the state and extend to the rural communities

¹Ibid, p. 278.

the educational and cultural benefits now available only in the populous metropolitan areas.

In the Regents meeting of May, 1951 the following report was submitted by the then Commissioner of Education, Lewis A. Wilson

A copy of the report entitled "Evidence in Support of Comments of the Board of Regents of the University of the State of New York, " prepared by Henry G. Fischer, the special counsel for the Board of Regents, and filed with the Federal Communications Commission on September 4, 1951, has been sent to each merber of the Board of Regents. This document outlines in considerable detail the extraordinary resources of the State that might be utilized in the development of educational television programs. I wish to record the outstanding cooperation of the public and private schools, the colleges, universities and institutes, the art galleries and museums, the libraries, the historical societies and other educational agencies, in the preparation of the materials which were incorporated in this report. Resolutions were adopted by boards of education, trustees and directors of educational organizations, and many other groups, supporting the Regents' proposal for the allocation of television channels for educational programs. It is a remarkable demonstration of the complete support by all the educational agencies of the State of the leadership of the Board of Regents in its efforts to secure this new medium for the further development of educational services for all the children and the adults of the State.1

The statement of the Regents urged further that the plan would foster, with great economy, an expansion of visual education in the state, formal and informal, for in-school purposes and out-of-school purposes, in television service areas and in areas without television service. Furthermore, that television, as a vehicle for the educational and cultural development of the adult population of the state would probably outdo, in impact and economy, anything the imagination can project for it today. It would allow a tremendous expansion of effort in

¹Ibid., p. 514

the direction of adult education on a coordinated state-wide basis.

A temporary study committee² appointed by the Regents recommended that the state finance the construction of the television stations requested, and staff them with necessary technical and administrative personnel and assume the cost of maintaining the stations and providing network and kinescope recording facilities.

The responsibility for programming was to be shared primarily by all the public and private schools, the libraries and museums and the other educational and cultural institutions of the local areas served by the stations.

It was contemplated that the educational and cultural institutions of the state set up local area councils made up of representatives of all segments of the educational system and that they be made responsible for the planning of the local program schedules. The functions of the University of the State of New York and the State Education Department in the development of this medium would be similar to their functions in most of the areas of the educational processes of the state. They would encourage, assist and coordinate the efforts of the local institutions. The important phase was that it would provide network facilities to make available, to all sections of the state, live programs of importance which could be developed in any of the local areas.

The report also called attention to the unlimited resources of the colleges, professional schools, public and private schools, museums, art galleries, libraries, zoos, botanical gardens and adult education programs, and the wealth of extremely worthwhile programs which could thus be developed that

²See Appendix II for members of this committee.

would be of unusual value to all the people of this state.

The decision of the Federal Communications Commission was announced on April 14, 1952. On that day the "freeze" was lifted. Two thousand fifty-one new stations were opened throughout the United States and, of those, 242 were earmarked for non-commercial educational purposes. Ten were allocated to New York State. Each of the areas embodied in the Regents' plan were assigned a station. In fact, all of the Regents' suggestions were adopted with the exception of the assignment of only one station to New York City instead of the two requested.

All of the stations were in the ultra high frequency (UHF) channels as distinguished from the very high frequency (VHF) which were then utilized by the existing stations.

In this decision, the Commission announced that on July 1, 1952, it would process applications filed on or before that day. In order to keep the ten reserved channels intact as a network for the combined benefit of all educational institutions in the State of New York it was necessary to file applications before July 1st.

The Regents, acting in effect as trustee for all the educational institutions of the state, determined to apply immediately for construction permits for the reserved channels. The July 1st deadline was met. Petitions were filed for eight of the stations and evidence of intent for the other two. As a result, the Regents were granted construction permits for stations in seven of the following cities: New York, Albany, Syracuse, Rochester, Buffalo, Binghamton, and Ithaca. Three others, Utica, Poughkeepsie and Malone awaited the resolution

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of certain engineering and technical problems. The Regents, "trustees of the public in this matter," acted to the limits of their authority.

Actual appropriations for instituting an Educational Television network system in New York rests with the State Legislature.

Regents Requests and Legislative Action

In 1952 the Regents requested that an appropriation of ten million dollars be made to construct ten stations and a television network. While both houses of the Legislature approved, the bill was vetoed by Governor Dewey. Temporary Commission on Educational Television

The only action taken by the Legislature in its 1952 session was the authorization for the Governor to appoint a commission to study the use of television for educational purposes. The commission was made up of representatives of the legislature, public officials and other interested citizens.

This commission was empowered to make a thorough and comprehensive study of educational television directed to examining and evaluating the following:

- a. The proposals that have been made and may be made for the use of television facilities for educational and cultural purposes;
- b. The desirability of governmental operation, management and control of television stations:
- c. The feasibility of the operation of non-commercial television stations by private educational, cultural or other organizations and the extent, if any, to which government should participate;

¹Appendix III, List of Commission members.

- d. The cost of construction and operation of such stations and the methods of financing thereof; and
- e. The development of such plans or arrangements as may be desirable or appropriate for the allocation, operation, management, control and use of television facilities for educational and cultural purpose. 1

The Commission held hearings throughout the state at which the testimony received was overwhelmingly in favor of the Regents' proposal. In spite of this almost unanimous support for a state-financed program, a majority of the members of this Commission in 1953 submitted a negative report to the Governor and Legislature. Two dissenting reports were filed. One, by the minority leaders of the Senate and Assembly, strongly voiced disapproval of the majority report. A separate extended report was sent to the Governor and Legislature by another minority body of the Commission. In it they said:

We are committed to the ultimate use of the ten channels allocated to New York State for educational television by the Federal Communications Commission, beginning with one channel and expanding as experience justifies.

We are not committed to any particular plan. However, we commend the Regents for their initiative and for their farsightedness — for stepping into the breach and for proposting their own plan.³

¹Legislative Act, State of New York (Albany: Legal Document Section, 1952).

²Appendix IV a, b, list of organizations and individuals testifying before the Commission.

³University of the State of New York, <u>Journal of Meetings of the Board of Regents</u>, March meeting, 1953, (Albany: University of the State of New York Press, 1953), p. 355.

In that report Chancellor Myers, a member of the Commission, recommended that the plan originally proposed by the Board of Regents be followed. He believed it to be a sound plan and best calculated to assure the diversity of local control and unity of over-all supervision, which is essential to the proper development of educational television in New York State. He recommended that the Legislature appropriate \$550,000 to construct and operate, in an upstate city, a pilot station using one of the channels now allocated to the Board of Regents. The initial appropriation to a pilot station was recommended as a matter of compromise for initiating the program and in order to afford an opportunity to provide the experience and evidence necessary by which the State could base determination for further action in this field.

The only action taken by the Legislature was the enactment of Chapter 201 of the Laws of 1954 which contained the following preamble:

Science and technology have recently developed, through television, a vast new medium of communication with unique potentialities for the dissemination of thought, knowledge and understanding. The Board of Regents of the University of the State of New York is entrusted with the stewardship of the state system of education and it is the sense of the legislature that the Board of Regents be charged with the duty and responsibility of supervising the organization and operation of nonprofit, noncommercial educational television corporations in this state. ¹

It then proceeded to amend the Education Law by adding section 236 thereto. This law vested in the Board of Regents the power to "charter private and nonprofit groups to construct and operate educational television stations".

¹Chapter 201 of the Laws of 1954, State of New York.

²Amendment to Education Law of the State of New York, Section 236.

and gave broad powers to the Regents for supervision of such corporations.

Emerging Pattern

It was this act of the Legislature, in amending the Education law, that set the pattern for future developments in the State of New York. As indicated by the hearings that had been held by the television commission there was more than considerable interest and desire by regional organization to get "on the air" with educational programming. In 1953, the officials of television station WRGB in Schenectady met with more than 100 educational, historical and cultural institutions of Eastern New York and Western New England. These institutions voted to accept the offer of free air time and financial aid. Out of this meeting grew the first community Educational Television Council in New York. An absolute charter was granted by the Board of Regents at its June meeting, 1953, to the Mohawk-Hudson Valley Council on Educational Television. At the present time, nine such councils are in existence. The location of these councils are in New York City, Albany-Schenectady, Syracuse, Rochester, Buffalo, Watertown, Binghamton, Long Island and Corning.

Attesting to the continuing support that has been given by local television councils, the Mohawk-Hudson Valley Television Council in the period 1953-58 in the face of tremendous odds accomplished the following:

- It presented over 2500 half-hour educational programs over commercial stations.
- 2. They have shown continuing community spirit in obtaining the first educational television charter in New York State as well as by achieving awards both nationally and locally by presenting the

first college credit course on television in New York State and presenting the first Russian course on television in the country.

The Beginning of State Legislation in Support of Television

In his message to the Legislature on January 5, 1955, Governor Harriman stated, "New York State cannot afford to overlook or lage behind in the development of television as a new and promising medium of education," and suggested that further studies be made." Subsequently, the Legislature allocated \$25,000 to the State Education Department to carry out these purposes.

In July, 1955, the Commissioner of Education established The Temporary Study Committee on Educational Television. Kenneth G. Bartlett was appointed chairman and Walter B. Emory, at that time consultant to the Joint Committee on Educational Television, Washington, D.C., was engaged to direct the study and to consult with the committee in the formulation of recommendations.

After many meetings and full discussion and consideration of many points of view, the temporary study committee eventually agreed unanimously upon the following seven recommendations:

- 1. The appointment of a broadly representative advisory board to deal with problems of television policy, continuity, and future plans.
- 2. The development of a limited form of state assistance for the purpose of stimulating greater television activity by local communities. It is also intended to encourage a wide variety of local experimentation ranging from the building of production centers where educational programs

¹Governor's Budget Message to the Legislature, January, 1955.

might be recorded to the eventual construction and operation of non-commercial stations.

- 3. The establishment of at least one state operated non-commercial TV station.
- 4. The installation of two "closed-circuit" television systems in one elementary and one secondary school.
- 5. The centering of responsibility in the State Department of Education for the growth and guidance of education by television by professional personnel capable of implementing the plans suggested above in advising school systems in respect to the utilization of television in the educational process.
- 6. An appropriation of \$900,000 to carry out the proposals here made and
- 7. A recommendation that the FCC continue the reservation of educational channels. 1

The following developments have resulted from the recommendations of the Temporary Study Committee. In 1956, the Governor and the Legislature approved the expenditure of \$200,000, as against a recommended \$900,000, for an experimental program by the State Education Department to discover how television could be used advantageously in improving instruction at all levels in the State's educational system.

The following is a description of the initial program:

Professors taught college courses at Albany and Brockport from studios to multiple viewing rooms for the meetings of all regular courses. Each viewing room had 24-inch receivers and about 30 students, one serving as student chairman. College students were used as cameramen, console operators,

University of the State of New York, Report of the New York State Temporary Study Committee on Educational Television, (Albany: University of the State of New York Press, 1956), p. 11, bound mimeographed report.

artists and assistants. Subjects included Commerce, Spanish, Genetics, Psychology, Education, Social Studies and Science.

Five days a week were used for TV instruction at Union Free School District 5, Levittown, with the same kind of equipment and 30 students per viewing room. Again, students served as cameramen and general assistants. Subjects including English, Citizenship Education, Algebra, Science, Plane Geometry and Biology were taught at both Junior and Senior high schools.

Varying lengths of time were used in elementary school subjects at the campus school at State University Teachers College at Brockport, with third graders receiving 20 minutes at a time and seventh graders having full 50-minute periods. Viewing was supervised by a regular teacher or student teacher. Subjects included Spelling, Science and Mathematics. 1

A detailed description of the utilization at Albany will be included in a later section on State University Television Development. The two University installations at Albany and Brockport continued under supervision and support of the State Education Department until 1959 when the equipment and budget control was transferred to the State University of New York.

Continuing use and expansion of educational television in the State of New York for the next two years was, of necessity, conined to developing state supported closed-circuit operations. The equipment that had originally been installed in Levittown was moved to Cortland, New York for the purpose of experimenting in a county-wide hook-up by telephone cable. Some of the findings resulting from three years of operation are

a. 75% of the questionnaire-completing teaching staff considers the quality of closed-circuit instruction better

¹University of the State of New York, <u>How Instructional Television Works</u> in New York State, (Albany: University of the State of New York Press, 1958), p. 7.

than or the same as the quality of traditional classroom instruction.

- b. 81% of the questionnaire-completing teaching staff would prefer to have their children study under an extremely capable teacher on television rather than under less capable teachers in the classroom.
- c. 71% of the student body, as reported by the teaching staff, feels favorably toward instructional television. Televised instruction requires a student to accept more responsibility for his own learning.
- d. 89% of the studio teachers are favorable to instructional television. They feel it challenges able students to their full potential and bridges the gap between school and college, that it brings top-quality teaching to students in small rural schools, that it upgrades the quality of teachers, and that it makes more effective use of the physical and financial resources available to the three school districts.
- e. 100% of the classroom teachers feel that the necessarily careful preparations of each lesson by the studio teacher is vitally important to the process of learning via closed-circuit television. 1

The failure or inability of the Federal Communications Commission to make available to education in New York, channels in the (VHF) very high frequency band created a situation in which very few stations had been activated due to the limitations of technical quality and coverage. Additionally, efforts of the Board of Regents to get political and budgetary support for activation of state-owned UHF channels led to the following developments.

In March of 1958, an action of the legislative body of New York State and the signature of Governor W. Averell Harriman appropriated \$600,000 to the

Almstead, Francis E., "A Report to the Board of Regents on Educational Television," Albany, 1959. (Unpublished mimeographed report).

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Education Department for services and expenses for developing educational television, including the lease and operation of a televised station to serve the city of New York and the adjoining metropolitan area; for experimental operation of closed-circuit facilities; and for payments to school districts in connection therewith, for the production and acquisition of instructional materials, for supervision of the operation of non-commercial Educational Television corporations and for any other expenses of educational television authorized... ¹

With the funds appropriated by the Legislature there was

established the Regents Educational Television Project in New York City, an open broadcast experiment conducted over Channel 11, under contract with WPIX. Program broadcast are designed to be used in the elementary and secondary schools. During 1959-60, over 740,000 students in the metropolitan area participated in these programs.²

The following is taken from a recent evaluation of the Regents Project in New York.

The report is based on a mail survey of all schools—public and non-public, elementary and secondary—in 32 counties in and around the New York area. In addition, 654 interviews were conducted with teachers and principals in 206 of the schools.

An estimated 4,400,000 program exposures were reported for all the schools during the week of April 2-6, 1962. (This figure does not refer to number of pupils because some pupils watch more than one program.) Science programs were the most popular with 450,000 pupils watching. The

¹State of New York, <u>Laws of New York</u>, An Act to amend the Education Law, Chapter 724, Section 213, 1958.

²University of the State of New York, <u>Regents Plan-Extending Educational Opportunity by Television</u>, (Albany: University of the State of New York Press, 1960), p. 51.

most popular single program was "Time for Science" with 116,300 pupils watching. The second most popular program was "Tell Me A Story" with 95,100.

The Regents Programs are used more widely in elementary schools than in high schools: 45 per cent of the elementary schools compared to 19 percent of the high schools (includes junior highs).

Of the inherent assets of TV as a classroom medium (as opposed to features associated with the particular content of what has been put on the air), the most frequently named was TV's ability to overcome the physical limitations of the classroom, by making possible the use of expensive equipment, the exhibition of involved demonstrations, access to scenes in distant places, and so on. Close seconds are the TV screen can expose the pupil to more expert teachers; the TV experience is likely to be dramatic and motivating. Some comments referred to what TV does for the teacher rather than directly for the pupils: it breaks up the day for the teacher, provides hints about teaching procedure, or enriches teachers' knowledge. 1

These programs were telecast to a thirteen county area covering 125 different school districts with a pupil enrollment of 1,626,000 children. When trying to implement a project of this magnitude, certain inherent difficulties will be encountered. In addition to the difficulties that were present in the project itself, it must be realized, due to budgeting practices in the State of New York and the date of the fiscal year ending March 31 that there can be very little time before a project is implemented at the beginning of the school year. The results of some of the research have pointed out this fact very clearly as re-

¹Lenihan, Kenneth J., Menzel, Herbert, and Spivack, Sydney S., <u>Utilization</u> of the Regents Educational Broadcast Programs, Research by the Bureau of Applied Social Research, Columbia University, supported by a grant from the Ford Foundation, (Albany: The University of the State of New York Press, 1963), pp. 3-6.

ported in the previous mentioned research project. In general, the telecast lessons were appropriate and well-prepared although the viewing was not as extensive as might be expected from such a large audience. Due to the large number of school districts and school buildings involved, the available time for any other program covering a majority of the classes viewing might as little as fifteen minutes. Almost one-third of the schools were without television sets and many schools had only one set to be shared by twenty to thirty teachers. Also, due to the relative rigidity of secondary school scheduling, there was more viewing on the elementary level.

With the acquisition of channel 13 in the metropolitan area as an educational facility, the Board of Regents program has continued through the use of channel 13°s facilities in cooperation with the New York State Board of Education. In 1965, when channel 35 is activated by the New York City Board of Education, the program will be carried on by the city school system with continuing support from the State Education Department.

It must be pointed out that all projects which have been supported by the State Education Department have been mandated by law as to how the money was to be spent. Little had been allocated to the support of television councils to strengthen their abilities to provide good instructional programs other than to provide minimal amounts in the form of contracts to produce educational materials. These, in turn would be distributed to other educational stations by the Division of Educational Communications of the State Education Department.

^{1&}lt;sub>Tbid.</sub>

The television councils have been supported mainly by local contributions, industrial corporations, school district membership and individual contribution. A New Master Plan for the State of New York

Based on experience gained since 1956, a new plan of operation was developed in 1961 by the sub-committee of the Regents Educational Television Advisory Council. The following principles were taken into consideration in the development of the master plan:

- 1. The cost for the acquisition of capital equipment and facilities for television purposes is prohibitive for an overwhelming number of communities and local school systems.
- 2. The primary objective of the State and the Department's participation in the support of educational television should be to extend opportunities in public education.
- 3. Programming authority for these educational opportunities should remain within the established framework for all public education in the State. The State Education Department should not have direct instructional responsibilities.
- 4. Programming authority for cultural programs, continuing education, and higher education should be the primary responsibility of the cultural and other educational institutions available to a community (such as libraries, museums, art institutes, universities and so on).
- 5. There are excellent teachers to be found in many school systems throughout the State. In order to extend the influence of these good teachers to many learners, it is important for the State to have sufficient facilities for making recordings. The recordings can be used elsewhere in the State for broadcast or projection purposes.
- 6. The medium of television can be used in education as a means of communicating: (1) instruction which otherwise may be impossible or impractical for schools within a viewing area; (2) subject matter which the less competent and inexperienced teachers may use with regular classes; (3) special programs to viewing areas where each school has too few pupils to justify the expense of a locally supported course; (4) total instruction by closed-circuit

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system; and (5) fundamentals of teacher preparation by closed-circuit systems. 1

The above principles encompass all of the basic requirements for the development of a state-wide design within the framework of equal opportunity, local autonomy, adequacy and flexibility. These are the same basic principles that have allowed the Regents to foster and stimulate new educational practices based on local needs and desires. As Chancellor Brosnan stated in speech to School Boards:

We have the power to mandate; we seldom do. Uusually we only recommend, because we believe in the principle of home rule. If the people at the grassroots want good schools and good teachers, they can get them. If they don't, neither you nor I nor anyone else can force these good things upon them.²

The initial appropriation in 1962 allowed the Education Department to implement closed-circuit projects on a matching basis with school districts and to contract with educational television councils for video tape productions to be distributed by the state.

By 1965 the amounts had increased to \$800,000 for local assistance for educational television. This amount assisted public schools in the development in individual and cooperative facilities. These projects were all funded on a matching basis.

¹University of the State of New York, <u>Educational Television in New York State</u>, A <u>Design for Development</u>, (Albany: 1960), Unpublished mimeographed report.

²University of the State of New York, <u>The Regents of the University of the State of New York, 1784-1959</u>, (Albany: The University of the State of New York Press, 1959), p. 14.

In the 1965 budget was included the first state allocation for funding capital equipment. This allowed the Educational Television Councils at Rochester and Syracuse to receive an additional \$434,000 from the federal government under Public Law 87-447 of the Educational Television Facilities Act. Finally, the budget appropriation allowed the sum of \$540,000 to be used for contracting productions from the Educational Television Councils.

The future looks promising for television in the state of New York with the councils forming a basis for a state-wide television network. Presently, nine councils are chartered by the Regents. Three of the nine are operating with their own educational television stations. They are located in Buffalo-WNED, Schenectady-WMHT and New York-WNDT. The other councils are offering programs through local commercial facilities of one type or another.

Western New York Educational Television Association is located in Buffalo, New York. It is operating Channel 17 covering the Buffalo-Erie County area.

Rochester Area Educational Television Association is presently programming over the two (VHF) very high frequency commercial stations in Rochester. They are able to offer a range of programs for the benefit of both in-school and adult audiences. The council has an application filed with the FCC, currently under consideration, whereby the council would share a (VHF) very high frequency channel with a commercial operation.

Educational Television Council of Central New York in Syracuse is starting construction. They are expected to be on the air in early 1966.

Mohawk-Hudson Council in Schenectady serves the Albany, Schenectady

and Troy area with both in-school and adult programs broadcast over Channel 17. As mentioned earlier, this was the first council to be organized. They have set the pattern of operation for educational television councils in the state.

Educational Broadcasting Corporation in New York City operates Channel 13. They cooperate with the New York City Board of Education in presenting their in-school programs. After the final school bell has rung, the adult-cultural programs begin. Educational Broadcasting Corporation is a major production center for cultural programs which are used throughout the State.

Southern Tier Educational Television Association is located in Bing-hamton. The council is currently presenting programs for in-school use over local commercial stations.

Southern Finger Lakes Educational Television Council is situated in Corning, New York. This council offers in-school programs over a locally operated community cable system.

Long Island Educational Television Council, Inc. is a new council just developing its resources. They hope to apply to the Federal Communications Commission for a construction permit. At present, they are gathering information and supporting funds for their application.

St. Lawrence Valley Educational Television Association is located in Watertown, New York. They broadcast their in-school materials over the local commercial station.

Information on councils supplied was by the Division of Educational Communications, State Education Department, Albany, N. Y.

The councils have a prime responsibility to serve a community with both in-school and adult programming. Each council, when possible, contracts with local schools for the use of their aired programs. By the same token, the schools, with the cooperation of the council organization, dictate their needs and help in the production of the programs by supplying the necessary educational experts. In all cases, the council's in-school programming must reflect the curriculum needs of the community that the council is serving. The adult-cultural programming also reflects the needs and interests of the community at large.

As evidenced from above, the councils maintained a strong interest and willingness to support educational television on the local level.

We have seen the development through the efforts of the New York State Education Department in-school and community programming for educational television in the local regions of the state.

Another factor that is developing and will be influencing the future development of television in New York is the increasing need for State University of New York to find a broadcast outlet for its own purposes and programming needs.

In 1960 when the Regents fashioned their Master Plan for television development the needs of higher education in the state were not included. At that time a study on the needs for television was in process and plans for higher education were pending until the completion of the study and report. This

¹Starlin, Glen, Television and Higher Education, A Plan for statewide Development in New York, (Albany: State Education Department, 1962).

study's review of attitudes toward television in education in the state indicated that television could be effectively utilized to meet some of the demands and needs of higher education. A supplementary report further recommended:

A multi-channel interconnection system between educational television broadcast stations, and possibly between campus television production centers, could prove most helpful by providing facilities for quick and easy distribution and interchange of educational information.

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The plan that was proposed included the development of 31 educational television broadcast stations at 27 strategic locations throughout the state and the interconnection of these stations by microwave relay to form a statewide network. It also suggested a number of television centers on college and university campuses. These would utilize closed-circuit facilities and might become centers for program production.

In the following chapters the development of television within State University will be related to the problem of providing adequate means for a broadcast service that will fit into the existing structure of educational broadcast service.

¹Jansky and Bailey, Engineering Report to the Board of Regents, (Washington: Jansky and Bailey, 1962).

CHAPTER V

THE ORGANIZATION AND STRUCTURE OF STATE UNIVERSITY OF NEW YORK

The State University of New York comprises all State-supported institutions of higher education, with the exception of the four-year colleges that constitute the City University of New York. Governed by a Board of Trustees appointed by the Governor, the University is decentralized in location and integrated through its central administrative staff.

There are 58 units in the University system composed of three University Centers, two Medical Centers, a Graduate School of Public Affairs, twenty-four State Colleges (18 four-year and 6 two-year) and twenty-eight locally-sponsored two-year Community Colleges.

Though its history spans but 15 years, the growth and development of State University of New York has been such that today it ranks among the leading universities in the United States.

Full-time enrollment in September 1963 stood at 76,500 students, nearly triple the entire student body of 1948. This enrollment was accommodated in the 55 colleges which were in operation. Three other colleges were in the early stages of development.²

Programs of instruction are offered on virtually all academic and professional levels. They include the Associate in Arts and Sciences degree

¹See Appendix for Organization Chart and Location Map

²Legislative Document No. 112, State University of New York, Board of Trustees, Annual Report 1963-64 (Albany, New York), p. 9.

granted at the two-year colleges and institutes, and the Ph. D. and M. D. degrees from the University and Medical Centers.

Though the University's progress has been greater than is frequently recognized, much remains to be accomplished if the University is to meet its mandate that all qualified young men and women of this State shall have available the best possible education, "unrestricted by considerations of race, creed, color or financial status."

The University offers programs in the liberal arts and sciences; engineering; home economics; industrial and labor relations; agriculture; veterinary medicine; ceramics; forestry; maritime service; teacher education; law; pharmacy; medicine; dentistry; nursing; social work, business administration, and public administration.

Its two-year programs also include nursing and liberal arts study and a wide variety of technical courses in such areas as agriculture, business and the industrial and medical technologies.

State University, in common with all the other approved colleges and universities, is a member of the University of the State of New York, which is governed by the Board of Regents.

The rapid expansion of the State University of New York is indicated by the following excerpts from the 1964 Master Plan.

Exclusive of expenditures for land acquisition and for the State's share of community college construction, it is estimated that the 1964-1970 capital expenditures of the University will be approximately \$1 billion.²

^{1&}lt;sub>Tbid.</sub>

²State University of New York. Stature and Excellence: Focus for the Future, The Master Plan, Revised 1964, p. 22.

President Gould pointed the direction the University will take in the future in his letter of transmittal which accompanied the State University of New York Master Plan, 1964.

The formative years, marked by the great increase in the numbers of campus units, will soon end. The University, entering its most challenging era, now begins to take permanent shape in identifiably fundamental ways. It is a privilege for all of us who are associated with the University to share in this exciting and unique experience, that of transforming an institution recognized for its great potential into an institution of undeniable greatness—an institution having as its most noteworthy characteristics a sense of identity and a passion for excellence. I

Significant changes in the role and stature of State University of New York coupled with the achievement in attaining greater freedom of self-determination of its actions will have significant effect on the development of an educational television network in New York State.

The legislation creating State University in 1948 made the University subject to the same regulations which applied to all other State agencies within the Executive Branch. Such controls may have seemed appropriate at the time for no one could forecast, in those early years, the enormous expansion that would follow nor the incompatibility of such expansion with cumbersome admininstrative procedures.

Early in State University's life the Trustees realized that a number of regulations to which the University was subject would impose hardships and make State University less effective in meeting the needs of public higher education in New York State. The Trustees made, from time to time, a number of

¹Ibid. Letter of transmittal.

proposals which would have allowed the University a necessary degree of freedom.

The Trustees' proposals were not approved by administrations or legislatures during those years.

During 1963-64 State University again advocated and finally obtained an important measure of relief from statutory and administrative restrictions. On April 10, 1964 the Trustees announced that legislation passed, and executive agreements reached, had granted State University "new powers of self-determination ... are consistent with the concept that authority and responsibility should go hand in hand,"

The new legislation grants greater self-determination to State University in matters of recruitment and salaries. It empowers the president of State University exclusively to determine which of the University's positions are in the professional service rather than in the Classified Civil Service.

Concerning budgeting procedures, the new legislation provides that

State University's budget requests shall be submitted to the Governor directly,
and not through the Commissioner of Education, as was required by law in

1948. Furthermore, provision is made that the appropriations for State University units be made in lump sum appropriations by the Director of the Budget in broad categories of expenditures within which the University may expend operating funds without prior approval of the Director of the Budget.

One of the major events that will lead to increased emphasis on tele-

¹State University News Letter, (Albany: 1964).

vision is the appointment of Dr. Samuel B. Gould as President of State University. Dr. Gould was former president of the Capital Educational Broadcasting Corporation in New York City and former Chancellor of the University of California, Santa Barbara.

It is interesting to note that included in his first budget request to the Governor, President Gould included a request for an appropriation for \$625,000 that would allow State University of New York to begin the development of a state-wide educational network. The 1965 New York State Legislature was beset by so much internal strife of its own it was feared that television would fare badly because of its high visability and history of disappointment in the past.

The request was turned down in the first budget that was approved by the legislature but it attests to President Gould's deep interest, concern and abilities that he was able to reinstate and have approved the sum of \$625,000 in the supplemental budget. This was in addition to the \$2,100,000 that had been approved by State Education Department support for local aid to schools and capital construction funds for educational television councils.

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CHAPTER VI

DEVELOPMENT OF TELEVISION IN THE STATE UNIVERSITY OF NEW YORK

As early as 1950 the trustees of the State University of New York began an investigation in the potential use of television for education. Dr. Edgar Dale was employed as a consultant to explore the resources of State University for program possibilities and to recommend a future plan of operation.

With the announcement of the Regents plan for a statewide network in 1951, it was necessary for State University to reexamine its own position with regard to educational television. If the Regents plan became an actuality, State University would have a differing role than if it was to go it alone as one of several unrelated groups seeking to make use of the medium for education.

Members of the central staff of State University were appointed to serve on the Regents Temporary Study Committee on Educational Television. The activities of this Committee have been described in an earlier chapter.

In 1956 when the first appropriations for educational television became available, two colleges of education within the State University of New York were chosen to be participants in the initial experiment of instructional uses of television in New York.

The purpose of the project was to determine the extent to which instructional television could be used to improve the quality of teaching and to enrich learning.

The project emphasized instruction in selected groups from the third grade through the senior year in college. Participating in the experiment were the State University Colleges of Education in Albany and Brockport and their

laboratory schools.

Developments at Albany

The experimental program was designed to discover the educational uses of closed-circuit television. This report describes the television system and some of its applications during its development at State University of New York College of Education at Albany. Though an installation is also in operation at State University of New York College of Education at Brockport, the two are similar and only the one at Albany will be detailed here.

With the operating philosophy that television should adapt to and facilitate the educational process and program, the television system has grown in complexity and flexibility over a period of ten years.

The system includes two studios. Studio A with two vidicon cameras for direct instruction and Studio B with three vidicon cameras for observation use in educational methods and psychology.

Five video channels and three audio channels, interconnected through a master switching panel, provide for multiple combination and patterns of receiving rooms for both observation and direct instruction.

For direct instruction, closed-circuit television has been effective in a variety of subjects. It has been adaptable to the personality, character and methods of the individual teaching staff members.

The following provisions have proven to be successful in closed circuit television instruction with methods varying from straight lecture to Socratic discussion:

- two-way audio communication for student feedback

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- teacher assistants in all rooms who work closely with the college instructor as a member of the teaching team
- a television director who is familiar with the subject being taught.

 All instructors are majors or graduate assistants in the subjects being taught.
- television production training and supervision by an experienced television staff
 - technically specialized personnel in the field of electronics.

By the use of three cameras pre-fixed to provide pictures to three receiving sets, it is possible the methods instructors and educational psychology instructors to provide observation of classroom situations for the study of good teaching methods and techniques related to the learning process and student behavior.

With effective patterns of scheduling, it is possible to provide the college students with an immediate period in which to meet with and to question the demonstration teacher.

Television recordings are made of special teaching demonstrations for future use. Television recordings are also made of student teachers for use in conference with their supervisors to evaluate their performance.

The following is a summation of methods of use and interpretations of some of the research findings and instructors subjective evaluations. 1

Closed-circuit systems offer some advantages that open-circuit cannot.

¹These reports and records can be found in the Television Office at the State University of New York at Albany.

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When confined to a single teacher-education audience, the medium offers a flexibility which is almost unlimited. This applies to the installation as well as to the techniques used.

The major advantage of closed-circuit television is the flexibility which permits the retention of a measure of intimacy between the instructor and the students. This is achieved through talkback facilities which permit a flow of discussion between the studio and the receiving rooms, or through small discussion sections which meet regularly with the instructor for the clarification of detail or concept and the elaboration of material presented in the television session, or other devices which have been explored and found feasible. Thus the instructor for the clarification of detail or concept and the elaboration of material presented in the television session, or other devices which have been explored and found feasible. Thus the instructor remains in control of the teaching situation and may alter his plans and methods virtually at will as is true in the traditional classroom.

The closed-circuit system offers specific possibilities in the following areas:

- direct teaching of the theory portions of education-sequence courses and content courses in the teacher-training curriculums.
- the observation of child and adolescent behavior in the teaching situation.
- 3. the observation of methods demonstrations by expert teachers

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- 4. the production of video tape recordings of student teachers in action and of special methods techniques for immediate and future use
- 5. the production of recordings for use in advanced professional programs, as guidance, testing and supervision
- 6. and the use of CCTV for demonstrations and activities which seem likely to be more successful than when performed with an audience present.

In one course using the discussion method, the instructor taught from a central studio, with nine to twelve students present, to three remove viewing rooms. Approximately twenty-five students occupied each room. The viewing rooms were equipped with microphones which permitted free communication among the three rooms and the studio. A graduate assistant, who worked closely with the professor, was present in each of the rooms and controlled the talk-back system. A large proportion of the three lecture hours each week was devoted to the building of political concepts through the use of the Socratic-discussion method, Except in a few instances when technical difficulties temporarily intervened, discussion flowed smoothly among the several rooms with no greater time lag than exists in the traditional situation.

Student evaluation was carried on in the same manner and with the same subjective type examinations as had been used the previous year, when the class had been taught conventionally in a large classroom. Based on this type of evaluation, there was no difference in student achievement in the two years. It was the judgment of the instructor that more students contributed to

the discussion when it was offered over CCTV than had been the case in the conventional situation. It was also the opinion of many observers that other positive goals were achieved in the television situation, notably the restoration of the merits of the small class atmosphere through the effective use of the graduate assistant. At the same time, all students had a clear, detailed view of the instructor and the many illustrative charts and aids. This might not have been the case in the large classroom.

On the negative side was the feeling, on the part of the instructor, that "he did not know as many of his students as he had on previous occasions."
This did not hold true for the students. The result of an opinionaire indicated that the students had as close a feeling of intimacy with the instructor as they would have had in the traditional situation.

Certainly, this type of instruction over CCTV would have its limitations. The adeptness of the instructor in the use of the discussion method, as well as his facility in adapting it to television, is an important factor which cannot be readily separated from the total situation. It is probable also that not more than one hundred and fifty students, located in five viewing rooms, could be effectively taught through the use of the discussion method. When the groups exceed this number, only questions for clarification purposes can be entertained to any extent without disrupting the trend of the class.

Television offers promise for improvement in the theory courses in education. The usual ground for criticism of these courses is that they are "too much theory" and are not "practical" in the sense that they often seem to the students to be too far removed from the actual school situation. Through

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the use of video tape recordings, prepared for illustrative purposes and by bringing live television from the school classroom directly into the college classroom, the student can see, under the guidance of his instructor, theory as it is applied in practice. Thus, not only can the theory portions of the education course be taught directly by CCTV, but, at the same time, theory can be related to practice through actual observations.

Certain precautions should be observed when planning direct instruction by CCTV. Special methods and organization should be planned well in advance of the transmission. The inadequate and poorly organized lecture is only magnified when transmitted by TV — particularly the boring aspects of such a presentation. Expert instruction is a prerequisite to success. Ample evidence indicates that the preparation of a television lesson is much more time consuming than preparation of the traditional lesson. Therefore, compensation in the instructor's schedule should be provided.

The instructor must be carefully chosen. Often even an outstanding teacher cannot adapt to the rigors of the new medium. It is more exacting. It is more remote from the student. Hence, not only a special kind of instructor, but also a special kind of person is needed for TV instruction. This need not be discouraging, however, since such people undoubtedly exist on every campus. The Observation of Child and Adolescent Behavior

Through television, groups of students in the pre-service teacher training program can observe children in a normal classroom atmosphere without the observer being physically present in the classroom itself. This permits planned observation on a much broader scale than might be possible otherwise.

Three general types of TV installations are used for this kind of observation. While there are minor deviations from the patterns described below, these illustrations should serve to focus attention on what can be done in this area.

At the State University of New York at Albany, the campus high school classes are also used in the demonstrations and all classes originate in a single classroom studio. The three cameras in the originating room are unmanned during the actual demonstration and remotely controlled. Each observing section of from twenty-five to forty students is kept intact in a small classroom equipped with three 24° receivers, one for each of the cameras in the studio.

Usually one camera is on the teacher and two on the demonstrating class. All three transmissions are received in the observing rooms and are visible to the observers simultaneously. Thus the entire teaching situation is observable at all times. This has seemed to work well with observer groups. In fact, at the insistence of the observers, this system was substituted for the original plan which called for the college instructor to choose one of the three images for observation. Seemingly, no confusion has resulted.

The demonstration teacher is usually brought into the observing room before and after the demonstration so that he can discuss with the observers and the college instructor the nature and scope of the class and particularly, the behavior of the youngsters involved.

The use of CCTV in the observation program presents certain problems which are often difficult of solution. Close liaison between the demonstration

teacher and the college instructor is essential. The observations must fit more or less directly into the context of the material being covered by the observing class. This necessitates long range, cooperative planning on the part of all concerned. Often this is more easily theorized than achieved. If a selection of pictures is involved, then additional detailed planning with the TV personnel becomes necessary, especially with the television director. The demonstration, to serve the desired ends, must be spontaneous, natural and unrehearsed. Sometimes this too is difficult of achievement. The television personnel must be cognizant of the aims desired, of the materials to be covered and of the common problems to be overcome. Hence, the personnel immediately responsible for the programs must be much more than technicians.

The following list of findings emerged from the first uses of closedcircuit television in teacher education.

Television can bring into the college classroom advantages not possible in live observations.

- In most programs where television is not in use, the mere arrangements for live observations by hundreds of students is an almost superhuman task.
- 2. Often the number of classrooms which can be used for this purpose is limited, and as college enrollments mount, observation must be eliminated or drastically curtailed.
- 3. Television permits the observation of the same teaching situation by an entire class or, for that matter, an almost unlimited number. Thus a common experience on which to

base discussion and other kinds of follow-up is provided.

This is not possible where students are distributed through many classrooms in groups of two to five or ten. In this usual situation, the students have varied experiences with little or nothing in common. Likewise, under these conditions there can be no real relationship between the college course content and the happenings in the observed groups. In this respect at least television should improve the observations program.

- 4. Of significance also is that in the television demonstration the observing group can be under the direct guidance of the college instructor who can discuss, while they are happening, the parts of the demonstration which are particularly pertinent to the course content. This holds promise for the solution of the difficult problem of fusing theory and practice into something more understandable to the college undergraduate.
- 5. In the final analysis, however, it is probable that some live observation must remain a part of the program if all objectives are to be accomplished.

In addition to the closed-circuit operation, the Television Department at State University at Albany has also produced video tapes and instructional films for use by various educational and state government agencies. The list of these agencies included State Education Department, Albany Medical Center, Experimental Surgical Laboratory and the American Association of Psychodrama Therapy.

Some of the general findings of the first two years pointed to future

developments and use. Television is a facility that can be used for instructional purposes in the following ways:

- As a medium whereby one instructor can teach multiple sections.
- As a teaching tool for demonstration work, i.e. science labs.
- As a medium of distribution of motion pictures or slides to individual rooms at the time the instructor desires.
- As a medium for observation of teaching methods, student behavior, learning activities in the professional sequence of teacher education.
- For television recordings.
- For research in new teaching techiques and methods.

As a result of the first two years experiments at Albany College of Education and Brockport College of Education a state-wide television committee was formed. This committee was charged with the responsibility of studying, evaluating and recommending future uses of television in the colleges of education of State University.

From this initial inter-institutional planning conference came recommendations which have led to the installation of closed-circuit television systems in all of the units of State University to serve all departments.

The following statements were reported in a summary statement to the Office of Planning and Development of State University by the Central Administration executive academic staff.

The installation and use of television systems on its campuses will

aid State University in its attempt to solve the problems of:

- preparing teachers-to-be in the use of televised instruction
 a medium gaining prominence in public school education;
- 2. providing observation of children and demonstration teaching for greatly expanded numbers of teacher education students for whom these necessary experiences cannot be provided directly due to the static campus school enrollments;
- 3. better utilizing qualified faculty in a shortage era;
- 4. providing an expanding college student body with an improved quality of instruction by utilizing the unique characteristics of television to insure greater student understanding and stimulation and a more efficient use of instructional time;
- 5. making available to all, the specialized knowledge of the fewboth faculty members and visiting authorities;
- 6. making available to all campuses those unique resources of each campus which can effectively improve the teaching and learning on each campus; and
- 7. preparing instructional, video tapes, films, and aids at the production centers for use on other campuses.

State University, therefore, supports the installation of instructional television facilities on each of its campuses, adequate staffing (both professional and technical), and operational budgets adequate to provide for effec-

tive use of the new teaching-learning medium.

Included in the present expansion and building of new facilities, provision has been made for the installation of the latest and best facilities that are available.

In a survey of the various units of State University of New York conducted in 1963 "a majority of the units reported being in an advance stage of planning, staffing and facilities installation."

Building plans of State University of New York include a Communications
Lecture Center with production facilities to be located at all of the eleven
four-year colleges to serve their campus needs. The University centers at
Albany, Binghamton, Buffalo, and Stony Brook will be large production centers
to support their individual campuses. These centers will also be equipped with
staff and facilities to provide supplementary production of teaching materials
for the various units within their region.

The program in terms of physical space and facilities of the Communications Center at Albany indicates the advanced design of the facility planned.

This building will become operational in early 1967.

The design of this building is based on the proven effectiveness of instructional aids in improving, both qualitatively and quantitatively, the teaching-learning process. The space program, therefore, defines a number of lecture halls varying in size

State University of New York, Anticipated Use of Instructional Television in the Colleges of the University, Summary Statement, (Albany: 1962).

²Copies of the returned questionnaires are available in the files of the Television Office of the State University of New York at Albany.

and equipped with instructional aids, as well as the facilities for the production of film materials, "visuals," demonstration apparatus and televised instruction. 1

The building is a non-departmentalized facility. Its concept is based on methods of instruction rather than disciplines, curricula or courses and it will be designed to support and aid the instructor and instruction in every possible way. It may also be thought of as being a multi-media communication center and will provide a high degree of flexibility of use.

The Production Center can be thought of as housing a manufacturing process; with the end result being the slides, films, charts, etc. For instance, the Graphic Arts Studio will be producing materials for both film and television use, as well as for direct classroom use. With the exception of possible offices and some workshops, the building will be windowless and will be air-conditioned throughout.

The building will contain twenty lecture halls of various sizes for teaching groups of sixty up to groups of five hundred. Each lecture hall will be equipped with a rear-projection room with multiple optical projection equipment for multi-media display on the rear-projection screen. Each of the larger lecture halls will also have a preparation room for the setting up of demonstrations and preparation of lectures.

In addition to using existing teaching materials such as slides, films, and transparencies this building will also include four television studios equipped with image-orthicon cameras, two motion picture production studios, a com-

State University of New York, Office of the Architect, Space Requirements of the Communications and Lecture Hall Building at Albany.

plete photo and graphics section and a materials library and dissemination center.

From the master control room, it will be possible to feed twelve different sources of information to all the lecture halls as well as to a campuswide closed-circuit hookup.

The Center will be independent of any particular discipline or academic department. A lecture hall may be used for physics presentation one period, a history presentation the next and a biology presentation the third.

The production areas support widely diversified activities. The staff exists to assist the faculty in their instructional programs. Design of the facilities are also directed to the same objective.

The functions performed by the staff and supported by the facilities are

- film production
- audio recording
- graphic arts production
- demonstration assembly and set up
- television origination
- control, distribution and recording
- storing and issuing of teaching materials

It is further contemplated that to make this a teaching and learning resource center there will also be attached to the center a group of research people who are specialists in communication theory and human and social behavior who will act as consultants to the teaching faculty in the design of courses for maximum effectiveness. These specialists will be, primarily, educators and content authorities but will also know how television can best be used to motivate learning.

Facilities are included to eventually connect the student seats to the computer center for instant read out of instructor effectiveness and student achievement.

A major service of this facility will also be the production and origination of telecourses for use on the State University network.

CHAPTER VII

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

During the history of educational television it has been well established through research and experimentation, that television properly used is an effective medium for extending and making more useful the educational and cultural resources of community, state or nation.

Television, with its ability to store and retrieve information, has made possible the availability of a tremendous resource library of recorded courses and cultural and informational programs of high quality.

We have seen the rapid growth of television on a nation-wide basis through various stages and patterns of use.

There are those who see educational TV as merely a new audiovisual tool which is an extension of motion picture and slide presentations. Telecasting permits the presentation of films, slides or even live lecture demonstrations to large numbers in a single classroom or in a number of different classrooms on the campus, or even to persons located at a distance away from the campus. These educators see limitations in the use of telecasting largely because it removes the impact of student-teacher relationships. They see the variety of visual aids so much used in TV broadcasts not as being new but merely as an adaptation of classroom visual aids. Diagrams, models, scientific apparatus, graphs, charts, etc. have long been used by effective teachers.

Other educators see all the advantages of the first group plus others.

They believe television will revolutionize college classroom teaching, being

perhaps the greatest educational medium discovered since movable type, and that it will extend the work of the present faculty, thereby making possible more individual instruction (conferences with students, etc.) at lower cost. To these persons, video tape recordings is a means of storing and retrieving lectures and demonstrations of the best teachers of the country for telecasting to the classrooms of many colleges, over an educational television network. They see more effective teaching to larger classes when telecasting brings the demonstration table of the surgeon closer to the student a mile away than to the student sitting in the back of a classroom. They believe that teaching of most subject matter can be made more meaningful and effective. They feel that television can be of great value to the student at home.

The emphasis on the kind of uses to which television has been put has reflected the interest of the financial resources which have made possible this development.

The first stage of this development, with its emphasis on community programming, stemmed from the financial support given to educational institutions by the Ford Foundation Fund for Adult Education. The character and direction of the early programming philosophy reflected the interest in providing a general kind of programming not available from commercial television stations. The intention was to satisfy the needs for informational, cultural and general educational programs.

In the second phase, with projects supported by the Foundation for Advancement of Education and Title VII of the National Defense and Education Act of 1958, the emphasis was directed to the use of broadcast television for in-

structional purposes and experimentation in methods and organization of research directed toward the various ways television can be used. Operational and practical models were planned, activated and field tested. This research revealed promising leads for developing new patterns and methods of using television.

Initially, these research experiments were designed to find the ways by which television could be used to increase the effectiveness of existing facilities and staff and to adapt television to the conditions that prevailed in the existing physical facilities and personnel. From these experimental projects have emerged findings that point to the way television can be used more effectively if facilities, personnel, curriculum and materials are directed to the maximum effectiveness and efficiency in the teaching and learning process. There is the opportunity to study the observable patterns of change and to transfer them to appropriate areas of need in education.

The development of television in the state of New York has been a slowly evolving process. This has been due to the unique structure of education in New York and to the historical and philosophical belief, on the part of the Executive branch of the government, that the Board of Regents should not own and operate television facilities. Historically, the Regents have provided leadership, supervision and enforcement. They do not own and operate facilities.

Initially, appropriations allowed the Regents to establish experimental projects of a closed-circuit nature. Broadcast television developed through the initiative of local educational television councils without financial support from the state. Over the years, an increasing amount of money was appropriated to

implement various closed-circuit projects. Approval was given for the Regents to lease time on a commercial station to provide in-school programming for the City of New York.

In the meantime, the television councils were gaining strength and support in the Legislature until they were able to get substantial subsidies for capital construction. They now form a strong state-wide organization of educational television councils which will serve as a basis for network operations.

To meet the unprecedented demands on its present and projected staff of facilities, State University will have to implement a program of credit courses for television on the systematic state-wide regional basis. With the modest investment of state funds the State University has been able to establish a state-wide television network.

With State University as a third factor in educational television in New York State, the sharing of responsibilities by the councils, State Education Department and the State University of New York will present certain difficulties in administration. However, it will make possible that all the diverse needs of New York State for educational television will be met.

The establishment and development of a State University of New York television network will make possible the realization of the first recommendation of the Board of Regents to extend, to all the people of the state of New York, equal opportunity to share the educational resources that have been available to a limited few.

A large, modern university such as State University of New York includes tremendous resources for television programming. These resources include specialists in nearly every field of human endeavor. It includes libraries, laboratories and scholarly collections. It furnishes student groups, capable of commendable performance in music, drama and sports. Contacts with allied educational institutions including elementary and secondary schools, industrial research laboratories, civic, farm, labor and business organizations.

Among the faculty members can be found teachers with long experience visualizing and demonstrating their specialties and discussion leaders who can stimulate thinking, clarify meanings and summarize viewpoints.

Though the body of this paper gave evidence that teaching by television is both effective and efficient and allows for reorganization of school programs, it has not been absorbed into the main stream of American education. Some of the major inhibiting factors which contribute to a reluctance to use television to its fullest extent, particularly in higher education, include the following:

- 1. The development and introduction of a new technology is opposed by the orthodoxy of the academic world. The established patterns of behavior provides a sense of continuity with tradition even though they may be non-adaptive in the world of rapidly changing demands. The irrational status quo is rationalized and marshalled against new ways of doing new jobs.
- 2. The development and introduction of new technology, even though resisted at first, is an effective way to stimulate change in patterns of thinking, behavior, values and attitudes of people. A corollary would be the introduction of the automobile into American life. In the first phase we saw the automobile as being adapted to the horse

and buggy age. The first design was similar to the old-fashioned buggy and its service station was the blacksmith. Through its various phases of growth we have seen society adapt to the automobile until today life has no comparison with the beginning of the century.

3. In the future, television will bring about tremendous changes in the structure of education in all fields. These changes will be both academic and administrative. Tremendous changes will take place in the kinds of things that are taught and the ways they are taught due to the impact of the technology of television and related media. Reallocation of teachers' roles and duties will change due to the fact that the teacher will no longer be the repository of knowledge nor disseminator of knowledge.

Complete television utilization presents a problem of major concern.

As shown in this report the potential exists for using it in all fields of education, but comparatively little use of it in relation to its potential.

State University of New York is presented with an unparalled opportunity for research, development, and dissemination. To move television from its potential to full realization, so that it may be as great a force in our society as commercial television, is feasible under existing circumstances.

The University of the State of New York is developing a network of communications. It will be spending vast sums on television yearly and has the basis for the establisment of a television research center which added

to the television network could serve the region and nation as well as the State.

It presents possibilities of not only making significant contributions to television research, development and dissemination, but promises to overcome many of the barriers to the use of television and to predict and avoid future problems.

Given the proper support in total administrative and academic commitment to the full development of television, State University of New York will have an opportunity to develop an educational television program that will enhance, and supplement the process of education for all.

Television can help State University to become an institution with "a sense of identity and a passion for excellence."

Recommendations

- State University of New York should take steps to establish
 a Center for the Study of Television with the objective to make
 television an influential and substantial part of its educational
 program.
- 2. This Center should be an independent organization chartered by by the Board of Regents but under the control of the State University of New York. A board of directors should determine the policy and broad direction of the Center.
- 3. The Personnel of the Center should be an interdisciplinary group with the necessary specialists to reach particular goals. For example, a team investigating an aspect of audience reaction in

relation to programming might be composed of a sociologist, psychologist, cultural anthropologist, educator and operations research specialist. The Center should have a varying number of teams serviced by such groups as statisticians, programmers and simulators.

- 4. The team leaders and directors should be a part of the Center and integrated into the academic structure of the University.
- 5. The main emphasis of the Center should be on operations research including such activities as:
 - a. Information on needs and desires of audiences should be gathered, analyzed and projected into patterns of programming.
 - g. Continual audience feedback should be gathered and used to correct patterns of programming.
 - c. Such specific problems as potential audience and uses of satellite television, psychological deterrents to the use of television and persuasive methods of overcoming resistance should be investigated.
 - d. It should give direction to leadership which will be needed in the years to come.
 - e. It should predict future patterns for projected audiences and give insight into possible courses.
- 6. There should be an awareness on the part of the people who control budgetary and fiscal considerations, that for television to be used to its full potential, there will have to be additional commitments

- of large sums of money.
- 7. There should be included as an element of the organizational planning, a library relating to television. This should contain the source material for the research needed to understand the present status, the actual and potential power, and the nature of the influence exerted by this medium of communication.

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APPENDIX I

- List of Persons Involved in the Survey Conducted by Dr. Lester Asheim Dean, Graduate Library School, University of Chicago
- Vernon Bronson, National Association of Educational Broacasters, Washington D. C.
- Lee Campion, Director, Educational Communication, New York State Education Department
- William G. Carr, Executive Secretary, National Education Association, Washington, D. C.
- Clifford G. Erickson, Dean, Television Instruction, Chicago City College
- Clarence Faust, President, Fund for the Advancement of Education, New York
- John Fritz, Director, University of Chicago
- John Gardner, President, Carnegie Corporation of New York
- Donald Grassmeyer, University of Nebraska, Lincoln
- Carl Hansen, Superintendent of Schools, Washington, D. C.
- William Harley, President, National Association of Educational Broadcasters, Washington, D. C.
- Francis Keppel, Dean of the Graduate School of Education, Harvard University
- Jack McBride, Director of Television, University of Nebraska
- W. C. Meierhenry, Assistant to the Dean, Teachers College, University of Nebraska
- Lloyd S. Michael, Supervisor, Evanston Township High School, Evanston, Illinois
- Wanda Mitchell, Evanston Township High School, Evanston, Illinois
- Kenneth E. Oberholtzer, Superintendent, Denver Public Schools, Denver
- Thomas Pollock, Dean, Washington Square College, New York City
- John W. Taylor, Executive Director, Chicago Educational Television Association, Chicago
- Paul Witty, Professor, School of Education, Northwestern University, Evanston, Illinois
- John H. Worthington, Midwest Program on Airborne Television Instruction, Chicago

APPENDIX II

Temporary Study Committee on Educational Television

- Francis E. Almstead, Assistant to Executive Dean State University of New York
- Kenneth G. Bartlett, Vice President and Dean of Public Relations Syracuse University
- Franklyn S. Barry, Superintendent of Schools Cortland, New York
- Ward C. Bowen, Chief, Bureau of Audio and Visual Aids State Education Department
- Very Reverend Bertrand J. Campbell St. Francis College
- E. A. Hungerford, Jr., Director Metropolitan Educational Television Association
- Warren W. Knox, Assistant Commissioner of Education
- James F. Macandrew, Director of Broadcasting, Board of Education New York City
- Carroll V. Newsom, Executive Vice-Chancellor New York City
- Paul C. Reed, Director, Department of Instructional Materials, Board of Education, Rochester
- Edwin R. Van Kleeck, Assistant Commissioner of Education

APPENDIX III

BEFORE THE

FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D. C.

In the Matters

of

Amendment of Section 3.606 of the Commission's Rules and Regulations

Amendment of the Commission's Rules, Regulations and Engineering Standards Concerning the Television Broadcast Service

Utilization of Frequencies in the Band 470 to 890 mcs for Television Broadcasting

Docket Nos. 8736 and 8975

Docket No. 9175

Docket No. 8976

COMMENTS OF THE BOARD OF REGENTS OF THE UNIVERSITY OF THE STATE OF NEW YORK

Pursuant to paragraph 12(a), as amended, of the Third Notice of the Commission in the above proceedings, the Board of Regents of the University of the State of New York submits the following written comments:

I.

Summary of the position of the Board of Regents.

For the reasons set out hereinafter,

(a) The Board of Regents supports the proposals of the Commission to reserve for the exclusive use of non-commercial educational television stations the following UHF television channels:

Albany-Schenectady-Troy, No. 17; Binghamton, No. 46; Ithaca, No. 14; Syracuse, No. 43; Utica-Rome, No. 25.

(b) The Board of Regents supports the proposals of the Commission to reserve for the exclusive use of non-commercial educational television stations a television channel in each of the following metropolitan areas: Buffalo, Rochester and New York. In these areas, however, the Board of Regents proposes a modification of the proposals of the Commission in the following respects:

Buffalo—the reservation of channel 7 in lieu of channel 23.

Rochester—the reservation of channel 10 in lieu of channel 21.

New York—the reservation of either channel 19 or channel 31, in addition to channel 25 now reserved.

- (c) The Board of Regents proposes that the Commission reserve for the exclusive use of non-commercial educational television stations the following UHF television channels:

 Malone, No. 20; Poughkeepsie, No. 21.
- (d) The Board of Regents proposes, as an alternative to the reservation of an additional channel in New York and the reservation of channels in Malone and Poughkeepsie, that the Commission adopt rules and regulations providing for a sharing of television facilities in these areas as between non-commercial educational and other television services.
- (e) The Board of Regents proposes that the Commission, in the promulgation of its definitive rules governing the licensing and employment of television channels for non-commercial educational purposes, make full provision for the unique character of the educational system of the State of New York and for the plan of the Board of Regents, hereinafter fully set forth, for the utilization of television broadcasting as an integral and important part of that educational system.

certificates of indebtedness. The state aid for the public schools in that year amounted to approximately \$236,600,000. This year both figures will be appreciably higher. In the year ending June 30, 1950, approximately \$2,300,000 was disbursed as state aid alone in connection with the program of adult education. This year the figure will be higher.

III.

The plan of the Board of Regents for the Utilization of Television Broadcasting as an integral and important part of the educational system of the State of New York.

In the course of the present proceedings before the Commission, the Board of Regents appointed a Special Committee on Television for Education consisting of Regent Jacob L. Holtzmann, Chairman, Vice Chancellor Edward R. Eastman, and Regent Roger W. Straus. On the basis of the recommendation made by that Committee the Board of Regents has adopted a plan for the direction of its official action designed to incorporate television broadcasting as an integral and important part of the educational system of the State of New York.

The essentials of that plan are as follows:

- 1. The Board of Regents proposes to undertake the construction of non-commercial educational television stations in each of the population centers of the state.
- 2. The Board of Regents will include in its next budget submitted to the executive department and to the legislature the funds necessary for the construction of the television stations.
- 3. The Board of Regents intends to apportion the programming of the television stations among the public and private educational and cultural institutions under its supervision and to provide for the coordination of the programming for the purpose of achieving a well-balanced systematic development of the medium adapted to the educational needs of the entire state.
- 4. The Board of Regents is prepared to include the costs of the technical aspects of operation of the television stations and

of their maintenance in its regular budget. It anticipates that the costs of programming will be borne, in the largest part, by the institutions participating in the programming plans with perhaps some measure of state aid. To the extent the University participates directly in the programming, it will bear the costs directly.

- 5. It is the purpose of the plan of the Board of Regents to underwrite the early construction and utilization of a state-wide network of non-commercial educational television stations on behalf of all the educational and cultural institutions in the state.
- 6. A summary of some of the functions and advantages of the plan of the Board of Regents is as follows:
- (a) The great State of New York has a population of nearly 15,000,000—approximately one-tenth that of the entire nation. In it are contained not only the City of New York but several other cities which rank among the largest in the country. It likewise contains a population of millions residing in widely scattered communities. The plan will tend to raise and make more uniform the standards of education throughout the state. It will extend to the rural communities the educational and cultural benefits now available only in the populous metropolitan areas.
- (b) The plan will foster, with great economy, an expansion of visual education in the state, formal and informal, for inschool purposes and out-of-school purposes, in television service areas and in areas without television service.
- (c) Television, as a vehicle for the educational and cultural development of the adult population of the state, an urgent function of the educational system thus far so difficult to carry out largely because of the inadequacies of other vehicles of education for the purpose, will probably outdo, in impact and economy, anything the imagination can project for it today. The plan will allow a tremendous expansion of effort in this direction on a coordinated state-wide basis.
- (d) The plan will permit the creation of programming which, under proper arrangements, can be made available to the educational systems of other states.

IV.

Relation of the plan of the Board of Regents to the present proceedings before the Commission.

The plan of the Board of Regents contemplates a network of non-commercial educational television stations throughout the state. The proposals of the Commission would reserve for non-commercial educational use eight UHF channels situated in the metropolitan areas of New York, Buffalo, Rochester, Albany-Schenectady-Troy, Syracuse, Utica-Rome, Binghamton and Ithaca, in order of population density. This reservation is admirable from two points of view: (1) the population of the state such an educational network would reach and (2) the proximity of the reserved channels to fine sources of educational programming. In the main, therefore, the Board of Regents supports the proposals of the Commission.

More specifically, the Board of Regents fully supports the reservation with respect to the metropolitan areas of Albany-Schenectady-Troy (No. 17), Binghamton (No. 46), Ithaca (No. 14), Syracuse (No. 43), and Utica-Rome (No. 25).

The Board of Regents also supports the proposals of the Commission to reserve channels for non-commercial educational use in the metropolitan areas of Buffalo, Rochester and New York. With respect to these areas, the Board proposes the modification of the reservations set out below together with the reasons therefor:

Buffalo and Rochester.

The Commission proposes to assign to Buffalo channels 4, 7, 17 and 23, the first two, VHF, the remainder, UHF; the Commission proposes further to reserve channel 23 (UHF) for non-commercial educational television. Channel 4 is now in use by a commercial television station. Channel 7, the other VHF channel, and the two UHF channels are not presently in use nor assigned to a specific licensee.

The Commission proposes to assign to Rochester channels 5, 10, 15, 21 and 27, the first two, VHF, the remainder, UHF; the Commission proposes further to reserve channel 21 (UHF) for non-commercial educational television. Channel 5 will be used by an existing com-

mercial television station. Channel 10, the other VHF channel, and all of the UHF channels are not presently in use nor assigned to a specific licensee.

Thus, in Buffalo and in Rochester, the Commission has reserved for non-commercial educational purposes a channel in the UHF band, although in both areas, an unassigned VHF channel will be available, channel 7 in Buffalo and channel 10 in Rochester.

The Board of Regents proposes that the Commission reserve the available VHF channels in these metropolitan areas for non-commercial educational television in lieu of the UHF channels for the following reasons:

- (a) Buffalo and Rochester are the only two large metropolitan areas in the state which now have VHF television and in which VHF channels are still available. They are, therefore, the only areas in the state in which sufficient television sets are now in the hands of the public to permit the earliest experimentation and development of non-commercial educational television. Accordingly, the reservation of VHF channels there is urgently important to the plan of the Board of Regents and the orderly growth of educational television in the state.
- (b) Both areas are important educational centers of the state.

New York.

The six VHF channels assigned to New York under the Commission's proposals are now in use by commercial television stations. The Commission proposes to assign three additional UHF channels there, Nos. 19, 25 and 31 and to reserve channel 25 for non-commercial education use.

The Board of Regents supports the reservation of channel 25, but proposes, in addition, the reservation of either channel 19 or 31 for the following reasons:

- (a) New York contains one of the greatest concentrations of sources of educational programming in the world.
- (b) The facilities of one television station will be inadequate to provide the programming that a systematized state-wide educa-

tional program by television will ultimately demand from the sources available in that city, and at the same time provide the educational programming to satisfy the important but special educational needs of the city itself.

The Board of Regents proposes also that the Commission reserve for non-commercial educational use the channels it has assigned to Malone (No. 20) and Poughkeepsie (No. 21). It is true that these communities are not population centers comparable in size with most of those in which reservations have been made. An educational television station at Malone, however, would best serve the extreme northern portion of the state, which otherwise would be denied the full advantages of the plan, and a station at Poughkeepsie would serve the central Hudson Valley area in the same fashion. One of the purposes of the plan of the Board of Regents is to bring education by television so far as possible to those areas which might be neglected if the development were allowed to depend solely on population density.

The Board of Regents recognizes that its proposals for the reservation of an additional channel in New York and the only channels now assigned to Malone ad Poughkeepsie may present a nice problem for the Commission because of the relative insufficiency of channels in these places to satisfy all the proper demands for television service. If no other reasonable solution to this problem can be found, the Board of Regents proposes, as an alternative to its proposal for the reservation of the additional channels, that the Commission adopt rules which would allow the Board of Regents access to the commercial television stations in New York City upon an equitable basis when the channel presently reserved there for non-commercial educational purposes becomes inadequate to satisfy the needs of the state and which further would permit the sharing of the facilities at Poughkeepsie and Malone as between non-commercial educational and the other television services.

The final proposal of the Board of Regents concerns the rules with respect to the eligibility of applicants for and the use of non-commercial educational television stations which the Commission, in its Third Notice in the present proceedings, has indicated will be substantially the same as those it adopted in connection with non-commercial educa-

tional FM stations. The Board of Regents proposes that the Commission, in the promulgation of these rules, make full provision for the unique character and organization of the educational system of the State of New York, and for the plan of the Board of Regents of the University of the State of New York to make full use of television broadcasting as an integral and important part of that educational system. It is the conviction of the Board of Regents that its plan will foster the early and orderly development of television in education in the state and in the nation and that such a development is urgently important in these times.

٧.

Appearance of the Board of Regents.

In conformity with the provisions of paragraph 13, as amended, of the Third Notice of the Commission in the present proceedings, the Board of Regents will participate fully in the hearing scheduled in the above-entitled matters, will adduce testimony and offer exhibits in evidence in support of these comments and proposals and reserves its right to cross-examine witnesses at the hearing on matters affecting them.

Respectfully submitted.

THE BOARD OF REGENTS OF THE UNIVERSITY OF THE STATE OF NEW YORK

By JACOB L. HOLTZMANN,

Chairman

EDWARD R. EASTMAN

ROGER W. STRAUS

Special Committee of Television
for Education

Henry G. Fischer
Fischer, Willis and Panzer
Dupont Circle Building
Washington 6, D. C.
Special Counsel

May 7, 1951

APPENDIX IV

Temporary State Commission on the Use of Television for Educational Purposes

280 Broadway, New York City, New York

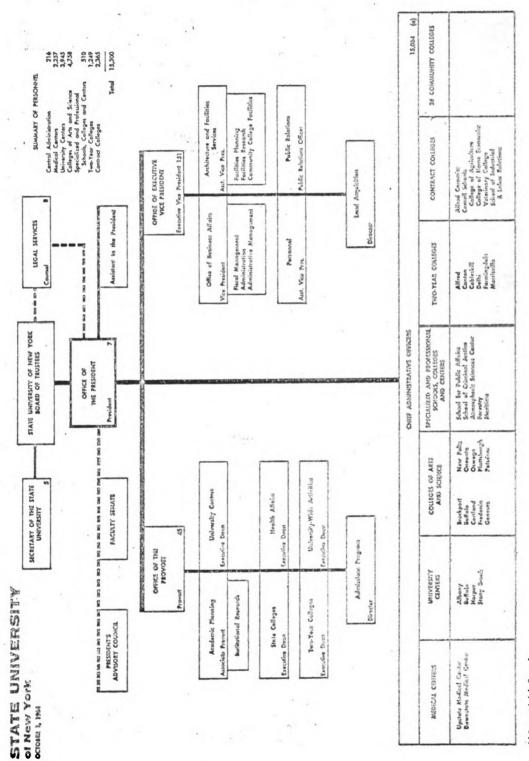
Members Appointed by the Governor

Douglas M. Moffat, Attorney (Chairman), New York City
Young B. Smith, Dean (Vice Chairman), New York City
Clarence U. Carruth, Jr., Attorney, New York City
Bernard Duffy, President of Batten, Barton
Durstine and Osborn, Inc., New York City
Michael R. Hanna, General Manager, Radio Stateion WHCU, Ithaca, N.Y.
Mrs. James W. Kideney, Buffalo, New York
Dr. Paul F. Lazarsfeld, Professor of Sociology, New York

Members Designated as Provided by Law

Hon. Arthur H. Wicks, President Pro Tem, State Senate
Hon. F. J. Mahoney, Senate Minority Leader
Hon. Oswald D. Heck, Speaker of the Assembly
Assembly Minority Leader, State Capitol
Hon. John P. Myers, Chancellor, State Board of Regents
Hon. Norman S. Goetz, State University Board of Trustees
Hon. T. Norman Hurd, Director, State Budget Division
Hon. Harold Keller, Commissioner, State Department of Commerce
Henvry V. Poor (Counsel to Commission), Mineola, N. Y.

APPENDIX V



(a) Done and berlads Conserving Colleges

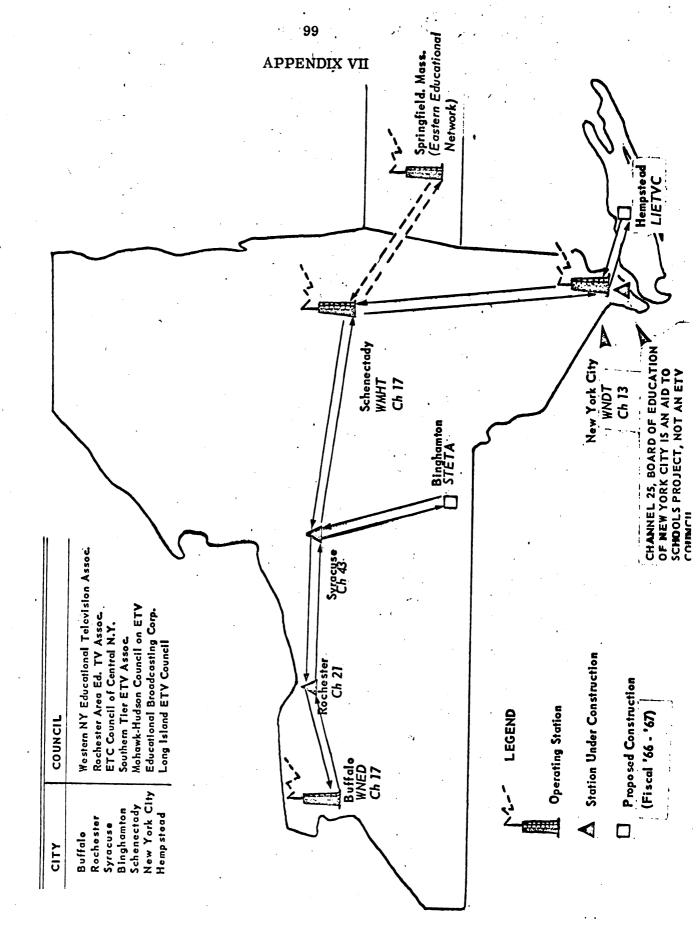


CHART 2
MICROWAVE NETWORK FACILITIES
(FUTURE DEVELOPMENT)

APPENDIX IX

CONFERENCE ON CLOSED-CIRCUIT TELEVISION

Under the joint sponsorship of the New York State Education Department and the State University of New York, representatives from the 11 State University Teachers Colleges met at Colgate Inn, Hamilton, New York, October 31-November 2, 1957.

The objective of the Hamilton Conference was to review and evaluate television recordings and recommend further utilization of the television recording facilities at State University Teachers Colleges at Albany and Brockport.

The TVR's were produced from recommendations of the State University committee on television recordings for use in the professional sequence of teacher education programs.

(Plattsburgh - Summer 1957)

PROGRAM

October 31 GENERAL SESSION Evening.... REVIEW OF TVR's Morning and afternoon..... November 1 GROUP SESSIONS A. Human Growth and Development B. Demonstration Teaching C. Student Teaching GENERAL SESSION Evening.... GROUP REPORTS November 2 Morning..... GENERAL SESSION Telecourses for Credit

TEAM REPORTS

Team A - Human Growth and Development

No additional TVR's were available for viewing on Friday. The following recommendations are made as a result of the discussion on the content and techniques of producing future TVR's in this area:

- 1. That Albany and Brockport each choose a topic from the list developed at Plattsburgh, develop the topic and record enough TV recordings to send to each college.
- 2. That each college review the TV recordings listed in the Plattsburgh report and the priority decided upon there as well as make suggestions for changes and additions.
- 3. That a committee on production in the area of Human Growth and Development be appointed to steer the next step after the colleges review the report and the TV recordings referred to in No. 1. This committee should include faculty with major interests in human growth and development. This recommendation also did imply that each college would help by writing the content for some of the suggestions that were made at Plattsburgh.

Team B - Demonstration of Teaching

The team reviewed additional TVR's in this area. The reaction was favorable, with a few minor revisions suggested.

Recommendations:

- 1. Additional TVR's be produced in this field.
- 2. Each of the nine colleges assume responsibility for producing TVR's, using its cwn professional personnel, at the two centers of production.

Potential production, uses and advantages of TVR's were defined

and discussed. A number of specific subjects which this team would like to have covered in TVR's were mentioned.

A. The master teacher at work

- A lesson showing correlation of teaching areas in the intermediate grades and culminating in general activities, such as an assembly program.
- 2. The use of multisensory aids in social studies (maps, globes, charts etc.)

B. Demonstrations (such as in science)

- 1. Demonstrating use of science apparatus and materials
- 2. Demonstrating the field trip technique
- 3. Demonstrating techniques of making a flannel board, preparation and use of spirit duplicator apparatus etc.
- 4. Others

C. Informational TVR's

- 1. Word attack skills
- 2. Professional ethics
- 3. Problem-solving approach
- 4. Foreign language in the elementary school
- 5. Teaching of music and art
- 6. Others

Team C - Student Teaching

After reviewing a number of TVR's relating to student teaching Team C reached the consensus that since they can present things not available on commercial film, they are potentially a very valuable instrument for strengthening the student teaching experience. Although they involve certain serious technical difficulties, and various dangers which should not be underestimated, and although they should

not be thought of as superseding the other techniques, they do provide one additional means for enriching the practice teaching experience.

Therefore, Team C recommends:

- 1. That the experimental group at Albany and Brockport be encouraged to proceed as rapidly as possible to produce the TVR's recommended at Plattsburgh conference:
- 2. That before these additional structure TVR's are produced at Albany and Brockport, interested persons should have an opportunity to make suggestions about their preparation.

 The group at Albany and Brockport should notify the various colleges of the topics of projected TVR's and invite suggestions which could be used later in the editing of the film;
- 3. That the list of recommended TVR's prepared at Plattsburgh be mimeographed at Brockport and 12 copies be sent to the President of each of the colleges for study by the staff and that their views and suggestions be sent to Dean Allen at Brockport;
- 4. That carefully selected three- or four-minute samples from the films shown at this conference and any other available to be made up into a single reel and circulated among the colleges as a demonstration of what can be done through this medium;
- 5. That in the preparation of additional TVR's related to student teaching from those lists recommended at Plattsburgh, the following nine topics given priority:
 - a. Beginning the student teaching responsibilities
 - b. The supervisor's visit and the followup conference

- c. The evaluation of the student teaching conference
- d. The teacher-principal conference
- e. Cooperative teaching and student teaching
- f. The community experience of the student teacher
- g. The parent-teacher conference
- h. The student teacher and classroom management
- 1. The post-student teaching seminar.
- 6. That TVR's be produced to help sponsor teachers to do a better job;
- 7. That individual colleges assume the responsibility for preparing the contents of particular TVR producations and bring them to Albany or Brockport for kinescoping and that these individual colleges also notify other colleges of what they are preparing and ask for suggestions.

CONFEREES COLGATE INN

State University College for Teachers, Albany

Edwin Adkins
James Cochrane
Elizabeth Conklin
Edgar Flinton
Theodore Fossieck
Randolph Gardner
Oscar Lanford

State University Teachers College at Brockport

Marguerite Hare Hermann Lybarger Sherwin Swartout Gordon Allen Marion Sortore

State University College for Teachers at Buffalo ,

Ralph Horn
Robert MacVittie
Katheryne T. Whittemore
Ruth Sugarman
Herman Trubov

State University Teachers College at Cortland

Donovan C. Moffett Roger G. Bancroft John Shaffer Olla Ricket Franklyn Coolidge

State University Teachers College at Fredonia

Harry Foster
John Bouchard
Florence Morrissey
Robert Boenig
Lloyd Kaiser

State University Teachers College at Geneseo

Lawrence Park William Cotton John Black John Moneur Gaile Carbaugh

State University Teachers College at New Paltz

Edward L. Klotzberger Judson S. Lyon Robert W. Pyle Emil Leone Dorothy T. Hayes

State University Teachers College at Oneonta

James A. Frost Herman D. Behrens H. Glen Martin Emery L. Will Reuben R. Rusch

State University Teachers College at Oswego

Sherwood Dunham Charles Turner Harold Alford Charles Wells Theodore Beers

State University Teachers College at Plattsburgh

Charles Smith Anthony Schwartz Raymond James Haverly Moyer

State University Teachers College at Potsdam

Perry H. Yaw Gerald Normile Alfred W. Thatcher Nelson Beeler

APPENDIX X

NEW YORK STATE ORGANIZATIONS

SUPPORTING

EDUCATIONAL TELEVISION

A partial list of New York State organizations, associations and local groups that are on record by resolution or supporting statement in favor of educational television for New York State.

State-wide Organizations

Association of Colleges and Universities of New York

New York State Congress of Parents and Teachers

New York State English Council

American Association of University Women

New York Chapter, The American Jewish Committee

Classroom Teachers Association of New York State

Executive Council of the New York State Speech Association

New York State School Boards Association

New York State Library Association

New York State C. I. O.

New York State Federation of Labor

New York State Catholic Welfare Committee

New York State Council of City and Village Superintendents

New York State Association of District Superintendents of Schools

New York State Teachers Association

New York State Association of Elementary School Principals

New York State Association of Secondary School Principals

New York State Historical Association

United Cerebral Palsy Association of New York State

Local Organizations

Shubert School P. T. A. Baldwin, N. Y.

North Side P. T. A. East Williston, N. Y.

Centerport P. T. A. Centerport, N. Y.

Board of Education West Hempstead, N. Y.

Wisdom Lane P. T. A. Levittown, N. Y.

Riverside Neighborhood Assembly 300 West 96th Street

New York 25, N. Y.

Islip High School Board of Education Islip, N. Y.

Baldwin Junior-Senior High School P. T. A. Baldwin, N. Y.

Educational Association of the Mineola School District Mineola, N. Y.

Western Long Island District, New York State Congress P. T. A.

51 Brevoort Place Rockville Centre, N. Y.

Farmingdale P. T. A. Farmingdale, N. Y.

Farmingdale Citizens' Association for Education

315 Secatogue Avenue Farmingdale, N. Y.

District No. 30 P. T. A. Valley Stream, N. Y.

District No. 16 P. T. A. Alden Terrace School Central Avenue Valley Stream, N. Y.

West Lynbrook P. T. A. 35 Winter Street Lynbrook, N. Y.

District No. 24 P. T. A. Valley Stream, N. Y.

Nassau Sanitorium Common School District 7 Town of Oyster Bay Farmingdale, N. Y.

Queens Public School 23 P. T. A. Queens, N. Y.

Public School 33 P. T. A. Queens Village 8, N. Y.

Public School 98 P. T. A. Queens, Douglaston, N. Y.

The Morris School P. T. A. 22 Marvin Avenue Rockville Centre, N. Y.

League of Women Voters of the 5 Towns 131 Park Street Woodmere, N. Y. Wantagh P. T. A. Wantagh, N. Y.

Levittown Democratic Club Levittown, N. Y.

Citizens' Committee for Sound Education in School District No. 17

Franklin Square, N. Y.

Faculty of Islip High School Islip, N. Y.

Bellport Citizens' Council for Public Schools Bellport, N. Y.

Manor Oaks P. T. A. New Hyde Park, N. Y.

Board of Education Union Free School District No. 5 1950 Hillside Avenue New Hyde Park, N. Y.

Hyde Park Manor Civic Association 9 Surrey Road New Hyde Park, N. Y.

South Side High School P. T. A. Rockville Centre, N. Y.

Levittown Home Bureau Levittown, N. Y.

Executive Committee of Northside P. T. A. Northside School Levittown, N. Y.

Community Memorial Free Library East Norwich, N. Y.

Jackson Avenue P. T. A. Mineola, N. Y.

Island Trees P. T. A. Farmedge Road Levittown, N. Y.

Sayville Board of Education Union Free School District No. 4 Sayville, N. Y.

Nassau County Farm and Home Bureau and 4-H Club Association

Old Court House Annex Mineola, N. Y.

Union Free School District No. 8 Roosevelt, N. Y.

Smith Street P. T. A. Uniondale, N. Y.

Miller Place P. T. A. Miller Place, N. Y.

Board of Education
East Meadow Public Schools
East Meadow, N. Y.

Newbridge Road P. T. A. East Meadow, N. Y.

Meadow Lawn P. T. A. East Meadow, N. Y.

Levittown J. W. V. Post No. 640 Levittown, N. Y.

Larkfield School P. T. A. East Northport, N. Y.

Freeport Board of Education Union Free School District No. 8 Freeport, N. Y.

Shubert School P. T. A. Baldwin, N. Y.

Executive Board of Elmont Library Club Elmont, N. Y.

U. C. P. A. of Nassau County, Inc. Levittown, N. Y.

Union Free School District No. 23 Long Island, N. Y.

International House Association, Inc. 500 Riverside Drive New York 27, N. Y.

Suffolk County School Executives Association Dodd B. Craft, Secretary

Ludlum School P. T. A. 190 William Street Hempstead, N. Y.

Floral Park-Bellerose P. T. A. Floral Park, N. Y.

Board of Education Central High School District No. 2 Sewanhaka High School Floral Park, N. Y.

Board of Education Union Free District No. 1 Babylon, N. Y.

Glen Cove Junior-Senior High School P. T. A. Glen Cove, N. Y.

Forest City Community Association, Inc. Forest City, N. Y.

Oceanside School P. T. A. No. 5 Oceanside, N. Y.

School Advisory Commission Copiague, N. Y.

Board of Education School District No. 23 Wantagh, N. Y.

Board of Directors of the 5 Towns Music and Art Foundation 396 Central Avenue Lawrence, N. Y.

Nassau County School Administrators Department of Education Lawrence, N. Y.

Board of Education Union Free School District No. 4 Lindenhurst, N. Y. Bowling Green P. T. A. 34 East Cypress Lane Westbury, N. Y.

Public School 162 P. T. A. 53d Avenue and 201st Street

Bayside, N. Y.

Union Free School District No. 2

Bethpage, N. Y.

Riverhead Board of Education

District No. 5 300 Pulaski Street Riverhead, N. Y.

Board of Education Sea Cliff, N. Y.

Bellmore Faculty Organization

Board of Education

Union Free School District No. 7

Bellmore, N. Y.

Union Free School District No. 4

East Northport, N. Y.

Southold P. T. A. Southold, N. Y.

Mothers Club of St Patrick's Academy

Catskill, N. Y.

Glen Head School P. T. A.

Glen Head, N. Y.

Bellmore P. T. A. Bellmore, N. Y.

Women's Society of St Marks M. E. Church

Rockville Centre, N. Y.

Atlantic Avenue P. T. A.

Lynbrook, N. Y.

Board of Education

Union Free School District No. 9

North Hempstead, N. Y.

John Street P. T. A. District No. 17, Munson Hempstead, N. Y.

Eastern Long Island District P. T. A.

Port Jefferson, N. Y.

League of Women Voters

Bellport, N. Y.

Board of Trustees

Hewlett-Woodmere Public Library

School District No. 14

1125 Broadway Hewlett, N. Y.

Central Council of P. T. A. School District No. 14

Woodmere, N. Y.

Hillside Grade School P. T. A.

New Hyde Park, N. Y.

Washington Street School P. T. A.

District No. 17

Franklin Square, N. Y.

New Hyde Park Road School P. T. A.

New Hyde Park, N. Y.

Board of Education District No. 9

West Islip, N. Y.

Glen Cove Board of Education

Glen Cove. N. Y.

Morton Civic Association Franklin Square, N. Y.

Board of Education Hempstead Public Schools

150 Prospect Street Hempstead, N. Y.

Pershing Junior High School No. 220 P. T. A.

9th Avenue and 49th Street

Brooklyn, N. Y.

Riverhead P. T. A. Riverhead Public Schools

300 Pulaski Street

Riverhead, N. Y.

Board of Education

Union Free School District No. 5

Hempstead, N. Y.

Board of Education

Union Free School District No. 28

Bellport, N. Y.

Alden Terrace School P. T. A.

District 16

Valley Stream, N. Y.

Islip High School

Islip, N. Y.

Civic Council for Education

Union Free School District No. 13

Valley Stream, N. Y.

The Ken Questers Association of Nassau and Suffolk

Counties

East Street P. T. A.

Hicksville, N. Y.

Board of Education

Union Free School District No. 7

Bellmore, N. Y.

Western Long Island District New York State P. T. A. Rockville Centre, N. Y.

Lions Club of Bellmore

Bellmore, N. Y.

Babylon Travelers Club

Babylon, N. Y.

Gardiners Avenue P. T. A.

Levittown, N. Y.

Mohawk Valley Branch

American Association of University Women

Commack P. T. A. Commack, N. Y.

Board of Education

Baldwin, N. Y.

American Association of University Women

Buffalo Branch

Buffalo, N. Y.

Sea Cliff P. T. A.

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