

GUIDES TO EDUCATIONAL TELEVISION PROGRAMMING
AND THEIR APPLICATION TO THE STATE OF OREGON

by

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GUIDES TO EDUCATIONAL TELEVISION PROGRAMMING AND THEIR APPLICATION TO THE STATE OF OREGON

CHAPTER I

INTRODUCTION

Statement of the Problem

As the State of Oregon looks toward and plans for the future development of educational television, it seems appropriate to study the experiences of other educational groups with television, both before and since the date of April 14, 1952, at which time the Federal Communications Commission issued its Sixth Report and Order (12,p.3905). With this announcement came the news that 242 channels had been reserved for educational, noncommercial television in the United States.

Prior to 1952 many persons had been surveying the prospects in educational television and talking to teacher groups, parent-teacher organizations and service clubs concerning "the new educational giant striding across the horizon" (34,p.1). Those in more fortunate locations than Oregon, where commercial television had become established before the FCC freeze, were actually getting experience in using TV for semi-educational purposes.

This study proposes to look at the factors which determine the manner in which education is to use television as one of its professional tools. On the basis of the experiences of those institutions and community groups so fortunate as to operate television stations in the years between 1952 and 1956, through study of the historical development of this new medium of communication, and the ideas expressed by experts in the field, it is proposed to determine the guides to educational television programming and to apply these guides to the specific situation in the State of Oregon.

Hubbell (21,p.4), writes:

Historically, television is perhaps the only invention of modern times which fills a basic human desire never before fulfilled: You can be in two places at the same time. The telephone and the radio anticipated television, but both of them lacked sight. And vision is our most potent sense. Of the 98 percent of our knowledge which we acquire through our eyes and our ears, roughly 90 percent is learned by seeing - only 8 percent by hearing. Since radio and the telephone are blind, it is perhaps more accurate to say that they are incomplete forms of television rather than that TV is merely an improvement upon them.

It has been frequently said by TV enthusiasts that sociologically TV will become our most potent medium of education. "Researchers must still tabulate its powers," says Gilbert Seldes writing in his book, The Great Audience (49,p.161), "but rough and somewhat primitive estimates indicate television will far surpass other media and may

roughly be equal to the combined impacts of aural radio, motion pictures, and the press." Seldes has called it the "instantaneous and complete transmission of actuality." Sarnoff (21,p.XIV), once referred to TV's contribution as its "service towards unification of the life of the nation, and, at the same time, the greater development of the individual."

The problem for education and for educators is the acquisition of the facilities for use of this new medium of communication. By the term, "facilities", we mean more than vacuum tubes, condensers, microphones, lights and cameras which together with thousands of other electronic parts make up the technical plant. These facilities include in addition to studio and transmitter: program resources, staff personnel, budgets for operation, and an audience. Above all else, educational television must acquire a purpose. Existing television broadcasters, together with future stations to be licensed under the traditional American system of commercial operation, can be expected to furnish the programs to fill the entertainment needs of the audience. Community television, as some prefer to describe it, must be educationally-purposive in its program scope.

Purposes of This Study

This study proceeds with the hypothesis that the guides to educational television programming for the State of Oregon are to be found in (1) the purposes of educational television, (2) the experiences of existing educational stations, (3) the opportunities for service seen by all existing educational broadcasters, including radio, (4) the resources of the institutions and the area to be served, (5) and the ultimate aims of education; and that these guides when collated in relation to the known elements of the Oregon audience can be used in developing an educational television program structure for Oregon.

The writer is acutely aware of the need to plan soundly as to use of such an educational television plant. In a presentation of the proposal of the Oregon Citizens' Committee (43,p.10) before the education committee of the House of Representatives of the 1953 Oregon Legislature, a two-hour discussion closed with this question from a member of that committee: "If we were to build you this television station, what would you do with it?" This study will attempt to give one answer to that question: These are the guides to educational television programming and this is their application to Oregon.

Sources of the Data

Robert Mullen, Executive Director of the National Citizens' Committee for Educational Television (17,p.1) pointed out to Governor Paul Patterson's Citizens' Committee on Educational Television that there have been few if any other movements in American history which have given so much evidence of future worth as has educational television. It is to the literature of the past fifteen years that we turn for the basic information as to the development of television, both technically, and as an educational medium. The references used will be found in the bibliography.

In addition to the historical information contained in the literature, the writer has corresponded with representatives of the Joint Committee on Educational Television, and the National Citizens' Committee for Educational Television. Letters seeking additional information were also addressed to many of the nation's educational radio broadcasters, and to managers and program directors of the existing educational television stations. Through this correspondence much of the information has been obtained which provides the current development of these programming guides. Questionnaires were distributed to the existing ETV stations, and rating scales on production and content of programs were distributed for use

and interpretation. Questionnaires were distributed also to 60 educators and community leaders in Oregon for statements as to the purpose which should motivate and guide educational television broadcasters in Oregon's possible future development.

Techniques Employed

The writer makes use of his undergraduate engineering training, his personal travels to both educational and commercial television stations, his 27 years as a member of the staff and ten years as the administrator of an educational radio program department for interpretation of such source materials and their application to the Oregon situation.

From the purposes stated by educational authorities and community leaders have been summarized the educational objectives and concepts which serve in this study as some of the guides to educational TV programming.

Audience factors have been examined in current books and periodicals by Paul Lazarsfeld and others, and have been related to the conditions as they exist in Oregon as seen in studies by the writer for the educational audience reported in 1954 and 1955 for the state-owned station, KOAC, in Corvallis.

Program resources have been examined in the reports of existing educational television stations and correlated

in Oregon with the studies of the Oregon State System of Higher Education's 1952 recommendations on educational TV made to Governor McKay(36,p.1), the report of the Citizens' Committee appointed in 1954 by Governor Paul Patterson (28, p.1), material furnished by Community Television, Incorporated, of Portland (53, p.1), and conversations and interviews held with representatives of a number of Oregon institutions.

The determining factors in programming created by the limitations of the technical facilities made available to the programming staff have been determined through the study of literature from equipment manufacturers, technical reports obtained from the engineering section of the Joint Committee on Educational Television, the engineer-reports of the National Association of Educational Broadcasters (38, p.1),and engineering studies made in Oregon by Grant S. Feikert, consulting engineer,chief engineer for Radio Station KOAC (14,p.1).

Emphasis has been placed in this study on the evaluation of television programming as related to educational aims and objectives. A special Scale for Purposive Programming (Appendix N) was developed as based upon the aims of education as stated by the Educational Policies commission (10,p.47), plotted against the eight stages in audience-age ranging from pre-school to old age.

Significant data from this Scale for Purposive Programming were then plotted on a number of graphs and charts for interpretation. Data on existing educational television stations were obtained by soliciting the assistance of the program directors of the ETV stations in operation at the time of writing of this report. These program directors have analyzed their own schedules of a week's telecasting in the light of the Scale for Purposive Programming. Total scores for each of the four aims of education, and for each of the eight age-groups were tabulated upon return of the questionnaires. The results were then analyzed and the known characteristics interpreted in the light of national averages for each of the reception areas of the stations. The writer has also applied this scale, personally, to the schedules of these same stations seeking to determine the relative effect on use of the scale when used by one who is not fully informed on the individual programming objectives of the program directors of the several stations concerned.

Two other scales were developed in connection with a low-cost educational programming experiment which has been conducted on the Oregon State College campus during the fall and winter months of 1955-56, under the direction of the writer, for training purposes of the KOAC staff.

Evaluation of Content (Appendix Q) and Evaluation of Production (Appendix R) scales were constructed and applied to the programs thus developed. Discussion of these two rating scales is included in this study in connection with the report on the KOAC TV Seminar-Workshop.

CHAPTER II

RELATED STUDIES

Background of Television Development

Technical Growth

If one would wish to delve into the very beginning of television it perhaps is necessary to go back to 1875 and to the American, G.R.Carey, of Boston, who tried to develop a scheme which would have been the first TV system. Carey tried to imitate the human eye, to look at a picture and send it all in one piece. The retina of his mechanical eye was to be a bank or mosaic of selenium cells with separate wires from each to its corresponding light in a distant bank of lights. The picture to be transmitted was to be focused on the selenium cells by a lens. Carey failed in this attempt because the selenium cells could not send sufficient electrical current through the wires to the bank of lights. Had he been able to amplify this current (vacuum tubes had not yet been invented!) at best his picture would have been only an outline. To reproduce a picture in detail would have required some 250,000 cells in the selenium bank and their corresponding 250,000 lights.

Maurice LeBlanc, French scientist, in 1880, made the next fruitful suggestion when he proposed that instead of

trying to transmit the whole picture at once, it should be broken up into bits of uniform size by some scanning device. Four years later this idea was further developed by Paul Nipkow who brought forth his "scanning disk", a revolving metal disk, perforated with a series of holes. This disk was used to scan the picture and to separate it into tiny sections. Nipkow's disk formed the basis of most television methods until the 1930's when engineers put electrons to work scanning the picture. TV demanded more speed than revolving wheels could supply.

Hubbell, writing in his book Television Programming and Production (22, p.4) tells the story of Max Plessner, a journalist, who wrote a story in 1892 about something called the telectroscope (the name television had not yet been coined). He predicted it would present "the stage, opera, important events, parliament, lectures with demonstration, church services, city sights, visits to watering places, races, regattas, parades, and the head of the state addressing the whole nation." About the only thing he omitted, says Hubbell, was that television would become a new art form in due time. It is interesting to note how closely Plessner foretold the lines of thinking of today's educators who have access, or who seek access, to this newest medium of communication for educational purposes - important events all over Oregon, the state's

legislative bodies in action, lectures with demonstrations from the faculties of the schools, colleges, and universities of the state, visits to important places in Oregon, and prominent officials addressing the people of the state.

What seems to have been the first demonstration of real television - the sending of moving images which showed actual detail - was given by Baird, in 1926. The London Times reported (21, p.86):

Members of the Royal Institution and other visitors to a laboratory in an upper room in Frith Street, Soho, on Tuesday saw a demonstration of apparatus invented by Mr. J. L. Baird.

First, a receiver in the same room as the transmitter, and then a portable receiver in another room, the visitors were shown recognizable reception of the movements of ... a person speaking. The image, as transmitted, was faint and often blurred, but substantiated a claim that through the "televisor" as Mr. Baird named his apparatus, it is possible to transmit and reproduce instantly the details of movement, and such things as the play of the expression on the face.

In the February 5 issue, 1927, of the English magazine Nature, Russell reported (21, p.86-87):

Mr. Baird has now developed a method by which the images of the person is transmitted, although he is in complete darkness. The result is obtained by flooding the "sending" room by infra-red rays. One of us stayed in the sending room with a laboratory assistant in apparently complete darkness. In the receiving room, on another floor, the image of the assistant's head was shown brilliantly illuminated on a screen, and all the motions he made could be easily followed.

The images were not outlines or shadowgraphs, but

real images ... The application of these rays to television enables us to see what is going on in a room which is apparently in complete darkness. So far as I know this achievement has never been done before.

...The direct application of Mr. Baird's invention in warfare to locating objects apparently in the dark seems highly probable, but I hope that useful applications for peace will soon be found for it.

It is interesting to point out here that these were early days for radio, too. There was confusion within the ranks of the radio broadcasters, for the government was not yet controlling station frequencies or power, and the traffic jam on the air was indeed tangled.

It is evident from the above that radio and television began in the laboratory at much the same time. But there were distinct problems or differences involved in these media that were later to become competition for each other on the American commercial market. In radio - no matter what the invention or latest development - the receivers that had been sold, or those put together from simple combinations of materials such as coils of wire wound on Quaker Oats boxes, never became obsolete by virtue of technical change. Those early sets would still operate as well as the day they were designed. That is not so in television. In 1933, after the Columbia Broadcasting System alone had presented some 2,500 hours of TV programs, the television boom collapsed and this new medium of communication and entertainment had to be sent

back to the scientist's laboratory. The television receiver must work in absolute synchronism with the camera. The two must be in perfect step. The impulses must be shot onto the screen by a stream of electrons at the same time as they are being scanned in the studio camera.

Hubbell (21, p.128) describes some of these problems of seeing at a distance in this fashion:

Automobiles of 1905 were essentially the same as modern automobiles, save for refinement of basic design. But the automobiles of 1905 could run on any kind of roadway - dirt, gravel, asphalt, concrete, or brick. Television could not be put into commercial use in 1933, for it could not travel over several different kinds of roads.

James L. Fly, explained it in a radio talk in his capacity as Chairman of the Federal Communications Commission in 1940. He said ... there has been vast improvement in the technique of radio transmission and reception. There has, however, been no change in the fundamental standards of transmission and reception during that entire period. A receiver built in 1920 will receive a broadcast station built in 1940. A transmitter built in 1920 will be received by radios in use today ... Television is different ... a receiving set is so synchronized with the transmitter that the two are inseparable in operation. The receiving set is, in effect, the key which unlocks the transmitter in order to receive the broadcast. A substantial change in the lock renders the key useless.

A television receiving set capable of receiving the signal of one type of transmitter may not accept the signal of a different type of transmitter in existence today. The receiving set must be constructed to operate on the same principle as the particular transmitter. If the American people should buy television receivers in

great numbers as they have bought ordinary radio sets, and if at a later date transmission standards are adopted which contemplate an alternative or improved transmission system over that on which the particular receivers can operate, we should, in effect, be changing the locks and leaving you with a bunch of highly expensive keys rendered utterly useless.

What happened in the intervening years until television became a reality for the American citizen? Fortune Magazine (21,p.136) gives at least a part of the picture when it said in its April-May issue of 1939, "Television is a big baby nursed by a corps of able scientists and tickled under the chin by Wall Street and Hollywood... a major technological accomplishment...a giant industry a-borning." This was also the year when the Federal Communications Commission issued its second report. It felt that TV had not advanced beyond the experimental stage, but that it had arrived at a point where more rapid progress might be made if broadcasters were permitted to have programs paid for, in part, by advertisers. At the same time the Commission recommended (21, p.138) that:

No interests should be permitted to raise public hopes falsely, nor to encourage public investments where the state of scientific or economic developments leaves any doubt that such hopes and expenditures are justified for the use of the public property in the radio spectrum.

To the scientific and economic problems in the birth of the new medium of mass communication must be added those caused by war abroad as well as the struggles which developed between competing commercial interests at home, namely, the Radio Corporation of America and the Columbia Broadcasting System.

Thus it can be seen that television was kept in the laboratory until it was nearly full-grown. As an art it has been said that TV was born an adolescent, almost ready to exert a grown-up effect on society.

What has been said here has an important bearing on the problem at hand - namely, the use of television for educational purposes. TV was "around the corner" for so many years during its technical development that educators seldom gave the prospect of the medium much thought as to educational potential. When television suddenly burst upon the American scene in its adolescent stage, so nearly full-grown, many persons gave it its very first thought as to educational capabilities. As a teaching device it was almost unknown as recently as 1950 when, as the FCC started work on a new plan for nation-wide TV allocations, educators seemed for the first time to grasp the actual potential of a new educational method which they could virtually hold in their hand or let slide through their fingers to be lost forever.

That educators rallied to the cause and won a brief time in which to experiment with television as an educational tool is the story of the year's reservation of channels for educational purposes. A year which has now, on an informal basis, stretched to four, but which might terminate at the discretion of the membership of the Federal Communications Commission.

The American System of Broadcasting

Hubbell, almost fifteen years ago, reflected on the problem of the system which broadcasting would take in America (21, p.223):

How is the future development of television to be planned? Is it possible that the men who planned the Constitution of the United States did such a good job of planning that television can grow in the democratic tradition? By this I mean as a private, competitive enterprise, operating in accordance with its own self-imposed rules and genuinely in the public interest.

Television under the American system has developed as predicted. The Federal Communications Commission made its allotments in the Sixth Report and Order, of April 14, 1952. (12, p.3911). It's order provided for more than 2,000 television channels scattered throughout all the United States. All but 242 of these channels were to be open to commercial competition in the same manner as radio has operated throughout its history. The TV box score as of the close of 1955 was for a total of 1300 commercial TV applications, of which 608 had been

granted and 434 were actually on the air and operating commercially. Many of those applications not yet granted were tied up in the competition between opposing applicants, their cases still to be heard by representatives of the FCC and decisions rendered. These channel allocations, particularly in the larger cities and congested population areas, represent tremendous financial opportunities and become properties of great monetary value. Hence, there is active competition for the channel grants.

In its development, television did not take the same course as radio. That is shown by the fact that the FCC set aside 242 (later 245) channels for educational, non-commercial stations. The educators had won a great victory. The FCC provided that in any community with at least three channels, one should be reserved for educational TV. It also set aside a channel in communities where primary interest centers about a college or university. Most major state universities have channels, and in some towns the only channel is educational.

In his chapter on Pandora's Box - Television , Seldes (49, p.161) emphasizes the fact that:

Television would be used substantially for the same purposes as AM broadcasting became inevitable years ago, perhaps as far back as 1929, when Vladimar Zworykin went to work for the Radio Corporation of America, developed

the iconoscope tube in its research laboratories, and automatically delivered modern television into the broadcaster's hands. ...Considering the enormous investment in radio, as manufacturer of equipment and the parent company of two radio networks, its enterprize in pushing television is extraordinary. Some competition has existed, especially in Britain, but RCA was for a long time in a position to slow up the growth of television and it did not do so. By using NBC as an experimental station it has forced CBS and eventually other broadcasters to take first steps, and so set in motion the forces which are making television a part of the radio industry, leaving the movies far behind.

Given that situation, and the capacity of television to act as a universal transmitter of virtually all forms of communication and entertainment, the development now taking shape is this: Television will be used as the primary force in the creation of a unified entertainment industry which will include sports, the theater and movies, newsreels, radio, night clubs, vaudeville, as well as many minor activities, and will profoundly affect newspapers, magazines, books, the fine arts, and ultimately education. Co-existing within this pyramid of entertainment there will be a highly unified communications industry affecting our political life.

This, then, is the picture of the American system of broadcasting in 1956: basically the medium is used for entertainment purposes throughout the United States with some 1300 stations either operating commercially or in the building stage as applicants granted their construction permits by the Federal Communications Commission. Operating along side of this vast entertainment industry, and as a supplementary service to it, are the non-commercial stations controlled by educational institutions and the community non-profit corporations

all dedicated to programs with educational purpose.

This supplemental service has been well stated by the Metropolitan Educational Television Service, Inc. (33, p.1) of New York City, a non-profit educational agency chartered by the New York State Board of Regents:

The programs will be educational in the broadest sense. We will strive to stimulate curiosity in all forms of thought, art, literature, and the sciences, thus providing a sound basis for understanding and appreciating all aspects of man's cultural heritage and potentiality. We seek to provide a wider understanding of the peoples of the world and their cultures, and to foster extensive discussion of current issues. We will extend opportunities for educational advancement at all age levels and at all ages...META has no intention of supplanting any television activities...rather we hope to supplement...and to cooperate with the commercial broadcasters.

Early Educational Experiments on TV

In introducing the section devoted to some of the early experiments with educational television, one might well summarize the developments by a statement made by Henry (1, p.1) in 1954:

Just three and a half years ago (that would be early in 1951) the Joint Committee on Educational Television was formed, and the hearings on allocations for education were yet to be heard. Two and a half years ago (1952) the allocations of two-hundred and forty-two channels for non-commercial use, an historic occasion, was made by the Federal Communications Commission. Even a year ago (1953) educational television as a national service, was largely a vision, discounted by the skeptics and the critics, both in the commercial industry and among the general public; it was met with indifference within the profession, an indifference sometimes akin to

snobbery. The negative comments were many:

1. Television costs too much.
2. Teachers cannot command popular interest because education has no mass appeal.
3. Television is all right for entertainment, but not for education; since the student can't talk back, he won't listen.
4. Education cannot afford to take on new obligations in energy, or in the public relations risk.
5. Television is inherently superficial.
6. Television can't do anything a film won't do.
7. Television is dangerous, for it might improperly become the means of a state control of ideas.

But there were those who patiently, persistently, and with great faith, answered these arguments, a growing corps of believers; and programs began to appear.

Now we have a body of experience, not just a theory. Twelve million people live in the metropolitan areas where television stations are now operating in ten different communities (This was 1954). Ten million more live in areas where nine stations are now building. Thirteen to eighteen million additional live where thirteen stations will start construction soon. Thus, some thirty-five to forty million people within a year (By 1955) will be within the range of educational television service; and this inventory does not include many other areas where hopes for action are justified, or the closed-circuit operations where educational programs are being recorded for use on the educational stations, or to the many educational programs on commercial television stations.

Actually educators have been interested in the possibilities of television for some thirty years or more. Students and faculty were busy in the physics laboratories from 1928 to 1930 in constructing scanning disks and studying the technical phases of the existing method of rotating disk for televising and transmitting

pictures. The more adventuresome of these institutions are illustrated by the programming experiments that were taking place at the State University of Iowa from 1932 to 1939(9, p.1):

W9XK's telecasts included lectures in art, engineering, shorthand, botany, and astronomy, among others, as well as entertainment events. The University's radio outlet, WSUI, transmitted the sound accompanying the pictures. On one occasion, an oral hygiene demonstration showed the proper technique for brushing one's teeth. A dramatic art student, who wrote his own scripts and directed the cast, produced a TV drama over W9XK as his master's thesis.

More than 400 programs were transmitted over the mechanical scanning system in this early educational experiment, probably the most extensive of the early educational endeavors on television.

In similar fashion, the first TV station to be owned by an educational institution was Iowa State College's commercial outlet WOI-TV, at Ames. Iowa State was the only school to have obtained a license by 1948 when the Federal Communications Commission froze channel assignments in order to re-examine the whole allocation structure.

By virtue of the long freeze on channel assignments, the majority of the serious attempts to study and to experiment with educational television during the early years of development have been done on commercial outlets.

Such experiments were sporadic indeed during the time between the 1939 study by the State University of Iowa and the lifting of the freeze by the FCC in June, 1952. Today the educational institution that has not used commercial television for educational purposes is the exception.

How this dream of the early ETV pioneers has been developed through the years just passed would take many volumes to fully document. A complete survey of these early experiments is not possible, nor is it the purpose of the present study. Rather are cited here a few of the experiments which show the course that has been taken by education in discovering the potential for the future through this newest member of the mass media.

There is nothing new about the teaching process of showing and doing. The method is thousands of years old and television is merely another way in which the technique of demonstration can be used. Agricultural Extension specialists have used such methods for more than fifty years. It is logical that such a specialist should have experimented on the first education-owned station in television. Gunderson (1,p.5) of Iowa State College says:

In October, 1952, I had three 12-minute television shows on rat control. At that time, WOI-TV had an estimated viewing audience of 107,000 families. In the two weeks following this series of programs, there were about 3,000 requests for the material offered on the shows. So we can

assume that at least 3,000 people were stimulated to action by the 3 shows. I spent a total of 3 hours preparing the programs. How does this time, effort, and response compare with those in the rest of my extension work? During the previous 12-month period I travelled 23,869 miles, held 108 meetings on many subjects, attended by 4,912 people, and made 261 farm visits. I also made 90 radio talks. I think we can assume that each person who came to a meeting wanted and needed the information, so he had a motive for attending. And each one learned a skill he could use to make his farming more profitable or his home more pleasant. I got 3,000 responses - almost as many as in all my other extension work - from 3 hours work and 3 television shows.

Syracuse University is an example of a pioneering effort of an institution in cooperation with a local commercial TV outlet, with television programs originating in a studio on the campus but released over the local commercial transmitter. Cummings, in his book (9, p.20) tells the story of the Syracuse development:

When vice-president Bartlett received an inquiry from a foundation interested in providing funds to help establish educational facilities for more responsible citizenship, he suggested television. The foundation then offered the university \$60,000 if the school would provide an equal amount, and the institution's chancellor agreed. Bartlett went to a commercial station and suggested that the university spend its \$120,000 for studio equipment which the station might use in return for the use of its transmitter by the university. The first station turned Bartlett down. But the second agreed to the arrangement and, in 1950, Syracuse University signed a five-year contract with WSYR-TV, which specified that a telecasting operation be set up with the university providing studio, studio equipment, and staff and the station providing the transmitter. As a result of this

cooperative plan, the station uses the university's studios and personnel for its local programming that requires studio presentation. The arrangement entitles WSYR-TV to a certain number of commercial hours a week in exchange for which the university receives a certain number of sustaining hours over the station's transmitter. The Syracuse TV plan includes another distinctive feature: television training is for graduate students only. The radio and television department believes that graduate students are easier to work with in an intensive program; they are more mature and have more drive, they are capable of taking direction more easily and are more imaginative.

Representative programs include: Open Shelf Room, Headline Forum, Footnotes to America, Let Them Live, Watch the Weather, Doodle, It's Fun to Paint, The World in Your Home, as well as experimental programs in a wide variety of subjects and formats. Tests indicate that 61,000 of the 270,000 homes in the telecast area are regularly tuned to one or more of the school's programs. This represents 226,000 persons or a larger audience than the total paid attendance at all of the university's sports events held in a single year. Some of the school's educational programs have pulled a larger audience than the network public service shows.

Many of the nation's colleges and universities fall into the category of transporting their educational TV programs to the commercial station studios, whether the distance be a few miles within a metropolitan area or as far as a hundred or more miles. The story of the State University of Iowa might be used as a national example here: prior to 1953 taking their programs, including staff, personnel, sets, properties, art work, film segments, to Davenport, 65 miles away, and to Ames, 135 miles away. Since the fall of 1953, at which time

the university installed studio equipment, including a kinescope recorder, most of the programs have been recorded on the campus and shipped to the participating stations rather than transporting the entire production as in previous years.

Other institutions have made their initial flights into educational television on commercial stations through the use of film. Making use of the filming equipment in the institutional audio-visual departments these schools have produced film segments and entire programs on the campus, which have then been distributed as packaged TV programs to stations in the area. All possible combinations of these various methods of putting the institution and its resources on television have been used during these experimental years.

The range of programs offered in these early years of experimentation with educational TV has been extensive. This potential was summarized in 1954 for Governor Paul Patterson's Committee on Educational Television by a sub-committee, of which Dr. John R. Richards, Secretary (now Chancellor) of the State Board of Higher Education, was the chairman. The sub-committee report summarized this educational TV programming by listing examples of what had been done by educational institutions and TV stations throughout the United States under the five headings:

Pre-school Programming, In-school Programming, Out-of-school Programming, Adult Informal Programming, and Formal Adult Programming. This complete report is to be found in Appendix A.

Public Support of Educational Television

Of the first seven educational stations to go on the air, three were built by community TV associations organized for the purpose, two by a state college, one by a private university, and one by a privately endowed foundation. Of the next five, three were licensed to community organizations, one to a state college, and the other to a state agency. Of fifteen million dollars in assets, \$9 million had been pledged by national and local foundations, more than \$2.5 million contributed by commercial broadcasters, and some \$5 million raised through contributions from corporations and individuals.

The elements of success seem to have been: sponsorship by local educational authorities; support by organizations broadly representative of the community; active participation by public-spirited business-men; and promotion by newspaper, radio and TV people.

To educators and citizens interested in the use of this new medium of mass communication, the Pittsburgh story is an example of this need for public support and the way one area met the need. The Pittsburgh Story as

reported in the Kiplinger magazine Changing Times for July, 1954, will be found in Appendix B.

This is a story of the way the people of a community worked together to develop educational television, including the mayor, industrialists, attorney, educators, community leaders, representatives of foundations, and a citizens' committee of over 400, mostly women; how all these persons pooled their best thinking and efforts to finance the station, and now apply at the station for auditions to become performers in front of the TV cameras. The story emphasizes the point that a successful community television station needs the active support and participation of all the people from the first planning stages through to programming.

In briefer form than the Pittsburgh Story, one finds such statements as the following regarding the need for public support (41, pp.7-23):

CINCINNATI - Like other communities, Cincinnati has discovered that for those who pioneer educational TV there's many a problem - and that they all can be solved if enough people want badly enough to solve them.

ST. LOUIS - A banker, a labor leader, a priest, a hat manufacturer - these are the four of the active leaders in educational television in St. Louis. This illustrates a point: St. Louis looks on educational TV as something for everybody, not just for specially selected groups.

SEATTLE - Individual initiative, a local benefactor, outside assistance from a fund - all these helped;

but in the end it took a considerable investment of elbow grease and shoe leather by a lot of plain citizens to bring educational TV to Seattle. Everything indicates that the same thing will be true in most other communities.

PITTSBURGH - The civic leaders of Pittsburgh have learned through experience that education cannot be imposed from on high - that culture cannot be spread over a population like jam on a piece of bread. And that means to the educational TV sponsors, it ...must spring from the community and become a part of it.

CHICAGO - All this could not have been done without active and enthusiastic support from a large number of people and organizations throughout the Chicago area.

Here has been highlighted the need for public support of educational television: in building an interest and enthusiasm among the people of the community or area to be served, in helping to raise the funds for construction of the ETV station both by actual contributions and by their public statements of support and desire, and in contributing in a very real way to the programming of the station once it is on the air.

Present Status of Educational Television

American Stations on the Air

As of this writing there are 17 stations on the air offering non-commercial, educational television program schedules. Two of these are on the Pacific Coast, KCTS-TV, Seattle, and KQED, San Francisco. The remaining stations are in the East, South, and Mid-West. Of the

group, WKAR-TV, East Lansing, Michigan State University, and KUON-TV, University of Nebraska, at Lincoln, operate non-commercially on non-reserved channels. The other fifteen stations are all on channels reserved for educational purposes by the FCC's Sixth Report and Order (12, p. 3905).

Two other stations are on the air owned by educational institutions, operating commercially on non-reserved channels. These are WOI-TV, Iowa State College, at Ames, and WDNV-TV, University of Notre Dame, South Bend, Indiana.

The complete list of stations operated by educational institutions and community TV associations is to be found in Appendix C.

In addition to the above stations, eight other educational stations are either on the air as this study is completed or so close to the final operating date as to be considered among the existing stations. This list of stations also will be found in Appendix C.

This summary of educational television stations which have been successful in getting on the air would not be complete without reference to other institutions and citizen groups actively working towards making educational television's dream come true in other areas of the United States. In many areas of the country, as in Oregon

itself, educational institutions, non-profit corporations and citizen groups are and have been , for the past four or five years, devoting time, effort, and money to suggested plans for such ETV development.

Continuing studies were approved by 1954-55 legislatures (24, p.1) in: Louisiana, Maine, New Hampshire, Oregon, Rhode Island, Tennessee, Texas, and Vermont. During the period from 1952 to 1955 twenty-six state legislatures or governors have officially supported ETV by resolution, by appointment of study commissions, or by allocation of funds.

Status of the FCC Channel Reservations for Education

The original FCC Sixth Report and Order, previously reported, and issued April 14, 1952 (12,p.3905) provided that there would be no petition for rule-making change until June 2, 1953. This provision gave educators one full year's protection for the channels allocated to non-commercial purposes. Status of the reservations beyond that date would depend on several factors, including the petitions which might be made to the FCC by commercial interests who might wish to use certain of these valuable channels reserved to education for the one-year period. Make-up of the membership of the FCC, itself, also would influence the decision which might be made in any future test case on the channel reservation

procedure. These intangibles gave a sense of urgency to educators during the year following the issuance of the Sixth Order and Report. Educators and civic groups have continued to study and promote ETV in areas where positive steps have not yet been taken, in the hope that continued promotion of the idea of educational TV would discourage competition for these channels from other interests.

That the situation is becoming increasingly precarious during 1955-56 can be seen from a number of reports in recent months. Under the headline "Urgent Notice" in the NCCET NEWS, of November 1955 (40,p.1), is found this item:

Community organizations should note that two matters of crucial importance to the future of educational TV are now before the Federal Communications Commission. They are the problem of ultra-high frequency channels (which account for about two-thirds of all ETV reservations), and the continuation (now being challenged by commercial interests in six areas.) Local groups should write or wire the FCC urging the importance to ETV of a UHF solution and the need for ETV reservations to continue without a deadline.

The JCET FACTSHEET, September 15, 1955, (21,p.1) continued this story of cases pending before the Federal Communications Commission as follows:

Petitions are pending before the FCC which affect 6 reserved channels: College Station, Texas - request for deletion of educational VHF channel 3; Des Moines, Iowa - request for rule-making proceeding looking to deletion of educational channel 11. Eight educational groups in Des Moines and the JCET opposed request. Petitioner recently requested "commercial-educational" classification for channel 11 which the JCET opposed: Jacksonville, Florida - request for deletion of educational channel 7 by

Jacksonville Journal, at same time offering UHF station to educators. Board of Public Instruction has agreed to make the switch if the FCC approves. Request opposed by Educational TV, Inc., applicant for channel 7, representing educational and cultural organizations of Jacksonville area. Two other petitions affect channel 7, one requesting a shift to Leesburg, and one requesting change from 7 for 12. Manhattan, Kansas - request to exchange VHF channel 8 for UHF channel 58, and to move channel 8 to Hutchinson, Kansas, for commercial use. Kansas State College opposed the request. Governor added personal letter to statement; Sacramento, California - request for shift of educational channel 6 to UHF 40. Request opposed by Central California Educational Television and California State Department of Education; Weston, West Virginia - request for use of educational VHF channel 5 with 25% of its time provided to education. Request opposed by Salem College and the University of West Virginia.

On June 2, 1955, the FCC instituted the first rule-making proceeding since the Sixth Report and Order of 1952 which might lead to the possible deletion of an educational TV reservation. Reference was made to the channel 11 request in Des Moines, in the above statement. After denying the request of Rib Mountain Television, Inc., for temporary authority to operate commercially on reserved channel 11 in Des Moines, the Commission invited comments in the consideration of shifting the reserved channel from VHF 11 to UHF 23. The Joint Committee on Educational Television opposed the shift in comments filed July 1, 1955 (21,p.1). Opposition was also filed by the independent School District of Des Moines, the Des Moines Adult Education Council, Des Moines Educational TV Council, Drake University, the Iowa Congress of Parents

and Teachers, and the Iowa Joint Committee on Educational Television.

It seems evident from the above that the educational channels reserved for non-commercial purposes from June, 1952, to June, 1953, and which now lie dormant are in a precarious condition should other interests see them as valuable property for commercial telecasting.

One particular point is of interest in the above statements concerning commercial requests for rule-making proceedings on these reserved channels. The VHF channels assigned to education are particularly valuable ones, and commercial interests are beginning to petition for a change of educational assignments from the VHF band to the UHF channels, thus making commercial use of the VHF channels possible. Mention should be made of the fact that in general more listeners can hear standard AM radio than can hear FM stations, and in a similar situation, more viewers can see VHF television programs than can see those telecast on UHF channels. Not only are all manufactured receivers equipped to tune the VHF channels (while many are not equipped for the UHF band), but transmission on channels 2 through 13 is much more efficient and fringe reception more satisfactory. In general the VHF audiences are larger than UHF ones.

In view of these facts, the offer of an exchange of a UHF channel for a VHF one is not a fair trade - education

stands to lose audience, particularly in an area where commercial VHF is already well established, or where other UHF stations do not exist. The quotations given above indicate that educational groups must vigorously oppose rule-making proceedings through which they stand to lose valuable television assignments, or through which they would be traded for assignments much inferior to the VHF ones originally made by the FCC. As Paul Walker, former chairman of the FCC said (54,p.2), "the only way to protect these valuable assignments is to get an educational station construction permit and build a station." Short of this, in the present status of educational television, educational institutions and community groups must continue to actively plan towards the day when such application for construction permit can be filed, so that such petitions for change of reservations as cited above can be vigorously opposed, and a strong case presented in defense of the ETV reservation.

Senator Hubert H. Humphrey was quoted in Broadcasting-Telecasting, December 26, 1955 (5,p.68), as urging:

That the Commission so act that the present educational channels will continue to be held in reserve and that this incalculably valuable educational resource be preserved. It would be nothing short of tragic if, in the deliberations of the Commission any decisions were made which might check the present steady growth toward the full development of a national system of educational television.

Calling on the FCC to continue its reservations of educational channels, Senator Humphrey cited the progress in educational television, and said he looked toward educational TV for a partial answer to the nation's educational crises.

Such is the present status of the educational TV reservations.

Closed-Circuit Television

Closed-circuit television might be described as the use of the TV studio facility without benefit of television transmitter. Programs are prepared and presented in the same manner as for a standard telecast, but the signal travels only from the control room over coaxial cables to television receivers in adjacent locations.

Education is using such closed-circuit equipment in an increasing number of ways: for a TV laboratory in the student training program; for the kinescope recording of programs on campus which will be distributed to commercial stations or through the Educational TV and Radio Center; in training of faculty personnel scheduled to appear on institutional programs carried by commercial television stations; for programming and engineering workshops; program experimentation; telecourses for classroom instruction as a part of the regular resident instruction in a wide variety of subject-matter areas.

A recent survey by the Joint Committee on Educational Television (23, p.1) listed 55 separate institutions in 27 states and the District of Columbia as using such closed-circuit equipment for educational purposes, plus at least eight military installations.

The majority of these closed-circuit installations make use of the vidicon tube cameras of the so-called industrial type, although a few institutions have installed broadcast-type image orthicon cameras and their associated equipment. The general feeling is that the vidicon cameras are more rugged and withstand the shock and abuse of a teaching laboratory situation. First cost and upkeep are both much less than for the full-quality broadcast equipment. There is some sacrifice in picture quality, but not sufficient to jeopardize the training function. Kinescope recording equipment is installed in some closed-circuit operations, especially where the institutions are looking towards development of television transmitters, or where production for use on commercial stations is extensive.

An example of such closed-circuit use of facilities is given for the University of Alabama:

The facilities will be operated one hour daily by the students on a regular schedule basis. The Alabama Educational Television Production Center will be located on the campus and the closed-circuit facilities will be used for training students of the university; for experimentation with programs to be considered for presentation on the state-wide educational television system; advanced students

will be employed by the production center for the state-wide system in order that they may obtain experience with professional equipment and facilities. Kinescope recording equipment yet to be purchased will be used for analysis of program materials in the advanced planning stage and after presentation on the air, as well as for rescheduling programs and for distribution to other educational TV stations throughout the country.

From the University of Kansas:

In program experimentation for best techniques in classroom instruction and in post-graduate training in medical education; ultimately for lay education. Surgeon operates in view of students in remote classroom. Surgeon wears microphone and headphones for two-way conversation with students in the classroom. Studio also has amphitheater. Thus students may be in the amphitheater during surgery and witness the operation as well as on television monitor in color. View on color monitor is better than direct view of students. Currently conducting experimental courses using the television facility in Procedural Surgery, Principles of Surgery, Introduction to Anesthesia and Surgical Pathology. Will soon be equipped for two-way communication via micro-wave relay link with Kansas City Veterans Administration Hospital which will have similar installation.

From Washington State College:

For student television training in connection with Survey of Radio-TV; Beginning Radio-TV Workshop; Radio-TV Writing; Television Workshop; Workshops held for county agents, home economists and other content specialists in which they try out new program ideas and techniques. Students in audio-visual courses, home economics, agriculture and other courses monitor especially prepared closed-circuit programs. They also monitor regular network and local station telecasts on college receivers. Demonstrations are given from time to time to interested groups such as women's clubs studying child development and the effects of television on the child, etc.

From Chicago Teachers College:

For student television training, for program

experimentation, for classroom instruction. Especially for observation and unit classroom magnification instruction.

No one could list, or know at the present time, all of the uses for which closed-circuit television will be employed in the years ahead. The University of Pennsylvania, as well as certain other schools, is using television as a means of meeting faculty shortage in the institution. Much will be heard of this use of closed-circuit television on the campuses in the years ahead for higher education.

Milton Eisenhower, who is an educational TV enthusiast, has said (47,p.1) that Pennsylvania State University will expand classroom instruction by closed-circuit TV in the next five years as a result of the survey showing practically no difference in grades of students whether taught by TV or by classroom lecture.

The New York Board of Education used closed-circuit TV to help select principals for city schools (47,p.1). Rather than visit schools and classes as a part of a supervisory test, as in the past, candidates convened April 11, 1955, in a high school auditorium to watch two classes being conducted in WCBS-TV studios. From the telecasts, the candidates wrote supervisory reports, which were judged competitively as part of the examination.

In Pocatello, Idaho (15,p.619) the first closed-circuit TV link between a college and all the public schools in a community was installed early in 1956. The system, designed to make possible a single presentation of an educational nature in 11 classrooms at the same time, rather than 11 presentations at 11 schools at varying times. According to plans announced in December, 1955, four types of educational programs will be telecast on the system. The first makes use of a few specialized teachers who formerly travelled from school to school. With the aid of TV they will be able to reach a much larger student group. These specialized subjects include: science demonstrations, health lessons, art and music instruction, phonetics demonstrations and speech correction.

Visual aids such as films and slides will be shown on the 24-inch TV sets in the special classrooms set aside for TV teaching. That means a single film library can be set up in the college studio. Money formerly spent on duplicate films and equipment will be used to enlarge the library. Also, students can take notes while watching the film since a room need not be completely darkened for TV reception.

Finally, present plans at Pocatello call for extensive use of television closed-circuit for teacher in-service training. There will be special courses for teachers and college faculty will give teaching demonstrations.

It seems evident from the above that educators will continue to find many new and varied uses for closed-circuit television in the teaching program in the years ahead. As at Pocatello they will experiment with many techniques and uses. Some of them may be no better or little better than already existing methods. But as already proven in some of the studies, as the ways are found to use this new medium, much of real value will be found in the use of educational TV techniques, whether on the air, or as in these closed-circuit developments.

Education on Commercial Stations

As has already been pointed out, educators have been producing television programs for a number of years, and since ETV stations are relatively new, all of the early work, and much of what is being done today, has been and is being done on commercial stations. The institution which does not now use a commercial station is the exception, though it must be added that much of the programming being done by education is of a public relations nature rather than programming of a strictly educational type. The vast majority of the programs produced for commercial stations aim at attracting the mass audience and are hence basically entertaining in nature.

Commercial broadcasters themselves have adopted a code which seems to indicate they want their programs to

be educational and presented in the public interest. The Broadcasters Creed of the National Association of Radio and Television Broadcasters states that broadcasters should enrich the daily life of the people through "programs of education, entertainment, and information." Also, according to this creed, broadcasters should cooperate with educators in developing improved broadcasting techniques, as well as educational processes which would produce expert and skillful personnel.

Furthermore, the FCC's Sixth Report and Order of 1952 (12,p.3905) reads:

It must be remembered that the provision for non-commercial educational television stations does not relieve commercial licensees from their duty to carry programs which fulfill the educational needs and serve the educational interests of the community in which they operate. This obligation applies with equal force to all commercial licensees whether or not a noncommercial educational channel has been reserved in their community, and similarly will obtain in communities where noncommercial educational stations will be in operation.

It would seem that:commercial broadcasters have a personal desire to carry educational TV programs, and (2) they have a legal obligation to do so.

That there are problems connected with the use of commercial stations by educational institutions has been heavily documented. Certain of these problems have already been covered in the Preliminary Report of the Program Sub-Committee for Governor Patterson's Committee on ETV previously quoted in the section on early experiments

in educational television (Appendix A). Said the sub-committee in its report:

Such programs on commercial stations have the choice of free time which the station is prepared to make available ...Commercial commitments rule out the most desirable hours for educational programs on these stations. Education has found it true throughout the history of educational radio.

Another suggestion has been made that educational programs desiring the favored evening hours should buy the time at regular commercial rates. Experience has shown that even though the community agency had the funds with which to pay the station it would find the time either already sold, or on a network option, and hence not available on any permanent schedule.

It is seen that the majority of the programs placed by educational institutions and cultural agencies on commercial stations will be on free time, at hours which will not be desirable for most organized teaching programs.

In testimony before the House Education Committee of the Oregon Legislature, March 4, 1953 (53, p.1) Gene Ragle, program director of commercial TV station KPTV, Portland, expressed the feeling of commercial broadcasters this way:

We conclude that voluntary cooperation between educators and commercial broadcasters cannot be expected to accomplish all the important objectives of educational television. In order for an educational television program to achieve its purpose, it is necessary that broadcast time be available for educators on a regular basis. An audience cannot be built up if educators are forced to shift their broadcast period from time to time. Moreover, the presentation of a comprehensive schedule of programs comprising a number of courses and subjects which are designed for various age and interest groups may require large periods of the broadcast day or week for educational purposes and which would be impossible to

obtain on commercial stations. It is difficult many times to reserve specific periods of any broadcast day or week for educational use. This is not due to lack of organization. If we do not realize a profit, we are no longer television stations because we are out of business. It is, of course, necessary to devote most of our time to commercial interests.

William C. Dempsey, educational director, KPIX-TV, San Francisco, speaks to this concern of educational programming on commercial stations (4,p.303):

As far as a commercial station is concerned, educational programming, like charity, begins at home. The analogy is not strained when one faces the fact that all too often the educational program is treated like an urchin left on the doorstep - not really wanted, but tolerated! On the other hand, those stations that have made a success of educational programming have done so because their management pays close attention to and has an interest in the community in which the station operates.

...Here are a few areas that will need your constant support (Dempsey is speaking to commercial telecasters). Radio, for example, earned a reputation of giving time for cultural programs and then selling it out from under the sustainer upon the first scent of a greenback. Such tactics are the poorest kind of public relations. Because of this bad radio practice, your offer of television time will be viewed with suspicion. You may be asked point blank by some educators, who were burnt by radio, just what your policy will be on this point. Even if they don't ask you, you'll likely be faced with the decision. If your educational programming is to be important or significant it must be given guaranteed time.

Dempsey has indicated that there is a positive side to the cooperation between local commercial telecasters and educational groups of the community. The case histories of these successful educational programs on commercial

stations of the United States would fill many volumes. Much of the experimental development of educational television, as previously indicated, has been done on these stations. There will be many institutions which will never have the opportunity to gain access to educational television and which must confine their efforts to these commercial outlets. Basically the majority of such programs will likely be of public relations and informational nature, rather than the deliberate, long pull of the organized, formal educational process.

The president of the American Council on Education, Arthur S. Adams (9,p.33) has summed up the advantages of using commercial stations this way:

I think it is recognized: (1) that cooperation with commercial stations can provide helpful experience in advance of operation of educational stations; (2) that in some areas where sufficient reserved channels are not available, this may be the only practicable way of extending educational services over television; and (3) that continuing cooperation with commercial stations and networks would in any case be desirable in order to bring to the broad audience which these stations have attracted a selection of programs of genuine educational significance.

It seems evident that the acceptance of free time on commercial television stations for educational purposes is a second-best substitute for the development of a program service on an available reserved channel as provided for under the allocations of the Federal Communications Commission. Where such facilities are not available the

educational institutions of an area should make use of the limited free time offered by commercial stations.

The Oregon Efforts Towards Educational Television

Official documents in regard to Oregon's efforts towards educational television begin with the compilation of the Joint Committee on Educational Television of the "Indications of Participation by Approved Teacher Education Institutions in the Educational Television Movement." (26, p.1). This report indicates that Oregon State College, Corvallis, the University of Oregon, Eugene, and Pacific University, Forest Grove, filed statements in response to the FCC TV allocation plan of 1951.

When it became evident that the state's educational centers were to have channels reserved for noncommercial TV purposes, Douglas McKay, then Governor of Oregon, called on Chancellor Charles D. Byrne, of the Oregon State System of Higher Education, for a report on what the state-supported schools, operators of educational radio station KOAC, proposed to do about television. Chancellor Byrne appointed an inter-institutional committee comprised of James M. Morris, General Extension Division, chairman, D. Glenn Starlin, University of Oregon, and Grant S. Feikert, Oregon State College. This committee submitted its report to Chancellor Byrne on July 1, 1952, who in turn presented it to members of the State Board of Higher

Education at that body's August, 1952, meeting (Appendix D). Following adoption by the State Board of Higher Education, this report was forwarded to the Governor's office, where it remained on the desk as unfinished business following his acceptance of the position of Secretary of the Interior in the Eisenhower Cabinet. The attention of the new governor, Paul L. Patterson, was called to this report by Chancellor Byrne, together with the new information that the sum of \$100,000 had been offered to the State Board by the Fund for Adult Education, to help in building on channel 7 at the Mary's Peak site.

On August 25, 1952, Paul A. Rhemus, superintendent of schools in Portland, called a conference of some educators in Oregon, together with members of the Portland School Board to discuss the educational channel 10 reservation in Portland with a representative of the Ford Foundation's Fund for Adult Education. Subsequent to that visit a similar \$100,000 grant was offered to assist in building on channel 10 in Portland. On September 11, 1952, the Portland School Board authorized expenditure not to exceed \$5,000 to employ engineering and legal personnel to make a preliminary survey to determine the type and cost of educational television facilities for Portland. Grant S. Feikert, KOAC chief engineer and consulting engineer to many Oregon stations, drew up the specifications,

predicted field strength contour maps, and other details for a Portland transmitter on Council Crest, studios in Benson Polytechnic High School, and micro-wave link.

Due to the publicity through the pages of the Oregon press following these early meetings, a citizen interest began to be manifest, followed by a number of resolutions urging study of educational TV possibilities which were passed by community organizations and chambers of commerce.

The writer attended a special meeting of the National Association of Educational Broadcasters and the Joint Committee on Educational Television, at the invitation of the latter group, held in Minneapolis in November, 1952. It became evident at these sessions that if Oregon was to profit from the experience in other states, there must be rapid and intensive development of citizen interest in educational television.

The Oregon Citizens' Committee for Educational TV was formed December 19, 1952, with organization of a similar citizen group for the City of Portland at about the same time. Elmer McClure, master of the Oregon State Grange, was named chairman of the state-wide committee, and Marshall N. Dana, vice-president of the First National Bank, chairman of the city group. On January 16, 1953, the two committees met in joint meeting, merged their organizations, and named McClure as permanent chairman. (43, p.1) The Oregon Citizens' Committee passed a

resolution calling for a combined implementation of channels 7, Corvallis, and 10, Portland, for presentation to the Oregon Legislature (Appendix E). This bill was introduced through the House Education Committee on January 19, 1953. The bill asked for funds to activate channel 7 under plans submitted in the original Television Report from the Oregon State Board of Higher Education, with the addition of the technical proposal made previously by Grant S. Feikert at the request of the Portland School Board. At an earlier meeting the School Board had indicated that it would not proceed further with plans for development of ETV in Portland. This action was formalized on January 29, 1953, when the body went on record with their decision not to activate channel 10, and so notified the Fund for Adult Education that it would not be in a position to accept the \$100,000 grant towards transmitter construction in Portland.

Many Oregon organizations and individuals were speaking up in favor of educational television. Groups included, among others, the American Association of University Women, Oregon Congress of Parents and Teachers, Portland Alumna Chapter of Theta Sigma Phi, Oregon Audio-Visual Association, Young Women's Christian Association, First Christian Church, Portland, Corvallis Lions Club, Oregon Education Association, Federation of Woman's Clubs, Portland

Chamber of Commerce, Corvallis Chamber of Commerce, the Oregon State Grange, Farm Bureau Federation, and the Farmers' Union.

After a number of meetings with members of the Oregon Legislature, hearings before the House Education Committee, a special conference of leaders of both houses called by Governor Patterson, and meetings of citizens' groups, Senate Concurrent Resolution No. 7 (Appendix F) was read and adopted by the two houses of the Oregon Legislature. This resolution empowered Governor Patterson to take all steps necessary to secure continued reservation of channels 7 and 10 for non-commercial, educational television. No funds for television development, and no interim committee to study the situation were included in this final but successful resolution.

Cumming(9,p.45) tells of the activity which greatly influenced Oregon when he wrote:

One of the most significant of the activities that took place during the year were the proceedings that postponed educational TV in New York state. Although the Board of Regents of the University of New York had applied for 10 outlets and had received 7 construction permits, a state investigative commission appointed by Governor Dewey and dominated by those opposed to noncommercial stations, reported unfavorably to the legislature. The commission did this in the face of much testimony in favor of state support of educational stations - 200 witnesses were in favor and 8 opposed.

The storm of protest was so loud in New York, that Dewey announced he would appoint a committee to help develop the potentials of educational television. But the New York situation dismayed educators all over

the country. It probably influenced other state legislatures to take no action on securing channels for state-supported institutions.

Chairman Paul Walker, of the FCC, outlined the pattern of those who opposed noncommercial stations as a strategy of delay (9,p.45). He said:

...consuming time with old arguments. Why can't commercial stations do the job? Why not pass a law requiring commercial stations to give a percentage of time to educators? Agreeing that educational stations would be marvelous but pointing out that it is not time for them yet; concentrating educator's energies on continuing the reservations beyond the June date to prevent more concrete steps being taken; and stirring up controversy over political control of stations.

Following the passage of the Oregon Senate Concurrent Resolution No.7 and the end of any chances for developments in the Oregon Legislature which would indicate progress towards ETV in the next biennium, meetings were held by a small, but vitally interested, citizens' group in Portland. Out of these meetings developed the non-profit group to be known as Community Television, Incorporated. Much assistance was given to this group by representatives of the National Citizens' Committee for Educational Television, the Joint Committee for Educational Television, and by Herbert Mayer, owner of KPTV, Portland. From Mayer the group received promises of assistance in engineering a community station, as well as antenna space on the KPTV tower and transmitter room in the building on Council

Crest, should they proceed far enough in their plans to build for channel 10 in Portland.

Throughout the year innumerable speeches concerning the channel reservations, channels 7 and 10 specifically, were given by key people in the movement for educational television in Oregon.

It should be a matter of record in any summary of ETV activity in Oregon that consideration was originally given to four channel assignments for noncommercial use made by the Federal Communications Commission. In addition to channels 7 and 10, as already discussed, channel 9 was reserved for Eugene, and UHF channel 18 in Salem. In considering these four allocations under the plan submitted by the State Board of Higher Education (Appendix D), the conclusion was reached that should channel 7 be activated with the highest power permissible under FCC rules and the transmitter placed on top of Mary's Peak, excellent site in the Coast Range west of Corvallis, such a station would lay a local signal over both Eugene and Salem. The two allocations made to those cities would not be needed under such a plan. Governor Patterson's legislative meeting agreed to this decision before passage of Senate Concurrent Resolution No.7 (Appendix F) and the Governor was prepared to defend channels 7 and 10 should interests file any request for commercial use of these channels.

In June, 1954, at the request of Vice-chancellor John Richards, Grant Feikert prepared an alternative proposal for activating channel 7 in Corvallis, which would call for a transmitter to be located on the top of Vinyard Hill in the Peavy Arboretum, with effective radiated power of approximately 100 kw. Studios would be on the Oregon State College campus with micro-wave link to the transmitter site. Since the location on Vinyard Hill would be substantially less favorable for television transmission, the potential audience was estimated at some 600,000 persons as compared with well over 1.1 million predicted for the Mary's Peak transmitter. Of significance in this difference was the predicted loss of the population along the Oregon coast. First cost of the transmitter would be considerably less than that of a station on the 4,000-foot mountain top. Members of the interinstitutional committee found it difficult to give up the Mary's Peak location in view of the recognized fact that it would be one of the finest TV locations in the nation, perhaps second only to Mt. Wilson on the Pacific Coast. The committee did recognize the value in the lower first cost of the technical plant if built on Vinyard Hill.

On October 12, 1954, Governor Paul Patterson convened his Committee on Educational Television, with Gardner Knapp of Salem, as chairman. This committee studied for some four

months and reported its findings to the Governor on February 3, 1955 (28,p.1) with the following recommendations:

(1) That there is a need for a two-year development of educational programming resources of the state of Oregon using existing television stations plus any others which may be established in the state during the two-year period. It was further recommended that \$48,000 be budgeted to this study of programming.

(2) It was recommended that an amount of \$4,000 be provided for engineering surveys supplementary to those already completed looking to the establishment of educational television stations utilizing the channels 7 (Corvallis) and 10 (Portland).

(3) It was recommended that Oregon's interest and intent to build on channels 7 and 10 be reaffirmed and that the Governor be empowered to take all steps that become necessary to protect the interest of the State of Oregon in said channels 7 and 10.

(4) It was recommended that the Governor appoint a committee by July 1, 1955, to study and plan for the further development of educational TV in Oregon, with a report incorporating the findings of sections 1 and 2 in a recommendation to the Governor prior to the next Legislative Assembly.

The committee also went on record commending all groups within Oregon active in support of educational television, and further recommended that educational and cultural institutions proceed within their own organizations to create the means for development of educational TV programs.

Membership of the Governor's committee included:

George Brown, Portland; D. A. Emerson, Salem; Father Michael Gavin, Portland; Mrs. Ernest E. Hall, Portland;

Herman Kehrli, Eugene; Gardner Knapp, Salem, chairman; Mrs. Hilmer Lindstrom, Astoria; Elmer McClure, Portland; James M. Morris, Corvallis, secretary; Miner T. Patton, Portland; John R. Richards, Eugene; Ben Robinson, Imbler; Tom Scanlon, Portland; Mrs. Robert E. Stearns, Portland; William H. Swing, Portland; and Carl C. Webb, Eugene.

Two bills were introduced in the 1955 Oregon Legislature: Senate Bill No.327 (Appendix G) by Senator Robert Holmes, of Astoria, and Representative Maurine Neuberger, Portland, provided for state-owned educational television to be created as a department of the Oregon State System of Higher Education; and House Bill #748 (Appendix H) introduced by the Joint Ways and Means Committee. This bill provided an appropriation of \$5,000 to be designated to the Governor who in turn was to select the appropriate agency for engineering and other studies looking towards establishment of educational television. The Holmes-Neuberger bill did not come out of committee. The \$5,000 appropriation passed and became legislation. Following the date when the legislation became law, Governor Paul Patterson designated the State Board of Higher Education to carry out the study. At a meeting in December, 1955, of the inter-institutional committee, Chancellor Richards reactivated the original TV study committee, Morris, Feikert and Starlin, to pursue the study provided for in the

legislative action.

A second subcommittee also was appointed by the Chancellor to study and present a plan for the use of closed-circuit TV between the campuses of the schools of the State System of Higher Education - specifically the University of Oregon, Oregon State College, and the Oregon College of Education. Such closed-circuit teaching will make possible the widest use of the best teachers in the institutions to teach courses by television on all major campuses. Thus the institutions hope to meet a portion of the problem of mushrooming student enrollments and shortage of teachers in the years immediately ahead.

On Tuesday, December 13, the Portland Oregon Journal reported (44,p.6): "The school board Monday night all but threw its hat back into the ring for educational television when it told Superintendent J. W. Edwards to study the value of the medium in classroom instruction." It was intimated earlier in this review of activities since the TV allocations in 1952, that the Portland Public Schools after taking an early lead in ETV changed their thinking and adopted almost a "hands off" policy. Board member James C. Yoemans said in the December 12 decision "a lot of things have happened since the board's original rejection of educational TV" pointing out that many communities have made educational TV work, through foundation grants

gifts of stations and equipment, and community-wide campaigns. "I think we have reached a point where we should ask the administrative staff to look at the situation," Yoemans said. To those in Oregon who have been laboring for educational television from the early days, and especially to those who predicted this success for TV as a teaching tool when testifying in hearings before the members of the Portland School Board in 1952, this decision "to take a second look" is indeed a heartening development.

Community TV, Incorporated, of Portland, continues to work towards development of the Portland channel for educational purposes. This local citizens group hopes through gifts, subscriptions, and foundation grants to provide the funds with which to build the transmitter on channel 10. It is its hope, according to expressions at a joint meeting of Community TV membership and the State System Committee, to provide the transmitter in Portland. Studios would be provided under its plan by the State System, Portland Public Schools, and an independent institution, each building a studio facility on its own property from which to cooperatively program the transmitter on Council Crest. At the time of this writing Community TV's financial campaign to raise the necessary funds is still in the planning stage.

Such have been the steps which have been taken toward educational television in Oregon from 1951 to 1956. While unsuccessful in achieving the ultimate goal during these years, this continued activity has perhaps prevented encroachment on the channels by other interests, and the planning that has been done forms a good foundation on which all educational interests can build the future development of educational television in Oregon.

CHAPTER III

PURPOSE AS A FACTOR IN PROGRAMMING
EDUCATIONAL TELEVISIONCriteria as Suggested by Authorities

It is proposed here that educational television programming departments need to draw up for their own use a list of the criteria determining the purposes of the ETV station for which the staff will be building its programs.

To arrive at the first steps in planning such criteria, it has been considered wise to turn to the thinking of authorities throughout the United States as well as in Oregon, the state involved in this study. Four groups have been contacted: (1) national leaders, (2) Oregon educators, (3) lay citizens and community leaders, and (4) educational broadcasters, in both radio and television in the United States.

Summary statements from each of these groups are to be found in this Chapter. The complete statements will be found in Appendices I through L. These summary statements have been brought together into some general recommendations based on the entire set of statements.

Summary of Statements from National Leaders

Statements from twenty national leaders are to be found in Appendix I. Each wrote on the question "What would be your statement of the purpose which should motivate and guide educational television broadcasters?"

From these comments have been selected the individual ideas as expressed, which have been compiled into the following:

These national leaders see educational television as a medium for the accomplishment of broad educational purposes - stressing demonstration and skill subjects for which ETV is superbly rated as a teaching device. They urge educational television as a means of developing a more informed, intelligent and courageous citizenry, with stations so programmed that "the viewer comes out better than he went in." ETV broadcasters are urged to tell Americans the facts about international affairs in such a way that people will be better prepared to make decisions in this field intelligently and dispassionately.

These national leaders see educational television stations programmed to fill a dual role: (1) a significant tool in the hands of the educator for formal classroom instruction, and (2) an important and effective medium of adult education. There is found here a prediction that educational television can become the greatest aid in the

roles of resident instruction and continuing education which has been devised in this century. There is seen serious intent in purpose for ETV, charged as it is with raising the level of knowledge, skills and cultural appreciation, with the emphasis on what improves rather than on what amuses.

National leaders see educational TV as one of the ways in which Americans can help solve the overwhelming problems of public education - teacher supply and school buildings.

Civic and community problems must be a part of the programming purposes of educational television. The statements indicate that the stations have a responsibility to interpret the many civic and community problems to wide audiences, supplementing the work of social, civic and cultural agencies.

Establishment of a nationwide system of educational television, as urged, means the extensive use of exchange programs among ETV stations on whatever form of recordings eventually become industry-standard, whether that be the present kinescopes, film, or magnetic tape.

Especially do these national leaders stress the fact that ETV must be willing, as must all educators, to accept the new medium of mass communication as a teaching device, even though we may be faced with an educational revolution.

Broadcasters must be quick to break through the old conventions and make use of new ideas, new viewpoints, and new inventions. As one national leader has written (Appendix I) "the unabashed exploitation of the medium's intrinsic advantages rather than the cautious aping of tried and proven techniques."

The opportunity of educational television to experiment and try those things that are new is highlighted by the injunction for education to operate non-profit, non-commercial, voluntarily supported.

Educational television is predicted as taking a generation to develop and the advice was given that we might as well get going and the sooner the better!

Summary of Statements from Oregon Educators

A total of thirty-six Oregon educators cooperated with the writer in answering the question "As an Oregon educator what would be your statement of the purpose which should motivate and guide educational television broadcasters? The complete, unedited statements from these persons are included in Appendix J.

Individual ideas have been selected from these reports and they are incorporated in the following statement:

Oregon educators see the same general purpose for educational TV as holds for other education, with its age

span of instruction stretching from the pre-school boys and girls to the old-age group of adults. The immediate goal expressed is seen as geared to specific, current and changing needs of Oregon in which ETV is to supplement the work of the regular classroom teacher.

Long-time goals include the promotion of the economy and the general welfare of the citizens; providing for common learnings, cultural experiences, occupational experiences, and knowledge of the community and public affairs. Specifically, it has been said that television should work in its educational process to stimulate the educational needs, awakening interests and desires for learning. It is pointed out that ETV has a unique quality as compared to other educational methods in that it can and should provide instruction to people who cannot easily be brought together.

Oregon educators see a need to show the people of the state how their teachers are being trained. They also would be quick to seize the opportunity to tell the story of the teacher shortage that faces our schools. In connection with this teacher shortage it is shown that educational TV should be used to multiply the teaching power of the master teachers; this is to be done at all levels of education from elementary through college.

Television's responsibility to combat the wave of anti-intellectualism is stressed, and it is frequently mentioned that ETV must be used to raise the intellectual level of us all. As one educator said: ETV must lift our viewers up - leading the listener from where he is to a spot somewhat farther along the road - in social sciences, agriculture, music appreciation, current events, and the like. It seemed to be well phrased as: the development of the highest type of democratic citizenship - culturally, vocationally, socially, politically, and spiritually.

Quite aside from the educational process of imparting new information to boys and girls, it has been pointed out by a public school man that ETV can give his pupils vital experiences in speech, music, drama, art, by providing them an opportunity to appear on television programs.

Educational TV has the responsibility and the opportunity, according to educators, to extend the community resources, as well as the resources of the institutions of which ETV is a part, to all the people of the area, providing community services to persons who might not otherwise receive such services.

The challenge is given to the ETV broadcaster to experiment with his medium of communication - with new methods and new ideas in the approach to content as well

as the techniques of presentation. Implied in this statement is the warning that education should not be trapped into doing things "in the same old way" just because a certain method is customary on commercial TV, or merely because it has been used before. Thus education should look for new and more efficient ways of treating subject-matter content, for all ages, and all educational levels, keeping in mind the audience capabilities for learning.

A program guage was suggested, featuring a five-point scale: (1) Intellectual, (2) Informational, (3) Significant, (4) Stimulating, (5) Timely-interest.

Teching - in the fullest, professional sense of the term - is urged, in order that education may be a satisfactory continued-learning process, always aimed at the "pursuit of happiness" for the individual. It is therefore the continuing responsibility to teach IN and OUT of the formal classroom, imparting information, knowledge, and skills.

A word of warning and challenge was given to the educational telecaster: to have new ideas, new perspectives and new understandings. Speaking to the specific educational skills which ETV possesses, "Doing with ETV those things which cannot be done without it," at the same time realizing the limitations of the medium and containing one's efforts within those areas that can be well presented. One statement from an Oregon educator seems to

fit here as a concluding summary: It (ETV) can never completely satisfy this bewildering array of needs, but to keep trying, that's how ETV must be conducted."

Summary Statements from Community Leaders

A group of community leaders were asked to answer the question: "What would be your statement as to the purpose which should motivate and guide educational television broadcasters? The complete, unedited statements from these individuals are included in Appendix K.

The ideas expressed by community leaders might be summarized as follows:

These community leaders see educational television as a service to society, presenting ideas and concepts which will lead individuals to a better appreciation of democracy, and an acceptance of responsibility and duties of citizenship.

They recognize educational television programming as being broader than the program offerings of an institution or a group of schools, rather that such a program schedule should present quality programming from all of a community's resources.

Educational television, according to these statements, should supplement present educational efforts, working along side of other educational processes, searching out

the needs of the people. These programs should feature information, entertainment, and instruction not on commercial television stations, and for which there is a demand and an expressed need of the viewer.

There is seen a need for formal instruction by ETV, including telecourses (credit and non-credit) in avocational as well as vocational areas. It has been stressed that the very fact that television goes into the homes makes this type of educational service more readily available than when instruction is confined to campus and to school buildings.

In addition to formal instruction, ETV would, according to these stated wishes, carry special events on the campuses and throughout the community to a much wider audience than would otherwise be able to attend. There would be an interest in non-secular, religious programs, provided they could be of good quality. If the quality could not be maintained, then it would be better not to attempt such religious programming.

Presentation drew considerable attention, with emphasis on interesting, vivid, entertaining format, not merely classroom presentation; not dull and preachy, but full of variety and interest, and containing the vital elements of interest-catching and holding. Efforts should be confined to those program ideas most adaptable to a visual medium.

The approaching educational shortage - both in teachers and physical facilities - was recognized and the opportunity of educational television to be used in overcoming at least a portion of the forthcoming congesting was expressed by several community leaders. In relation to the other classroom tools available to the teacher, it was pointed out that educational TV should be used in the teaching process for the specific jobs it can do better than any other method.

As a fundamental principle to guide educational TV broadcasters, it was suggested by community leaders that essentials should crowd out non-essentials, and provide a worthwhile alternative to other existing television programs available to the viewer and his family.

The educational television broadcaster was urged to make it educational, informative, cultural, non-commercial, and non-political!

Summary of Statements from Educational Broadcasters

Statements from fourteen of the nation's educational broadcasters are to be found in Appendix L. Each wrote on the question "As an educational broadcaster what would be your statement of the purpose which should motivate and guide educational television broadcasters?"

Educational broadcasters see as the primary purpose of any broadcaster, radio or television, to serve the public - first and always. Always striving for educational results, the station will be serving in this capacity at all times and all age levels, in: (1) formal education; (2) informal education; (3) in-school; (4) out-of-school. Emphasis will be placed on the great value of educational television in reaching the people who cannot be drawn into sizable groups. Programs should be "beamed" to many special-interest audiences: housewives, shut-ins, art lovers, rural youth, pre-schoolers, in-school viewers, telecourse viewers. They should feature systematic instruction which can advance fundamental education for thousands of youth and adults otherwise deprived of this knowledge.

Mention was made of Sir William Haley's broadly-based cultural pyramid for the British Broadcasting Corporation, which says in another way that ETV programming should lead the audience onward and upward to better things as one moves higher on the cultural pyramid.

The feeling has been expressed that educational television broadcasters must be idealists, and that their ideals must be reflected in the purposes which guide and motivate their programming. Especially does this idealism show the basis for upgrading citizenship and helping in the search for a better life; for the vision of better things to come.

Training, philosophy and background of those who direct educational television programming was expressed in the professional qualifications: knowledge of education, a sound educational philosophy, and understanding of the scope of the medium.

It was pointed out that technically the programs on ETV should fully utilize the unique potentials of the medium combining sight and sound, and should not merely be radio with incidental visual materials. This would imply leaving to the medium of radio those functions of education and information which radio itself can best perform.

Training of students is mentioned as one of the purposes which should guide programming of ETV stations. Broadcasters need the personnel that such a training program provides. In addition, the institutions of an area have the responsibility to train students for future positions in the industry. Teachers in such a program should prove to students that truth, morals, and a sensitivity to good taste are compatible with good showmanship in TV production.

It has again been stressed, this time by broadcasters themselves, that ETV, like educational radio, is a supplemental service to other TV programming. Educational television broadcasters should evolve criteria for ways to

determine the degree of success which their programming is achieving, both by formal research methods, and by informal audience observation.

In final summary, it can be said that ETV's programs should inform and instruct, and it is the responsibility of the broadcaster to experiment - to try new approaches to educational problems and new techniques of presentation - but always to advance education in the fullest meaning of the word. Educational television should never take the position of seeking to emulate or to compete with commercial television, but should have firm faith in the eternal values of the materials it has to offer.

Conclusions on Educational Objectives and Concepts

A total of 80 individual statements and comments have been compiled in answer to the question as to the purpose which should guide educational television broadcasters. The summary statements which have been prepared for each of the four groups: national authorities, Oregon educators, lay citizens, and educational broadcasters, have been brought together in a set of conclusions which might guide any future ETV development in Oregon. As these summaries of the potential, the opportunities, and the responsibilities of educational television are read

one finds it necessary to return to the statement of Henry (18, p.4): "...To ignore its potential is neither scholarly nor professional, nor sensible..."

These conclusions follow:

TEACHING: Does the program teach in the fullest professional sense of the term?

Is the broadcast geared to the specific educational needs of Oregon?

Is it a program which makes maximum use of the master teachers in the educational system?

Does it provide for common learnings, cultural experiences, occupational experiences, knowledge of community and governmental affairs?

Does the program meet the requirements of age-level, educational-level, interest-level?

INFORMING: Does the program stimulate the educational needs, awaken interests and desires for learning?

Does it contribute to the extension of community services?

Does the program contain information to meet an expressed need of the audience?

EXCHANGING: Are facilities provided so that the station can take advantage of the exchange of programs with other ETV stations?

EXPERIMENTING: Does this broadcast accept new ideas, new viewpoints, new inventions? Or does it merely ape the tried and proven techniques? Is the style of presentation interesting, vivid, entertaining - not dull and preachy?

SUPPLEMENTING: Is this a program which will fill a purpose as an additional teaching tool?

Is this a program not now being successfully done by other media?

Is this a TV program, or could it better be done on radio or by other media?

TRAINING: Is provision made for training of students? Are steps being taken to provide staff with knowledge of education, sound educational philosophy, and understanding of the scope of the medium of television?

GROWING: As a result of this telecast does the audience move "onward and upward" on the cultural pyramid?

What happens after the listener turns the dial at the end of the program?

These are the questions which the ETV broadcaster must ask himself if he attempts to meet the standards set

for him by the statements which have been presented in this study. It is obvious that no one program will meet all, or most of these concepts. The application of this list of questions as a program yardstick will give a measure of the degree to which any individual program meets these objectives.

CHAPTER IV

OTHER DETERMINING FACTORS IN PROGRAMMING
EDUCATIONAL TELEVISIONSome Audience Principles

There is no phase of the programming department of a broadcasting service which is more challenging and which offers greater potential for investigation than the area of audience measurement.

It is unfortunate that the greatest share of the work that has been done commercially is in the field of estimating numbers of viewers and listeners. Such information is obviously of interest to an advertiser on the morning after a big production, but there are other facts of equal interest and of much greater importance, especially to the educational broadcaster.

Lazarsfeld (30,p.19) has written:

Whether a person did or did not listen to a certain program can be established with a fair degree of accuracy. Whether he likes to listen to a specific program is a much looser question. On the one hand it can mean that he is enthusiastic...or that he listens because there is nothing more desirable available.

Again, Lazarsfeld (30,p.14) writes:

The term "mass" audience is applicable to broadcasting more than to other media, for it reaches all groups of the population uniformly. This is true only insofar as amount of listening is concerned...there are marked differences in what people listen to.

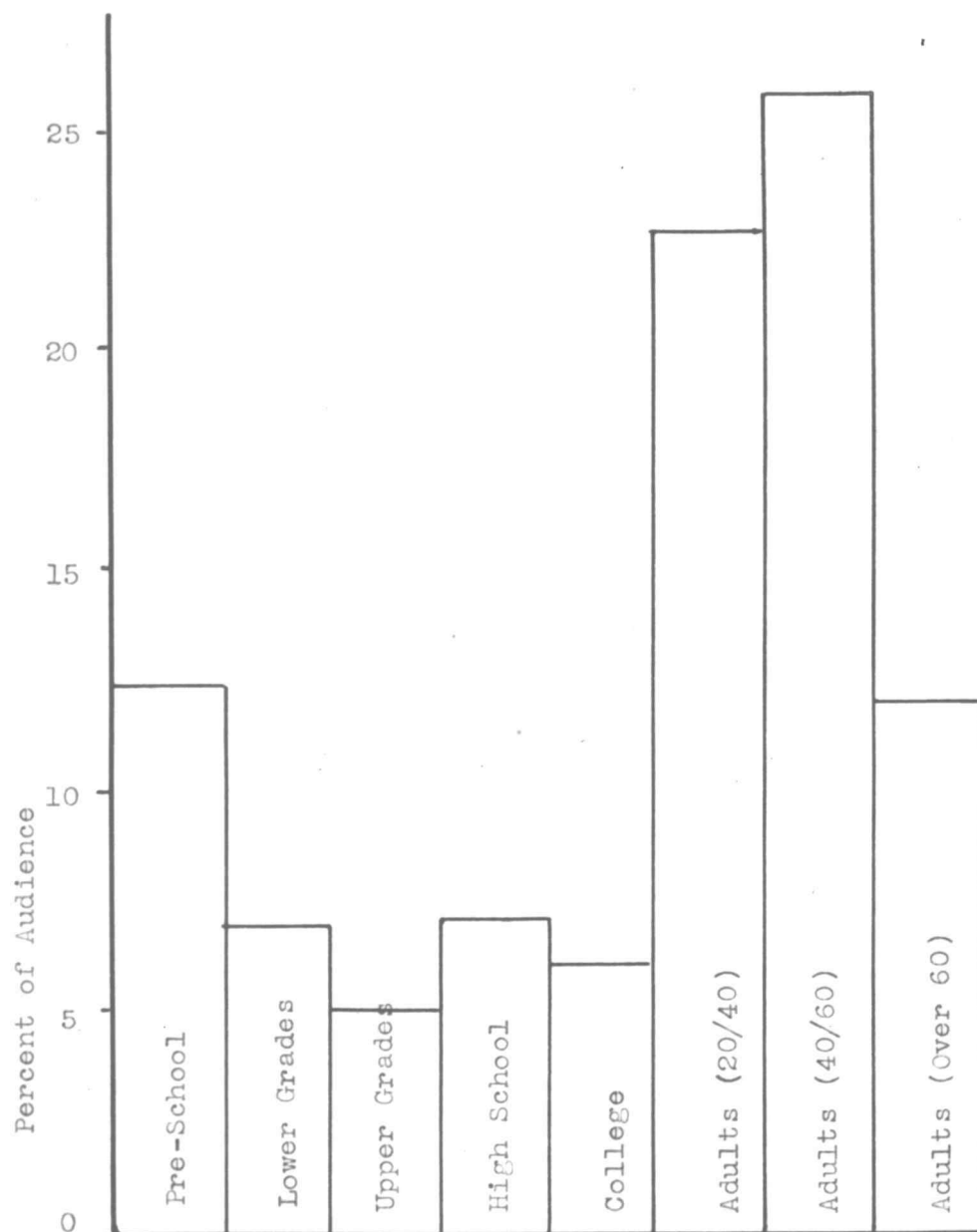
Studies have been conducted over the past three years in an attempt to determine the characteristics of a group of some 3,000 families whose names by request have been placed on a mailing list to receive publications from Oregon's state-owned educational radio station, KOAC. Reference is made to the 1954 study inasmuch as it tells the story of one segment of an audience (37,p.1) which has been attracted to educational radio: namely, the people who write to an educational broadcaster for materials and the bulletins which such a station distributes concerning its programs.

Age Factors

The data shown on the accompanying chart illustrates the composite audience which is available to the educational broadcaster. Figure 1 shows the age groups of 2,100 Oregon families comprising the 1954 KOAC Audience Study. Knowledge of the age distribution in the ETV audience is essential, just as it is in educational radio, for maximum effectiveness of the programming plans of the station. Program interests, level of understanding, words, concepts, social activities, common family activities, needs, and many other factors depend upon the make-up of the group.

It is interesting to note the very similar number in the first and second adult groups (the 20/40 and 40/60 age groups) and the very substantial audience segment over 60

Figure 1
1954 KOAC AUDIENCE STUDY
Audience Age Distribution



years of age. In many ways the first two adult groups have quite dissimilar interests and educational needs. In general, the younger adult group has the younger children, the 40/60 group the older ones. The differences these age groups face can be shown in the psychological area where the basic needs of the 20/40 group of parents will be in the problems of child psychology; the 40/60 group is more likely to be concerned with the problems of the adolescent, courtship and marriage, and the very real problems of being in-laws and grand parents. In similar manner each age group has its own individual health problems toward which the broadcaster has a responsibility to program.

Education

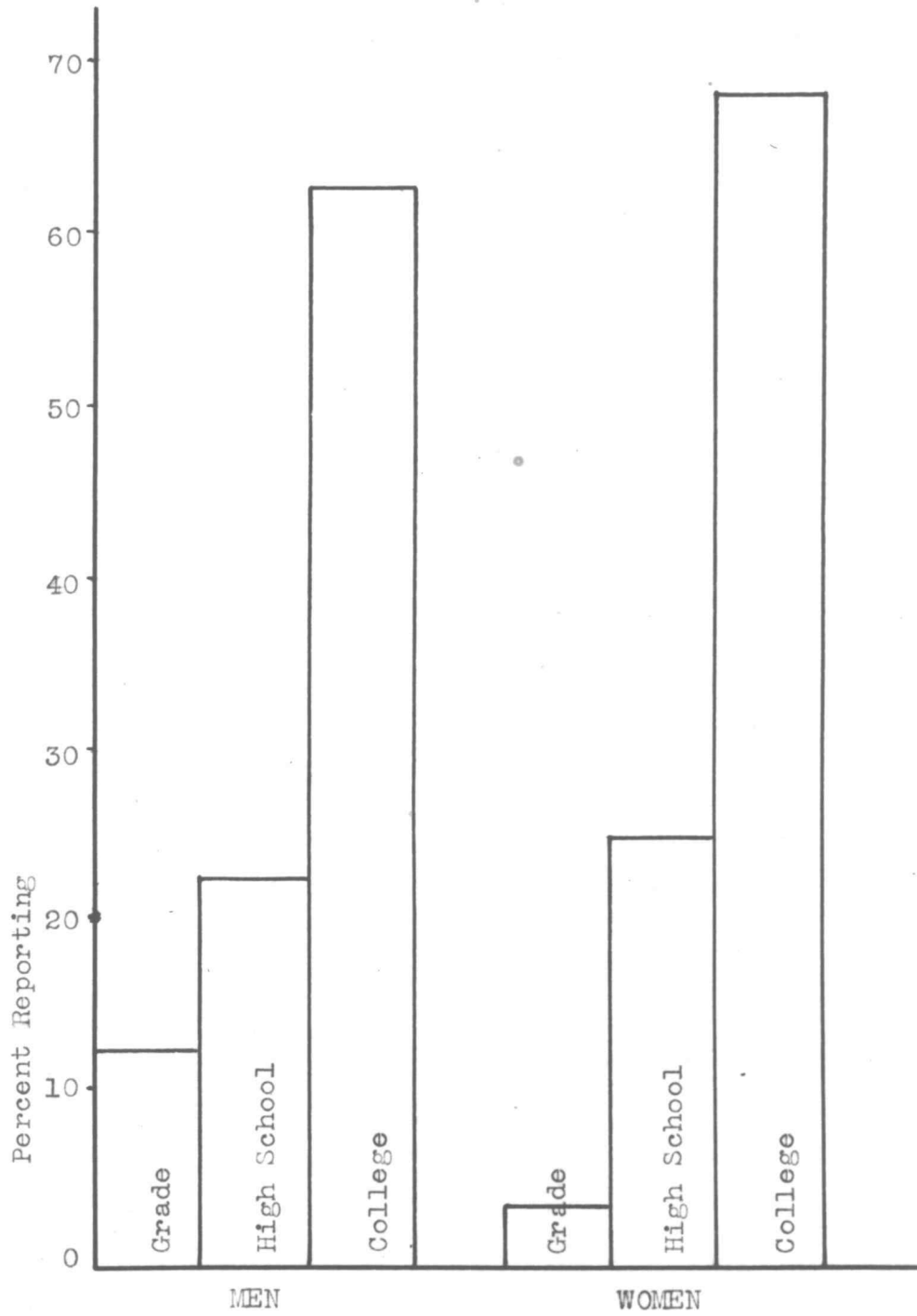
Figure 2 illustrates the educational age of mothers and fathers in the family groups. This result for the KOAC Study deviates from the traditional data of the average Oregon audience in the high percentage of parents with a college education. It is obvious that some of this deviation towards the college side of the graph results from the fact that such educated persons are attracted to program offerings of an educational broadcasting station. On the other hand it is significant to the ETV broadcaster, as it is to radio, that 35% of the fathers and 30% of the mothers possess no more than a high school education. This seems to be proof that educational broadcasting will

Figure 2

77a

1954 KOAC AUDIENCE STUDY

Education of the Parents



attract substantial numbers of persons with limited education. There is justification here for the prediction that additional numbers would be attracted to such positive programming if proper care is taken to have the broadcasts maintain content which meets the needs of this group, and presented in a manner they can grasp and understand.

It is of interest to note the small percentage of women with grade school education as compared to the men who terminated formal education at this level or below. Approximately three times as many men as women went only as far as the 8th grade in formal schooling. A number of these men with limited education married women possessing college degrees. In this audience sample women frequently possess more formal education than their husbands.

The problem faced by the educational broadcaster is to meet as many of the limitations of each of these groups as possible, developing programs within fields of their interests and abilities. The educational tools with which the ETV audience is equipped will vary, but basically large groups of these viewers have common problems and common interests.

Occupations

Indicative of the common problems and interests of audience segments are those possessed by individuals in

the different vocations. What types of programs will best serve businessmen? Labor? Men in the professions? Here are significant audiences for which programming needs must be discovered. Figure 3 is a diagram showing the major areas of employment of men in the 1954 KOAC Study. It is a recognized principle of testing that persons in the same vocation tend to have similar interests, likes and successes. This principle seems to give a basis for understanding the programming-needs of such segments of the audience.

Interests and Hobbies

What does the average family do with its spare time? A knowledge of family interests and hobbies will point toward areas of programming which will cut across many audience differences. The 155 hobbies represented in the answers to this question indicate many valuable programming ideas. Figure 4 indicates the ten most popular hobbies in 1954 for the sample studied.

Lazarsfeld points the way to a more intensive use of audience studies in educational television, in his book The People Look at Radio (29,p.42) when he writes:

A careful review of the present survey indicates that there are millions of people in this country who want more serious music...The market for serious programs seems to be both larger and more important than has been commonly believed in recent years.

Figure 3

1954 KOAC AUDIENCE STUDY

Father's Occupations

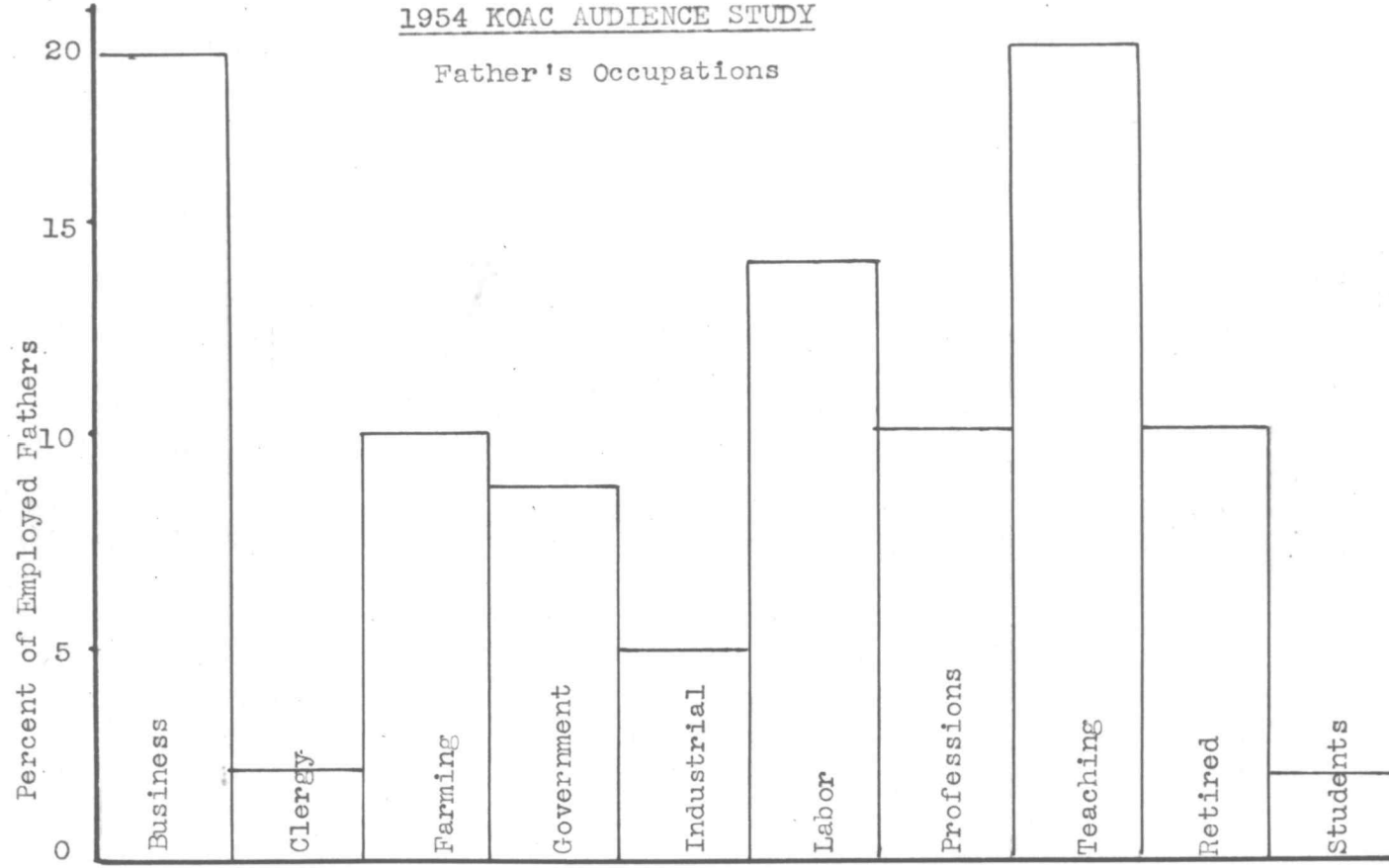
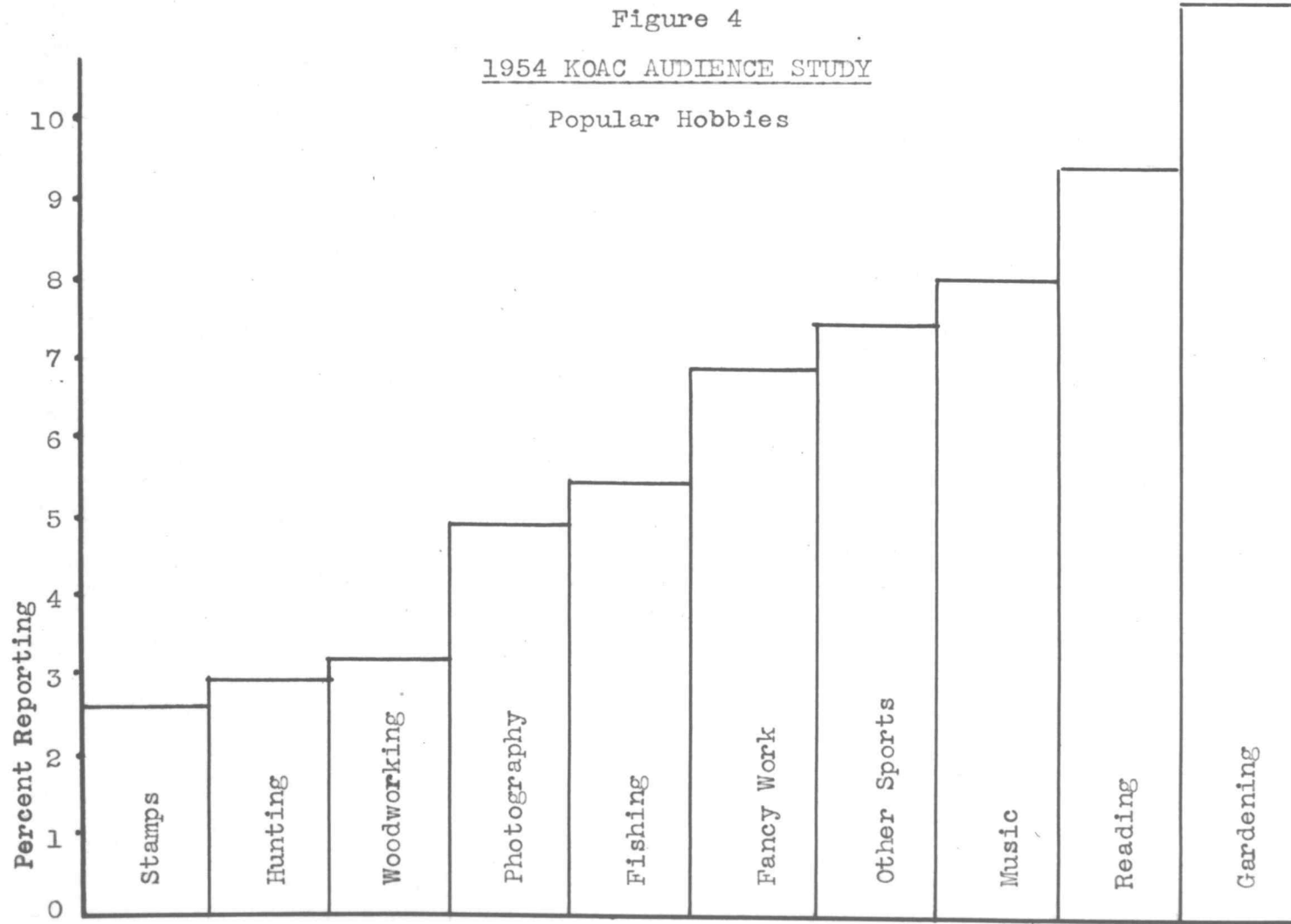


Figure 4

1954 KOAC AUDIENCE STUDY

Popular Hobbies



The educational TV broadcaster is obligated to study seriously methods and procedures involved in audience measurement for the most efficient use of the method of education which he has at his command. Audience measurement must become more than a mere counting of numbers. It must not become as Burrows indicated (29,p.40) "A rating is a figure which tells you the size of the audience, and which is completely inaccurate if it is too low."

Audience studies for the educational television broadcaster must tell what age and interest groups are potential viewers; what educational and cultural needs they possess; which individuals in these groups are viewing; the reasons which explain why the remaining persons do not view the educational programs; at what hours of the day they are most willing and able to view; and through what media they can best be reached with details of the telecasts in which they would find interest. Audience research must also find out "what happens after the dial is turned." The end result of educational broadcasting must be the positive action which the listener-viewer takes as a result of having heard and seen the program.

Program Resources and Obligations

Regulations of the FCC

Certain of the regulations of the Federal Communications Commission are among the determining factors in programming educational television and have a direct bearing on the resources available to the station. Only two of these will be discussed here, but it should be recognized that thorough study of the FCC Rules and Regulations is necessary before the program department proceeds very far in planning and operating an ETV station.

The FCC sets forth certain further requirements, beyond those already in effect for the broadcasting industry, pertaining specifically to the licensing of stations on the reserved, non-commercial channels. The pertinent provision of Section (3.621) of the Commission's Rules (12,p.3911) reads:

The prospective licensee must be a non-profit educational institution or organization...non-commercial educational broadcast stations will be licensed only to a non-profit educational organization upon a showing that the proposed station will be used primarily to serve the educational needs of the community; and to furnish a non-profit and non-commercial television broadcast service. ...An educational station may not receive fee or other consideration for television programs. Other institutions, educational agencies, or even a commercial organization may furnish programs to an educational station, provided that this is done without charge.

A further stimulus to cooperative planning for these stations can be found in the FCC Third Notice of Proposed Rule Making, issue March 21, 1951.(13,p.3079) Where there are many educational and cultural institutions applying for one educational reservation, the Commission wrote:

It is recognized that in many communities the number of educational institutions exceed the reservation which is made. In such instances the various institutions concerned must enter into cooperative arrangements so as to make sure that the facilities are available to all on an equitable basis.

Under this latter provision of the FCC all educational groups within the coverage area must work out a cooperative plan for programming for public schools, parochial and private institutions, higher education, libraries, museums, symphony societies, and others. All such groups must be served by the station, irrespective of the institution or the non-profit corporation which holds the ETV license. Such joint programming calls for a high degree of cooperation. Paul A. Walker, former chairman of the Federal Communications Commission, in an address before the National Association of Educational Broadcasters, April 18, 1952 (55,p.1) wrote:

The Commission, in granting these assignments, (he is speaking of the reserved channels) was impressed by the possibilities of cooperative planning and financing among the several educational institutions in large communities.

A Survey of the Area Served

For the purpose of this study it is assumed that we are surveying the program potential of the entire state of Oregon, though it is recognized that the resources listed here may not be complete and function merely as guideposts to any final survey which might be made.

Oregon's state-owned schools of higher learning, administered as they are under a single State Board of Higher Education take a prominent place in such a study of the potential for educational television. Then follow the rich resources of private colleges and universities, the public and parochial schools, Oregon's many departments of state government, municipal governmental departments, and the public agencies and cultural organizations. All would have access to educational television under the rules of the Federal Communications Commission.

If one were to start tabulating these resources, there would be listed:

State System of Higher Education:

- Oregon State College
- University of Oregon
- Colleges of Education
- University of Oregon Medical School
- University of Oregon Dental School
- Portland State College
- General Extension Division

Independent colleges of Oregon which have been authorized to offer teacher training in the state:

Cascade College
George Fox College
Lewis and Clark College
Linfield College
Marylhurst
Mt. Angel Seminary
Mt. Angel Women's College
Multnomah College
Northwest Christian College
Pacific University
Portland School of Music
Reed College
University of Portland
Willamette University

Public agencies and organizations:

Oregon Medical Society
Mental Health Association of Oregon
League of Women Voters
Oregon Congress of Parents and Teachers
Oregon Historical Society
Oregon Education Association
Federated Garden Clubs of Oregon
School Districts of Oregon
Public Libraries
Symphony Societies

All of these and many more would serve as program resources, including the many departments of state government, as well as groups and professional societies serving their membership and the people of Oregon.

Under the regulations outlined from the FCC, an educational television station not only has this array of resources toward which to turn for program material, the station also has the obligation to represent all such efforts within the area served.

Oregon's experience, like that in many other parts of the country, in planning for program development to

use these resources and fill ETV's responsibility, has shown the necessity of looking toward program supervision with the advice and counsel of some form of program advisory committee. The Oregon Citizens' Committee in 1953 suggested the following(42,p.1):

It will be the duty of this committee to meet with program department personnel to develop plans for serving these educational needs and to coordinate the programming potential of the institutions, school districts, and departments participating. It is hoped that this program committee will become an integral part of an Oregon Educational Radio and Television Council whose membership would include many of the citizen leaders and heads of civic organizations now known as the Oregon Citizens' Committee for Educational Television. Such a radio and television council could be of great service in guiding the future of educational radio and TV on educational and commercial stations alike.

Whether the council as outlined in the above proposal of the Oregon Citizens' Committee would be the final form for the council to take would be a matter for discussion and decision. The proposal does point to a very real and expressed need and an expressed concern of many citizens, namely: that some similar advisory group be provided in planning, no matter what institution or community organization became the eventual licensee of educational TV for Oregon.

This has been seen as a must in many other places as ETV development has progressed, of which the following

are only examples (39, pp. 1-8):

SAN FRANCISCO. To ensure the broadest possible cooperation with the community, a special advisory group was established at the outset.

HOUSTON. Many civic organizations are represented on the Educational Television Council of Houston. Before their non-commercial station went on the air these representatives cooperated with educators in an investigation of the program needs of the entire area to be served by KUHT.

SCHENECTADY: The Council on Educational Television with seventeen member board of governors, represents over 100 public, parochial, and private schools; colleges; state university extension services and other state agencies; libraries; museums; and historical societies in the surrounding areas. It is developing educational television programs.

PITTSBURGH. A citizens committee of 400 was selected and then broken up into manageable subcommittees to handle the leg work that had to be done.

The particular type of committee or advisory council organized depends upon local situational factors. It seems well established that most ETV developments need a variation on such an organization to assist with program planning and evaluation.

National Educational Television

The earliest planning for educational television recognized the responsibility of ETV stations to develop a method of program exchange similar to the radio network then in operation by the National Association of Educational Broadcasters.

The entry of the Fund for Adult Education, of the Ford Foundation, into the field of educational television with offers of financial aid to institutions and community groups brought the reality much closer. The FAE required that all stations which it aided with financial support must provide a kinescope recorder for the purpose of preserving the best of the station's creative programs for exchange with other educational telecasters.

This concept of educational television on a national basis became a fact with the establishment in 1952 of the Educational Television and Radio Center (11,pp.1-2 and 10).

A non-profit educational corporation chartered under the laws of the State of Illinois, the Center is governed by a 12-man Board of Trustees, leaders in the fields of education, business and civic affairs. ...Permanent offices have been maintained in Ann Arbor, Michigan, since September, 1953... On the program side, since May, 1954, more than 100 series totaling almost 1200 programs have been developed and acquired. These have come from 75 separate producers, both national and international in scope. ...On the distribution side, the service has grown from the original four stations to 15 with additional national coverage through the extended services and audio-visual distribution plans.

The ETRC attempts to distribute a balanced programming each week to member stations in 10 broad fields: History and Civilization, The Individual and Society, Public Affairs, Literature and Philosophy, Music, The Arts, The Natural and Physical Sciences, Child Interests, Youth Interests, and Specials.

The Center is not a producing agency itself, but obtains its programs from three major sources: (1) exchange among the educational television stations themselves, (2) existing educational film material, and (3) production under direct contract. The ETRC says of these three sources (11,p.6):

Simple exchange of programs might not always be consistent with educational objectives of a well-planned and integrated program service. Therefore the Center, in addition to exercising a high degree of selectivity, has made special efforts to condition and improve potential series and to encourage and strengthen quality programming by payment of a small honorarium for all materials selected for national exchange.

Another major source of programs has been the educational films already available for classroom and other use. To tap this source, it has been necessary to make extensive inventories of films available in this country and abroad and to work out legal and other questions of clearances for television. Several important series have been developed in this manner.

Perhaps the most fruitful source of programs to date has been through direct production under contract from the Center...Contractual agreements range from partial support to full support of the entire project. Such productions are either kinescope recorded or produced directly on film.

The Center has maintained a continuing plan to improve technical standards among the educational TV stations themselves. There is available to the stations a production handbook which sets the standards and requirements not only for any program intended for national distribution by the ETRC, but which can also

serve as a guide for local programs.

The Center received valuable support late in 1954 through a special grant which provided for technical consultants to all ETV production centers, as well as providing for the constant flow of programs to the member stations. Financing, initially from the FAE, was planned eventually for a self-supporting basis. In the early months of development of ETV the stations were going on the air with such minimum budgets for operation that any substantial payments to the Center for national programs were out of the question. Stations were serviced with programs for mere token payments. Gradually these annual payments for service have been increased to a maximum of \$7,500. For this amount the stations have received about one-fourth of their weekly schedules, with the attempt to furnish one program each week in each of the ten areas of content.

A recent and more substantial grant was announced to the Center by the Fund (27,p.1), guaranteeing foundation support through 1959, and providing a budget sufficiently large to project an offering in the next year containing twice as many hours of programs per week ,as in 1955.

It is evident that the Educational Television and Radio Center occupies an important place in the programming plans of an ETV station. For a relatively small sum

better than 25 per cent of a station's beginning schedule can be supplied through national distribution from the Center. These are fine educational programs, meeting the high production standards of ETV stations, and forming a solid foundation of national programming on which the local station can build its total educational structure.

Technical Facilities for Educational Television

Studio Limitations Upon Programming

In looking at this topic it should be recognized that the problem is approached in line with its relationship to programming guides. The reason is obvious, then, for not discussing the transmitter of the ETV station. While the size, power, and location of the transmitter will largely determine the number of persons who can see the telecasts, only as its technical design might determine whether the picture be technically good or bad on the viewer's receiver, and the total number of persons who will be in the range of the station, thus limited, will programming be affected.

The studios, and their associated equipment, on the other hand, have a direct bearing on the kinds and amounts of programming that can be done, as well as the production quality that can be achieved on those programs that are presented.

Included in the factors to be considered might be: studio size, number of studios, lighting facilities (design and flexibility as well as total amount), projection equipment, number of cameras, types of camera dollies and boom pedestals, audio facilities, portable equipment for remote telecasts, shop and facilities for set and property construction, storage space, dressing rooms, location of studios, offices, staff and production space, adjacency to radio (if both media are operated by an institution), and kinescope recorder.

Since a number of these are most obvious, let us turn to four basic installations:

FIRST STAGE: Projection equipment for film, slides and kinescope recordings - only. This is basic and minimum equipment in use in certain local commercial stations in minimum markets where income to the station from local accounts will not provide revenue sufficient to operate local live programs. Most of these stations will add live studios very quickly, especially if any competition develops within the area. Speaking to this point, Ben Greer, program director, WGVL-TV, Greenville, S.C. says (4, p.75):

I was told we would be a film and slide operation for at least a year...But as our on-the-air date approached, we began to hear rumblings of a merger from the competition. This led us to believe that competition was nearer than expected.

We immediately began to alter our plans and think in terms of live operation.

How studio space that is available determines what the program department can do is illustrated by Greer's following statement(ibid.):

Adjoining the control room was one lone, empty room...one hundred by one hundred and twenty inches!...our eyes fixed on this over-sized closet...it simply couldn't be done, but somehow it must. I asked for twenty-four hours to think about the situation. This is what we finally came up with...bed sheets, steel rollers, a midget piano, a suspended 77-D microphone, thirty-five Flood-40 light globes, and a mirror two by three feet...shooting the camera through the glass from the control room.

From this description it is obvious that live studio operation, even of the most limited sort, rapidly becomes a necessity. With only projection equipment for slides and film, the station is limited on any local programming to the little that might be done with a motion picture camera. It appears folly for an educational station to consider such a minimal operation since the fundamental approach is that of extending the campus to all the people of the area served, making use of the rich resources among its own faculty. This could not be done without live camera facilities, excepting in the most meager and limited fashion.

SECOND STAGE: Projection equipment plus a single camera chain and one studio. This step is definitely an improvement over the first stage which had no facilities

for live studio programming. With this single broadcast-camera, programming would be possible from the campus, though limitations are definite and many techniques could not be used if a single camera is all that is available. Programs must be extremely simple in format and design, and will tend to lack the variety of camera angles and viewing positions which the public has come to expect in television production. Greer (4,p.78) writes:

...we made some twenty-five slides. These were used as "crutches" to get from one scene to another. This then is the way we brought our viewers a service with only one live camera.

Ward (4,p.154) comments on such limitations:

...we still have only one camera; so we had to learn how to pan or switch quickly from our newscaster to a picture or prop. Almost immediately we added a Zoomar lens to our live camera. This piece of equipment works wonders...by careful use a real production can be accomplished.

Not only are there many limitations within a program using a single camera, but the problems are multiplied should it be necessary to go from one live program to a second without a film in between the two. Proper use of good viewing hours for a station's own creative programs is thus restricted in single camera studio operation.

THIRD STAGE: The third step is merely the addition of a second studio camera, giving the program department full projection equipment and two studio broadcast cameras and their associated equipment. This equipment would be

considered the minimum facility to be provided for adequate production. The limitation, here, is still in programming "back-to-back" on live telecasts which follow one another on the schedule. It is necessary to insert film or slide sequences between two live studio performances if sets and staging need to be changed extensively. The limitation can be overcome by the design of flexible sets that can be quickly changed (Even the bedsheet backdrops on steel rollers mentioned by Greer) and which might permit alert directors to change from one set to the next in the fifteen seconds between broadcasts.

There is an added limitation in a two-camera studio for educational television, if the cameras are of the portable type and are expected to be moved out on remote location for special events: sports, convocations, lectures, and concerts. Rogers (4,p.14) describes this problem:

We were able to undertake a single camera remote where we could leave one camera in the studio... and even did a football game with the other...The first program following the football game was a quarter-hour live studio one-camera show. By the time the other camera was needed again, the truck had arrived with it.

If both studio cameras must be taken out for use on a special event, and there are many times when educational television programming will demand their use in this fashion, then the station will have to resort to

film projection to remain on the air with a continuous schedule.

FOURTH STAGE: This stage is merely an elaboration on the multiple-camera studio installation, making for greater variety in production and more flexible programming. Three or more studio cameras, two or more studios, and complete projection equipment will mean that the station schedule can be more flexible, since studio conflicts in rehearsal and on-the-air schedules will be reduced as studio facilities are increased. It seems obvious that multiple studios, so arranged that cameras can be moved between them and used most efficiently in programming from these studios, will contribute to the over-all potential of the ETV station.

Criteria, involving a series of questions regarding studio facilities, might be set up as follows:

1. Are the studios large enough to adequately handle the programming that is desired to be done?
2. Are there a sufficient number of studios? If only one studio is provided, is it large enough to accomodate several different sets and productions at the same time?
3. Is there sufficient rehearsal space?
4. Is the lighting adequate and sufficiently flexible?

5. Does the projection room provide for slides, film, and kinescope recordings?
6. Does the equipment provide two or more cameras per studio?
7. Is a mobile unit provided?
8. Are at least two of the studio cameras of the portable type? (If no remote unit is provided.)
9. Is storage space for sets and properties adequate? Is it adjacent to the studios for ease of use?
10. Are good shop facilities provided for set construction?
11. Are studios adjacent to offices, film room, dressing rooms?
12. Is adequate staff and production space provided?
13. Is kinescope recorder provided so the station can exchange programs with other ETV stations?
14. Is the space arrangement such that additional space can be allocated to ETV as the programming service grows in the years ahead?
15. Is ETV space adjacent to radio studios and offices for close integration of the two services? (Where the institution also operates educational radio.)

Facilities Provided to Existing Stations

No attempt has been made to survey all of the existing educational TV stations as to the studios provided

and the equipment with which they are supplied. Any such survey would become out of date before completion of the study, so rapidly are the stations adding to the first meager facilities with which many of them began their programming.

The pattern seems to follow a theory outlined by Hubbell (22,p.51):

Because a great many programs are going to be needed in television schedules, and because personnel and facilities usually will be a premium (if for no other reason than because broadcasters, unlike motion-picture producers, will always try to do things as inexpensively as possible), there are certain faults now common to radio broadcasting which can easily become implanted in television.

Educators, in general, in developing educational television have conceived an over-all plan which they hope someday to complete, but first steps are made slowly with minimum equipment and space, and minimum expenditure of funds. As rapidly as possible the additional equipment and studio space contained in the original plan should be added, and staff and program schedule expanded.

The Federal Communications Commission made this graduated scale of operation possible for ETV stations when it provided (12,p.3911):

Non-commercial stations are not required to operate on a regular schedule and no minimum number of hours of operation is specified. However, the rules provide that the hours of actual operation during the license period shall be taken into consideration with reference to

renewal of licenses for these stations. The Commission would be concerned if a channel is permitted to remain idle for long periods of time, especially if there exists an interest and demand on the part of others for the use of the channel.

This provision of the FCC makes it possible for educational stations to begin with limited daily schedules and gradually to expand to regular operating schedules as staff members are trained, and studio facilities completed. On the other hand, the FCC ruling places a measure of control on such limited operation in causing the station program to be subject to review at license renewal time.

The Joint Committee on Educational Television in a compilation of institutional facilities (23,pp.1-10) cites the following, among others, as installed and in use in August, 1955:

University of Alabama. One TV studio 30' x 23', located in the Department of Radio and Television; two cameras; film projector; kinescope (on order).

University of Illinois. Single studio 50' x 60'. Three image-orthicon cameras; vidicon film chain; kinescope recorder.

Iowa State College. Two studios, 40' x 80' and 30' x 40'; six image-orthicon cameras (four field cameras and two studio chains); two film projector chains (each with two projectors and two slide projectors); kinescope

recorder; rapid film processor.

University of Iowa. Two studios, 98' x 50' and 65' x 36'; three image-orthicon cameras; film chain; rear projection equipment; kinescope recorder.

Kansas State College. Single studio, 30' x 40'; one image-orthicon camera; projector for film and slides.

University of Michigan. Single studio, 44' x 44', three image-orthicon cameras; slide, film, opaque projectors; kinescope recorder.

Michigan State College. Three studios, 40' x 50', 40' x 50', and 15' x 18'; four image-orthicon cameras; two film chains; kinescope recorder.

Syracuse University. One studio, 31' x 22'; three image-orthicon cameras; film, slide and opaque projectors; kinescope recorder.

University of Wisconsin. Three studios, 15' x 32', 15' x 22', and 10' x 12'; three image-orthicon cameras; two film projectors and two slide projectors; kinescope recorder; film processing unit.

In this list of representative TV installations in educational institutions, one sees studio development stages from two through four. In no case is an institution providing only film and slide projection equipment as outlined in the first stage. This limited equipment has been considered sub-marginal for educational television. A single studio equipped with image-orthicon camera, plus

a film-camera chain, is considered the absolute minimum for education's use, with the added provision made for early acquisition of additional cameras and studio space.

Recommendations of Consulting Engineers

Arthur Hungerford, electronics engineer, special consultant to the Joint Committee for Educational Television (38,p.3) writing for the National Citizens' Committee recommends as basic studio facilities:

Studio, 45' x 45'; two camera chains and film and slide projection camera; all associated sound equipment; lighting; mobile unit. Cameras to be of the portable type for dual use in studio and on remote location for special events.

The Radio Corporation of America, in its planning for ETV (48, p.12) recommends:

Group A Stations: Single studio, one camera, film and slide projection equipment.

Group B Stations: Single studio, two camera chains, film and slide projection equipment.

Group C Stations: Three studio cameras, also for use on remotes; film and slide projection equipment, film processing unit.

Group D Stations: Two or more studios; five cameras for studio programs and remotes; slide and film projection equipment; film processing unit.

Jerrold (20,p.7) writes:

Studio size should be large enough to allow freedom of motion in production of programs and should include plans for expansion...proximity of scenery and prop storage, scenery and art rooms, and

artist's dressing rooms. Consideration should be given to space for audiences...rehearsal rooms are advantageous in most operations.

Callahan (6,p.58) adds this comment:

Basic station equipment includes...a studio with two cameras; sound;lighting;film projection equipment; a kinescope recorder; a processor for finishing local newsreels and kinescopes.

Personnel Resources for Educational TV Programming

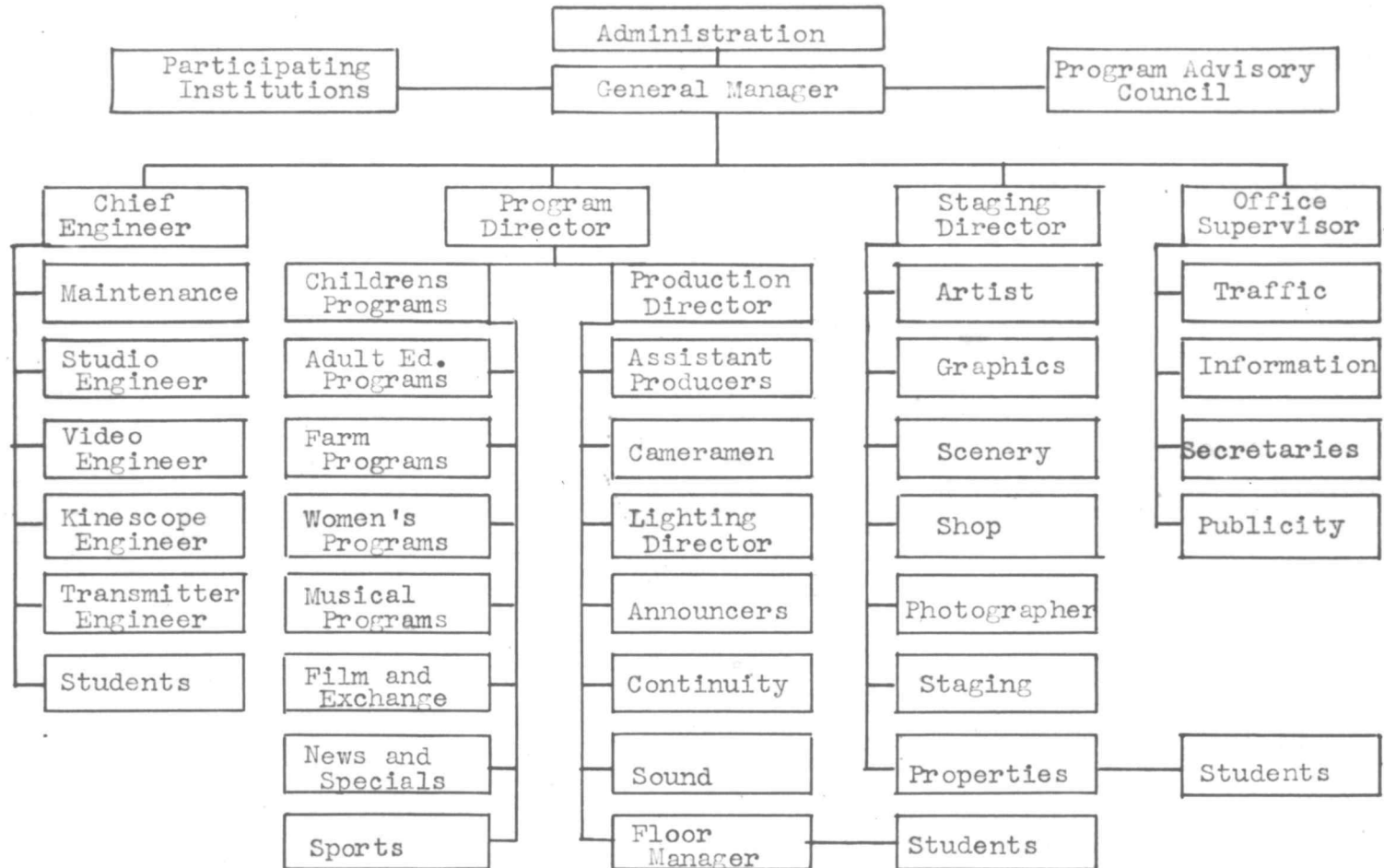
Requirements of a Station Staff

The staff assigned to an educational television station programming department, with each individual member's capabilities and qualifications, as well as the actual number of people employed, will largely determine the extent of the programming such a station will do.

For the purposes of this section, it is assumed that each person assigned will be fully qualified to carry out the specific duties of the position. We will look at the different jobs which it will be necessary to fill on the ETV station staff, and which affect the programming that will be done. Figure 5 indicates the requirements of a station staff in actual positions to be filled, though the organization may differ in individual planning.

It shows that there are a number of major areas in which authority must be delegated, including: programs, engineering, staging, and office details.

Figure 5. ORGANIZATIONAL CHART FOR EDUCATIONAL TELEVISION



Engineering procedures seem obvious. Positions here include those tasks which are concerned particularly with the electronic phases: transmitter operation and maintenance, the several studio technical jobs, operation of the kinescope recorder unit, and the mobile unit if the station possesses one.

In programming there are two major areas, including: the positions involved in the production of programs, and those involving responsibility in various subject-matter areas. Whether these latter positions are merely jobs of coordinating the efforts of resource people on the faculties, or whether they are specialists themselves in content areas, depends upon the philosophy of the administration in organization of the station staff. The chart in Figure 5 indicates these positions as occupied by specialists, fully qualified in their own right to program in these areas of program content.

The department shown as "staging" in Figure 5, with a staging director responsible to the general manager, coordinates all of the miscellaneous staff positions dealing with set design, properties, art work, graphics, set and property construction, as well as the actual staging for productions.

Office procedures, not directly concerned with program production, including secretarial staff, bookkeeper, traffic,

information, publicity and publications, form a fourth major division.

It is seen that there are many jobs in educational television. The requirements of the staff are unique to this medium of communication in the diversity of the jobs and the number of persons needed to create even a single successful ETV program. There are interesting and sometimes important differences between the organizational procedures of the several ETV stations. Appendix M contains the organizational charts for nine educational TV developments as published by the Joint Committee for Educational Television.

It would appear that early in the ETV development an organizational chart is necessary, adapting the television planning to the specific problems of the local area in such ways as methods of financing, and administrative philosophy of the institution or association under which the station is licensed. The lines of authority and of advice and counsel which are established will have a great bearing on programming policies and plans.

It is not meant to infer in developing these charts that an ETV station must employ full-time professional persons for all of the jobs indicated on the charts. These are the positions to be filled, but the number of full-time people who will share these jobs will depend upon

the amount of creative programming that is done and the actual hours of station operation. It has already been established that ETV stations usually start small, with limited daily program schedules, gradually building toward longer broadcast schedules as budgets, facilities and trained personnel permit.

Many of the positions will be filled by students in a training program on the campuses, and by volunteers from the area which the station serves. Lacking an institution of higher education in the immediate vicinity which is training students for television, arrangements are also made for a type of apprenticeship class in the ETV station itself, thus assisting in filling the jobs listed for a station staff.

Basic to the television development, however, is a full-time professional staff. Two authorities in the field write to this point:

Wegener (9,p.204) puts it this way:

I don't believe TV can be run by several people from several departments. A professional full-time staff must be hired and that might just as well be faced from the beginning.

Cumming (ibid.) writes:

Taking faculty men from various departments to create TV programs may work if the operation is not too extensive. Wegener speaks from his experience with WOI-TV (Iowa State College), a large-scale operation. His advice, nevertheless, may apply to many institutions.

These men are saying that educational television cannot be superimposed upon a teaching faculty. A full-time staff, with time and efforts devoted entirely to broadcasting, and with professional training in the use of the mass media for educational purposes, is essential.

Faculty Participation in ETV Programming

There are two interpretations to be placed on the responsibility of the faculty member of a state educational institution to teach. The broad interpretation is that the state is the campus, and the faculty member's responsibility is to share in this state-wide instruction for all the citizens. Previous to television, this interpretation has meant that the instructor travelled thousands of miles during the year to meet classes in whatever part of the state a demand for that particular course existed.

The narrow interpretation, referred to above, is that of restricting or limiting the teaching program to the instruction of students actually in residence on the campus.

In general, the institutions which accept the broad definition of educational responsibility are those which have taken the leading roles in educational television. Here is a communication medium through which the faculty can reach all of their state-wide pupils wherever they

reside, without the thousands of miles of travel heretofore necessary.

Wegener (9,p.202) writes:

Colleges must realize TV...must become a fully-integrated part of teaching. Its impact is so great that the thing has to be integrated into the whole college community.

Four major problems present themselves at the point of faculty participation in ETV programming: (1) selection of program content in keeping with the needs of the audience; (2) selection of qualified personnel; (3) compensation for time devoted to broadcasting; and (4) integration of the telecourse offerings in the curriculum procedures of the institution. These four problems will be discussed in this order. Henry would add a fifth problem when he writes (13,p.5):

We can't expect appropriating bodies, foundations and philanthropies to provide the resources for educational television on a wide scale until the rank and file of teachers at all levels believe that it is important to do so.

Bell (2,p.2) adds:

It is hoped...that professors will approach this experience not with resigned acceptance, but with a realization that there is a new opportunity for the extension of mass education far beyond anything previously envisioned. Today, colleges and school systems throughout the country are endeavoring to realize the educational potential of the television medium.

In setting the stage for a discussion of college and university adult-education telecourses, Callahan (6,p.151)

poses these questions:

Should state colleges and universities use television to extend their services to all the citizens of the state?...Will professional schools soon be offering refresher courses to graduates in their homes and offices?...Here lies a vast new learning potential deserving the considered thought of everyone.

Smith (51,p.7) describes the first of these major problems of selection of programs for the audience:

I have tried to give you a teacher's impression... that we are in danger of slipping into a philosophy of education by systematic instruction, for those who want to learn, as an arm of the schools, and should ask ourselves carefully whether we really intend this in place of a philosophy of education by varied instruction, as an arm of the total community of which we are a part, for those capable of learning.

For the purpose of our discussion of education at the adult level and for which, in largest measure, college and university faculty members will be recruited as program resource personnel, let us define this post-school education as of two types: (1) courses in higher education which parallel the usual extension work of the institutions; and (2) informal education in a highly varied field of interest which has a much wider audience.

Dunham (52,p.3-4) in writing of these two types, points out:

The experience which we now have in evaluating telecourses betrays the fact that there are actually three audiences for these courses -- (1) those that take the course for credit; (2) those that are interested enough to follow the course with printed outlines and supplementary

materials; and (3) (and this is by far the larger audience) those who merely are attracted to an individual program and may not continue to be viewers to the series unless their interest is aroused and maintained....Ten areas of human interest, perhaps more, are areas acceptable for informal adult education. They are: the home, school, church, industry, government, military, arts, science, communication, transportation, health, recreation, and philanthropy.

It is of note here that the faculties of higher education have the personnel within their number who are authorities in all of these fields and thus ETV has the resource personnel at hand for such programming efforts.

In line with the second problem listed, the question becomes: Which faculty members?

Cumming (9,p.218) writes the following:

Perhaps no school in the country will be able to turn out more than a handful of really top-notch TV personalities...After a little experience, and with the right type of program, a good percentage of faculty people should be able to do a reasonably good job on TV...Faculty people at most institutions, once they are sold on the idea of appearing on a program are usually eager to cooperate with the TV crew.

When asked if his faculty objected to donating time to the medium, a southern educational telecaster replied: Yes! Yes! Yes! Mostly from those who are not effective TV teachers. They use the argument of the time involved but it is merely an excuse. Some of them are worried about doing something for which they are not paid. Others couldn't produce a good show if they had forty hours to prepare it.

Wegener (9,p.201) adds:

Putting all gimmicks aside - props, sets, everything - the element that outweighs all is the

skill of the person doing the show. This is important to colleges. Showmanship is suspect in the academic world...Showmanship is: a knowledge of people, an interest in them that goes beyond the subject matter. It's a sense of harmony and balance. It's vitality, and it's a desire to communicate.

The ETV broadcaster will find it necessary to set up yardsticks with which to measure the effectiveness of faculty members in teaching by television, whether in formal classes for credit, or in the much broader field of informal adult education. Perhaps, for many, it will be necessary to instruct them "under fire". Having once told them what takes place within the studio, ETV may find the most effective television teachers only after studying audience reactions to their efforts before the cameras.

The third problem listed at the beginning of this section dealt with compensation for time devoted to broadcasting. Is the faculty member to be considered as a program resource person only if he is willing to donate his time over and beyond his regular teaching load? Should he be given recognition in that teaching load for the time devoted to television? Should he be given recognition in rank and annual salary for over-time TV teaching? Should he be paid in a fashion similar to payment for an extension night class?

Cumming (9,p.202) adds the following on this general topic:

There are many faculty people who are genuinely reluctant to participate in television. They see the medium as voracious, full of pressure, time-consuming, and possibly even an eventual threat to their jobs. If full faculty cooperation is to be obtained, administrations must assure their faculties that their jobs are secure and that they will be paid adequately or otherwise remunerated, perhaps through a reduction in teaching load, for their participation on television.

Poole (9,p.203) writes on faculty participation:

You've got to give your people time, more financial backing, and complete backing in everything. You just can't say, "Professor Jones, you'll be in charge of a television program in addition to your teaching duties." Administrators have got to realize that their people must be free in order to do TV work.

The four alternatives for the institutional approach to compensation: donation, recognition, on teaching load, increase in rank and annual salary, and overtime pay, all have their advocates. If television is to be guided by the experiences in educational radio most faculty personnel will donate their time. This will definitely limit their participation. But there are examples of the other alternatives. The answer will not be found in this study; rather the recognition of the fact that whichever course is taken will in large measure determine the extent to which faculty members will devote their time and their efforts to educational television.

Perhaps the course which integration of the TV teaching takes in the curriculum procedures of the institution will help to answer this question. If, as was earlier emphasized in the discussion of closed-circuit teaching on campus, these courses for regular college credit become a part of the institutional contribution to an ETV station as well as being on closed-circuit, then the problem of recognition on academic load will be automatically solved. It is frequently pointed out that schools which pay or otherwise remunerate their faculty for TV work seem to have little trouble getting them to participate.

If it is true that more than four million Americans are seeking an education in their spare time, and seven million attend demonstrations by county agents, there apparently is no dearth of potential adult students for college courses by television. It is to fill these expressed needs that formal course work by ETV can be planned. Credit registrants may be required to do a full amount of homework and to take examinations. Some course work by TV calls only for examinations. In the comparisons that have been made between on-campus resident instruction and instruction by TV, the television enrollees have in general made the better grades. Results show that few fail the television courses. Current closed-circuit

studies indicate a similar trend. Students taking a campus course in the traditional classroom fashion do no better, if as well, as students taking the same subject from the same professor by closed-circuit TV.

Merrill (5,p.) recently announced:

Thousands of Americans are using educational television courses to work towards college degrees and the movement is now out of the experimental stage.

According to the study by Merrill, enrollment was 4,016 persons in 1954-55, with 620 for college credit. An estimated 372,000 additional viewers watched the telecourses. Institutions are beginning to realize the fact that the new medium of communication is actually being used for college credit and that it will become increasingly necessary to recognize such course work by television as study toward a college degree. To many faculty personnel this concept comes as almost an academic revolution. This, too, becomes a programming problem facing the ETV broadcaster. Are his telecourse offerings recognized as a regular part of the institution's educational program? Or are they merely additional reference material made available to persons who enroll for the regular correspondence courses, for which the outlines, references, and examinations have been prepared without relationship to the telecourse? The institution's television teaching

will be materially strengthened as TV courses are integrated into curriculum procedures, not merely superimposed upon them.

The Use of Students as Assistants

Reference is made to Figure 5 in which staff positions in an ETV station were charted. Each of the major departments of that organizational chart provided for the help from students in the TV training program. Reference was made to the fact that ETV stations operated by community associations, and which did not have access to such a pool of student help, must work out some form of apprenticeship-training program of their own.

By the nature and the size of the television station staff, operational and production costs would be much more difficult to meet should students not be available. Students in the training program are one of the reasons why education can operate television, as it does educational radio, on much smaller budgets than commercial stations find possible.

In general, students are handled in ETV stations just as though they were paid members of the regular staff. They perform all functions according to their abilities and the stage of their training.

It is common practice for educational institutions to provide courses at both undergraduate and graduate

levels, through regular instructional departments, to provide this constant pool of students for the ETV staff.

Other Available Persons

It has been recognized previously that educational television becomes a community project, tapping the resources of the entire area which the station serves, even though the station itself may be licensed to a single educational institution in the area.

In like manner, these stations draw upon the entire community for volunteer help; whether it be membership on a program advisory committee, a volunteer team to raise annual membership contributions to help defray programming costs, program talent to appear in front of the cameras, or production talent behind the scenes.

The ETV staff will find community volunteers of any age: pre-school, elementary, high school, and adult - all valuable contributors to the staff and to programs. The development of such talent is one of the guides to ETV programming.

Cost Factors as They Affect Programming on ETV

For the purposes of this study the finances involved in educational television are divided into three divisions: (1) technical costs involved in initial construction of the station, including transmitter and studio facilities,

(2) operating expenses involved in the annual budget of the chief engineer, and (3) programming costs which are the annual budget of the program department. In this section is shown the way station budgets affect the programming of an ETV station.

Technical Costs

It has already been indicated in an earlier section of this chapter that studio facilities provided for the use of the program staff have a great deal to do with the opportunities for programming. Lack of adequate equipment and space will materially reduce the quality and the quantity of live studio-programming which the staff can accomplish.

It is that portion of the first technical costs which is allocated to studio facilities which will guide the program staff in planning for actually going on the air.

The Radio Corporation of America (19,p.12) has divided TV stations into four groups, "A", "B", "C" and "D". This is a classification which roughly conforms to the division of ETV stations into stages 1 through 4. Group "A" stations have limited facilities for live studio production with a single camera and one studio; Group "B" stations possess a single studio and two cameras;

Group "C" stations are equipped with more elaborate studios, three cameras and facilities for remote telecasts; Group "D" stations include two or more studios, a minimum of three cameras, remote equipment, film processing, and kinescope recorder.

Costs which have been given for these four basic groups by RCA (ibid.) are only suggestive of the range into which individual layout costs might be expected to fit. Equipment costs for studios, only, in the above plan, include: Group "A" studio, \$67,300; Group "B", \$86,000; Group "C" about \$180,000; and Group "D" studios at \$230,000.

When one examines the limits of the programming which can be done from a single studio with one live camera, as compared to the extensive programming possible with multiple studios and three or more cameras, film processing equipment, kinescope recorder and mobile unit, it is readily seen that technical costs of studio installation have a direct bearing on the guides to ETV programming.

Operating Costs

Basic facts of actual operating costs (and similarly for programming) are difficult to obtain on educational television. There are almost as many different

ways of computing these costs as there are educational groups planning and operating in ETV. Some stations operate with a few full-time employees and many students in training in the engineering school on the campus; others with volunteers in apprenticeship training programs. Some stations absorb certain of the costs in other departments of the institution, insofar as published cost estimates are concerned. Still others combine educational radio and television staffs for the most efficient use of personnel and station funds.

Callahan (6,p.65) writes:

When television activity is a total effort of a large university excellent arrangements can be made through the various departments by shifting personnel to permanent positions in the television development and drawing upon departmental budgets already set up...Operating costs are minimized in educational television by the use of teachers and students and supervisory personnel and present a very different financial-budgeting problem from that of commercial stations.

The very arrangements which make television less costly for education also make it difficult to obtain accurate budget figures. The flexible arrangement on hours of station programming also add factors such that no two ETV stations have budgets which even approach similarity.

Engineers of the Radio Corporation of America have compiled some of these actual budgets and issued

information to guide groups in the ETV planning stage. In view of the limitations just stated these figures are at best rough estimates to be adjusted to suit local conditions.

J. Herold, TV station planning consultant (48,p.10) writes:

The following operating costs shown are made on a 4-hour, 8-hour, and 12-hour, six-days-a-week basis. Since a number of stations will operate on a short schedule when first starting, the 4-hour schedule will be useful in many ways. Later on the time can be lengthened as plans change. Figures on operating costs are based on educational TV operating experience plus data compiled from a study of operating costs of other stations with like conditions. These costs are based on a station using equipment as shown in RCA group "B"...a single studio with two live cameras and one film chain.

<u>Operating Expenses</u>	<u>4 hours</u>	<u>8 hours</u>	<u>12 hours</u>
Employees	\$24,000	\$44,900	\$62,000
Transmitter Supplies	10,400	15,100	21,700
Studio Supplies	8,150	14,900	21,850
TOTALS	<u>\$47,900</u>	<u>\$74,950</u>	<u>\$106,450</u>

It is evident from these figures that budget allotments available to an ETV station will in large measure determine the extent of the programming that is possible for the community. The above total estimates for technical operation range from 38% of the total budget for the 4-hour-per-day station, up to 42% of the 12-hour-per-day figures. This percentage will tend to rise as program production develops ways of building low-cost features for educational TV, since the costs involved in operating

expense are, in large measure, determined by the actual time which electronic equipment is in use. Tube replacements and general maintenance depend basically on hours of use.

Programming Costs

This discussion of programming costs is introduced with the second portion of the budget study cited above by RCA Tv consultants(ibid.):

Program expense can show a large variation in estimated budget, depending upon production plans and available talent. Production talent, with ability to plan and coordinate programs with proper imagination, will be an important factor in the cost of production.

<u>Programming Expenses</u>	<u>4 hours</u>	<u>8 hours</u>	<u>12 hours</u>
Administration	\$21,400	\$25,990	\$26,900
Program Staff	39,200	59,700	73,800
Supplies	14,100	24,650	40,900
TOTALS	\$74,700	\$110,250	\$141,600

As indicated in the discussion of technical costs, Jerold (ibid.) has estimated program costs at from 61% of the total annual budget on a 4-hour-per-day basis, to 58% of the 12-hour-per-day total.

The problems of fund-raising, while extremely important to an ETV station, are not pertinent to this topic, except as the time and efforts of the staff must be devoted to problems of selling subscriptions or taking donations in annual money-raising campaigns, when

their efforts should be devoted to problems of actual programming. Problems of money-raising, particularly in a community-type ETV station, are the subject for separate study and should be a separate responsibility in station organization.

Educational broadcasters have become ingenious at stretching the budget dollar over added hours of live studio programming. In the face of statements from commercial broadcasters that educational budgets are unrealistic, ETV programming continues to be done on annual amounts far below the "realistic" estimates of the commercial operations. The University of Houston illustrates a portion of the answer(39,p.8):

At KUHT, about 150 student volunteers are used, signing up for specific work, which may be done under the chief engineer or the head cameraman. The production director uses at least a dozen of the students training in TV production. The art director uses student talent crews entirely, even in building the basic sets for the backgrounds for the station's many live programs. Houston stores furnish all the props for each setting. The Houston Chronicle donates daily AP news photo service and a leased wire. With lively community support and student training of this practical nature, it is possible to keep operating costs of noncommercial stations far below typical operating budgets.

Cumming (9,p.209) writes:

As to costs, most programs telecast by educational institutions are produced in such a variety of ways that it is almost impossible to name the cost for any particular show. TV programming may be the result of work for which the participants are not paid or which they do as a supplement to

their regular work. It may include appropriation of materials already available, the use of donated transportation, the services of volunteers, and the like...Despite the fact these are hard to estimate, there are a number of examples:

Syracuse University estimates average actual cost per program (½-hour telecast) at \$175.

University of Florida shows costs run from \$50 to \$200.

University of Utah estimates \$70 per half-hour for one series, \$10 per program for another, no cost at all for a third.

Brown University estimates \$125 per half-hour.

Michigan State indicates \$74 per 30-minute program.

Iowa State College quotes one series at \$219.

University of Minnesota prepared ten one-hour broadcasts by the Minneapolis Symphony Orchestra at \$1370. (\$800 of the amount was for musician's salaries, \$300 for erecting and tearing down the platform.)

Johns Hopkins reports telecasts as low as \$5.

It is evident from the above that there are no average figures which would have a great deal of meaning. Referring to the annual operating budgets quoted previously for the 4-hour day, the average hourly rate for the year's programming would amount to \$95.00. In actual practice, of course, some programs would cost far less money than this average amount; others would cost more.

Once the ETV station is on the air, there are ways of developing new programs at reduced costs, or of obtaining revenue which will actually offset a portion of

the cost of the program. Examples of these ways are cited by Mullen (39, pp. 7, 8):

Western Reserve University produced eleven separate TV series whose cost was more than met by public subscription. The costs in each case were: salary for the instructor; preparation, printing and mailing of supplementary instructional materials; certain allocated administrative costs; and - in nearly every instance - the half-time of a secretary. Tuition for the course was \$48, entitling viewers to take examinations for credit, or \$5 for those who merely wanted printed material relative to the course. One such course "Psychology 101" attracted wide comment. A survey showed an audience of nearly 60,000. John Crosby, writing in the New York Herald Tribune, said: "Not much of a TV audience, but a hell of a classroom!"

New York University aired an educational series...titled "Today's English"...the University provided supplementary printed material for this ten-program series at a subscription price of one dollar. After the third program subscriptions exceeded \$2,000. At the end of the course viewers were advised that upon payment of an additional dollar, anyone so desiring could take examinations at N.Y.U. for a "grade certificate", but with no formal college credit involved.

In Seattle, school children were given letters prepared by the group sponsoring educational television. One hundred and fourteen thousand of these letters were taken by the children. The response from parents totalled over \$22,000.

Similar ideas would be productive to offset operating costs of ETV stations. The point to be made here is that budgets allocated to the station for annual operation will be one of the most important guides, if not the controlling factor, in the extent of the station's service to education. Dollars, as they are combined with the

imaginative skill of the staff in stretching them over necessary expenses, will determine the program schedule which evolves.

CHAPTER V

ANALYSIS OF A PROPOSED ETV PROGRAMMING GUIDE

A Suggested Method of Evaluation

The Ultimate Aims of Education

Henderson (17,pp.249,250) points out that philosophies agree that respect for human personality is the crux of their educational theory; that they are all interested in building a society which recognizes the dignity of man and provides for his best development.

Recognizing this, and that there are finite aims which should guide teachers engaged in the educational process, it is believed that educational broadcasters should pay increasing attention to the aims and the objectives of programs using the mass media. It is with this realization that special attention has been paid to the development of a method of evaluating the educational content of current and future programs and schedules of educational television.

Steetle (52,pp.1,2) said, on March 10, 1955:

As of today, with 13 TV stations operating and controlled by educational institutions and organizations, what program trends are beginning to show? Are patterns of programming becoming evident?...Are there patterns discernible in programming?...There are those who are anxious for a philosophy of educational TV to be enunciated so that present

and future patterns of programming can be measured against this philosophy to determine if educational TV is education or television or an appropriate blending of each. Others have taken comfort from the fact that educational TV, unlike commercial TV, has not frozen into a pattern, has not assumed the rigidity of a substance within a mold...it is not always wise (referring to TV as a new frontier) to map unfamiliar territory until surveyors and pioneers have been in it and return with sufficient data for charts that would be accurate guides for future travelers. But now it is time for attention to be given to this matter of philosophy. With educational TV three years old (1955), there is beginning to grow a body of information which will help determine the directions for educational television.

For specific help in this area, the study makes use of the work of the Educational Policies Commission of the National Education Association (10,p.47) which has been encouraging and aiding such studies with publications on education in the framework of democracy. The detailed meaning of education for boys and girls in a democratic society is found in the Commission's Purposes of Education in American Democracy. These meanings include: The Objectives of Self-Realization; The Objectives of Human-Relationships; The Objectives of Economic Efficiency; and The Objectives of Civic-Responsibility.

Many other groups have tabulated the aims of education, phrasing these ideas and concepts in various ways. For the purposes of this study of Guides to Educational Television Programming, it seems appropriate to use these ultimate aims of education as set forth by the

Educational Policies Commission.

A Scale for Purposive TV Programming

The four major areas under which the Commission grouped the aims of education become the four proposed objectives of purposive TV programming.

In Appendix N is to be found a copy of the scale which was developed and distributed to the seventeen educational television stations on the air as of November, 1955. The two educational institutions operating stations on commercial TV channels and presenting sponsored programs were not considered for the purposes of this study since large blocks of their on-the-air time are not devoted to education.

On the survey blank these four major areas were further elaborated as an aid to the program managers and directors who were asked to interpret their own educational programming in the light of the scale.

These educational objectives are charted against the eight segments obtained when dividing the audience into age groups ranging from pre-school, through lower and upper elementary, high school, college, and adults, 20 to 40 years, 40 to 60 years, and over 60 years.

Using this chart a station manager can examine his programs as to educational purpose, plotting the intended objectives against as many or as few of these age groups

as he feels will find the program useful. Instructions for using the chart call for completion on the basis of quarter-hours of program time, with segments credited to all areas in which they apply, not merely to the area of "best fit." Many programs will obviously fit a number of different age groups. It is conceivable that a program could easily be of value to all adult age groups, another could be of value to several of the children's age brackets. On the other hand, in an educational TV station which takes its purposive programming seriously, certain broadcasts will be prepared for specific age groups. A school program may be planned to teach only in the primary grades, or in a single elementary grade; to the young adult group with certain very definite needs; or directly to the group over sixty years of age. The extent of the programming which an ETV station aims at these definite target audiences will in large measure indicate the care with which programs are planned as to educational objectives.

Experiences of Educational Television Stations

Programming Schedules of Operating Stations

The Scale for Purposive Television Programming was distributed to seventeen educational TV stations on the air in November, 1955, with the request to the manager or program director for an interpretation of a week's

schedule according to the scale. No attempt was made to determine whether the station's programming was effectively reaching its stated goals. The interest was in determining what the station intended as the aim of its program schedule for the week.

Totals were calculated from the data returned by the cooperating stations, and national averages determined. These national averages indicate the percentages of station programming intended for the various age groups in the national audience, as well as percentages of programming planned for the four aims of education.

Of the seventeen existing educational TV stations, fifteen cooperated with this study by completing the survey. The data, together with calculations of the percentages and group averages, are to be found in the Appendix O.

Curves have been drawn for the national averages as calculated for these four educational aims, as well as for percentages of time devoted to purposive programming in the eight age groups for which the study is prepared.

Programming Schedules of Planning Groups

The Scale for Purposive Programming, described above, was also mailed to eight institutions and community groups known to be in the active planning stage for educational

television. The intention was to obtain similar studies of the educational objectives proposed by this group. One institution of higher education and one community group replied that they had so little information on programming plans that it would be impossible to fill out the form. Another institution applied the information on programs being distributed to commercial stations, and therefore the information obtained did not apply to this study. The other five were not heard from.

It must be assumed from these returns that those groups now planning for ETV have not progressed far enough to have definite programming plans completed. This seems unfortunate in view of the stress that has been placed on the use which educators would make of television as a new teaching tool in the years ahead. As indicated previously, positive programming plans seem essential to the proposals for ETV development which are to be placed before legislative and citizen groups for study and possible action.

Summary and Interpretation of Results

The national averages as computed for the four major aims of education from the data supplied by the fifteen reporting stations show:

Self-Realization - 25% , Range 6% to 48%
Human-Relationships - 10% , Range 3% to 30%
Economic-Efficiency - 7% , Range 1% to 14%
Civic-Responsibility - 12% , Range 3% to 33%

These data are shown graphically in Figure 6.

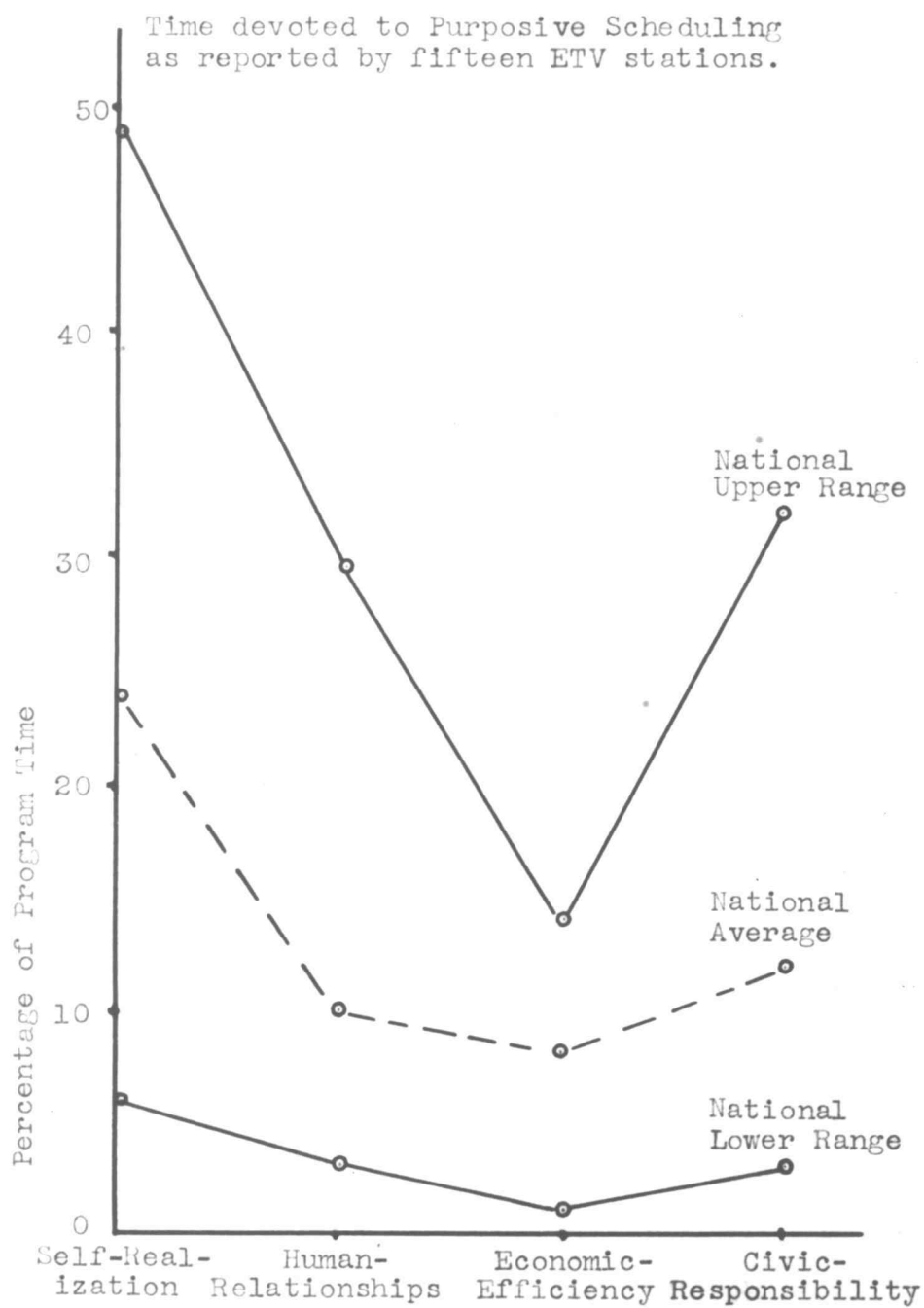
In studying the data submitted by the individual stations, four are found to fit the national averages. Two of these: KQED, San Francisco, and WCET, Cincinnati, are community-operated stations; one is operated by a state university, KUON, Lincoln; and the fourth represents a consolidated college group, WUNC, Chapel Hill.

Two institutions which have operated outstanding educational radio stations for many years average consistently above the national average in program purposes. These are WKAR-TV, East Lansing, and WILL-TV, Urbana.

Others fit either an erratic pattern or one completely below the national averages. It is of interest that these stations which have erratic patterns generally rank high in programs aimed at self-realization.

The reports have been examined as to types of communities served, industries and occupations, types of people in the communities, in a search for some pattern which might explain the differences which exist in program purposes. No such pattern appears and the conclusion which must be reached is that ETV broadcasters have not as

Figure 6

EDUCATIONAL TELEVISION PROGRAMMING

yet attempted to lay such a yardstick beside the program schedules of their stations.

Figure 7 shows the average percentage of time devoted by the fifteen stations to the four objectives of education as related to the eight separate age-levels of the ETV audience.

An examination of these four curves would indicate that ETV programming is failing to produce a sufficient percentage of programs for the boys and girls of the audience. A great deal of emphasis has been placed on the opportunities which ETV possesses to reach boys and girls with programs having educational purpose, as well as offering youth a constructive of programs as an alternative to existing commercial programs. Only an occasional station seems to program adequately for younger viewers in the four major divisions.

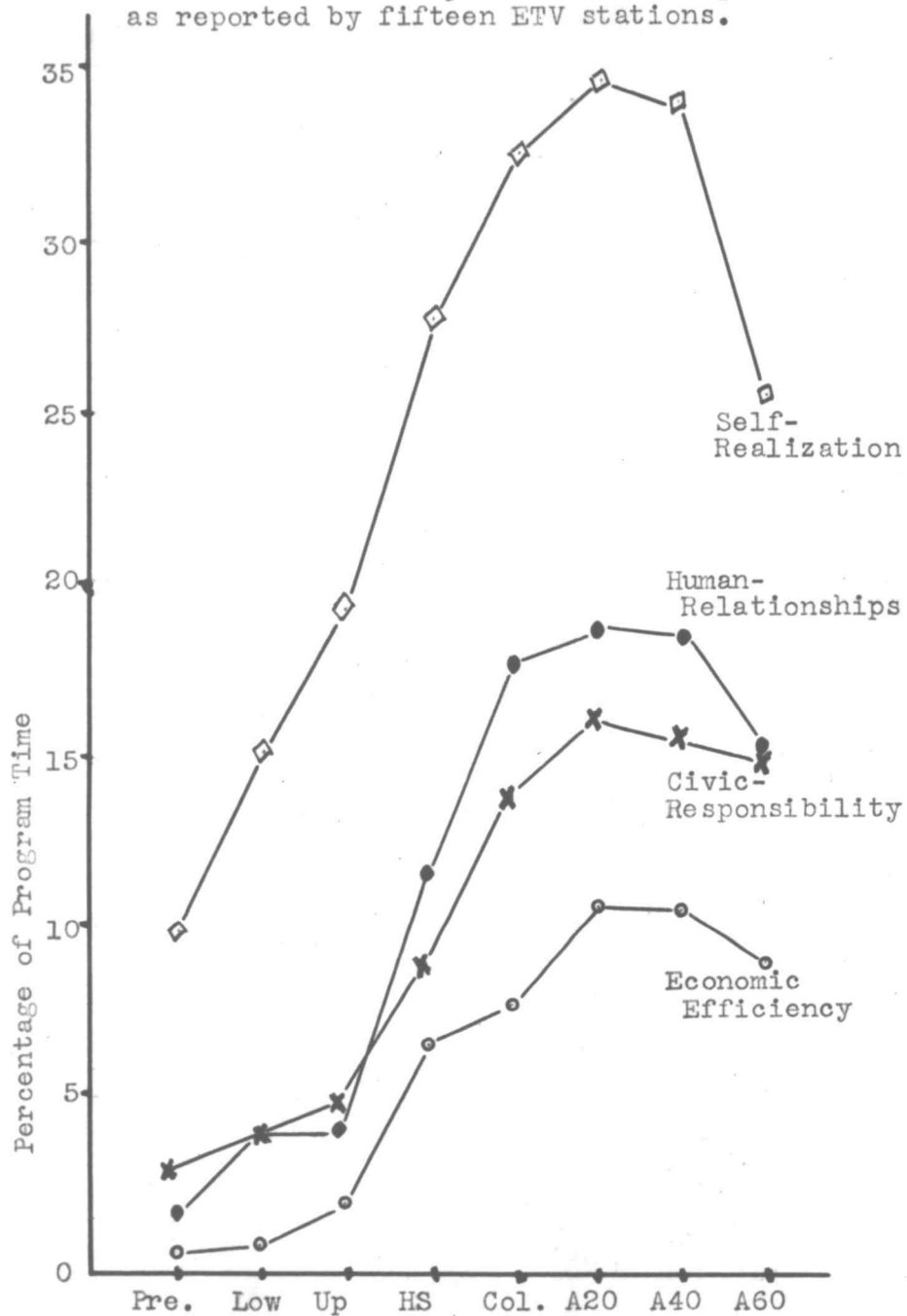
It is suggested that ETV broadcasters apply this, or some similar scale for measuring program schedules against educational objectives, in an attempt to fit programs to the needs of the community with increasing accuracy.

The national averages are not intended to represent the degree to which any individual station should program to these objectives. Rather the program director of an

Figure 7

EDUCATIONAL TELEVISION PROGRAMMING

Time devoted to Purposive Scheduling
as reported by fifteen ETV stations.



ETV station should use these averages as a check to see how his own percentage curves conform to what the others are doing, and then the local programming should be adjusted to fit a percentage curve which seems to represent local conditions. National averages will merely guide a station director as to what others have found to be the actual practice on other local stations.

CHAPTER VI

A LOW-COST EDUCATIONAL TV PROGRAMMING EXPERIMENT

The Plan of the Experiment

The KOAC Program Department employs a professional staff of program resource people - all members of the academic faculty of the General Extension Division of the Oregon State System of Higher Education.

The members of this staff saw the need to begin their training in adapting educational content to television as early as 1952, but being far removed from any existing commercial television station on which to gain this experience, found this impossible until the Speech Department at Oregon State College installed closed-circuit equipment for the student-training program in resident instruction.

The present experiment was organized to devote staff efforts to creative program development of low-cost educational television in four areas: (1) to train the staff in the elements of the new communication medium of television; (2) to determine some of the criteria which must guide the successful educational telecasters in program development on the small budgets available to educational institutions; (3) to experiment in the area of educational simulcasts for both television and radio release; and

(4) to provide actual test conditions for experimental production and educational content TV rating scales.

The KOAC staff feels that members can best prepare to adapt content to the new medium by becoming familiar with all of the jobs to be done in television production. The plan involved members of the staff alternating at all of the jobs in the studios as well as in the preparation of the script content, properties and graphic aids needed in each of the productions. These studio jobs include those of: production director, switcher, floor director, lighting director, cameraman, sound, boom, music, special effects, announcer, and staging director.

An initial evening was spent in the studio learning the fundamentals of lighting, camera operation, choice of colors in relation to the gray scale, duties of the floor director, and sounds and special effects. The plan then evolved in which one evening was spent doing basic planning, run-through of the script, and preparation of properties and graphics for two separate programs. The following session was spent in the studio using the complete facilities for rehearsal and closed-circuit telecast.

A production chart was developed to assist the director of the seminar in scheduling the various members of the group for weekly assignments (Appendix P).

Program Development

Five separate program series comprised the initial group of staff projects. These included:

ACROSS THE DESK - One of a series adapting a current educational radio broadcast to the new TV medium, featuring the writer, speaking across the desk of the program manager, in news of the week's programs and a discussion of letters from members of the KOAC audience. Special feature was a tour of KOAC's facilities done with the aid of photographs of staff personnel on the job in the various departments of the station.

LET'S EXPLORE ART - an example of a program from the Oregon School of the Air, planned for in-school use, and featuring as artist-guest Mrs. Mary Jo Albright, art supervisor for the Corvallis schools. "Creative art is the expression of everyday living" was Mrs. Albright's theme, with this particular telecast involving experiments with texture. Liberal use was made of chalk and chalkboard, art papers and textured materials.

THE FARM HOUR WEATHER - presented by William G. Smith, farm program director for KOAC. This excerpt was from one of the farm broadcasts, featuring a forecast of the program elements to follow, and then presenting a farmer's detailed analysis of the weather. Maps, charts, and photographs were used as visual materials.

THE STORY AND THE PROBLEM - was the first of a series created by John MacDonald, with Paulus A. Heist, Assistant Professor of Psychology, as the host. The series was introduced as one of "psychological discoveries" and featuring the psychological problems inherent in dramatic stories. The initial program involved the first dramatic effort of the seminar with dialogue centering in the communications difficulties of the characters in Mark Twain's story Buck Fanshaw's Funeral.

DRAMA IN POETRY - one of a series of oral interpretations created by Duane Tucker, school specialist. Robert Frost's Death of the Hired Man was presented in oral interpretation. Mr. Tucker served as host and narrator. This production was one of several planned for simulcast on both radio and television, and a tape recording of the entire performance was made for reference purposes.

The experimental development outlined here is continuing.

Evaluation of Results

Content Scale Chart.

In an educational broadcast - radio or TV - content is of prime importance. In attempting to evaluate results of this seminar to date, the need was felt for a scale of

evaluation for content of the programs. A nine-point rating scale was developed based on factors deemed essential by authors in the field for content of an educational broadcast, including: purpose, interest, attitudes established, clarity of content, information contained, completeness of treatment, movement, demonstration material in the broadcast, and follow-up activities suggested. This scale for evaluation of content is found in Appendix Q.

Production Scale Chart.

Having established an evaluation schedule for the content of educational programs, there is also found to be a need for a similar rating scale concerned with the technical production itself. Factors of content should in no way influence production evaluation.

A search of the literature reveals ten factors of importance for this scale: setting, art work, properties, lighting, camera action, sound, music, casting, pacing, and announcer. These ten criteria were listed and then discussed with members of the seminar group as to their effectiveness for this scale. The complete scale for evaluation of production is to be found in Appendix R.

Application and Interpretation

Copies of the Scale for Evaluation of Content were given to all persons involved in a production. Each was asked to fill out these rating scales. Figure 8 indicates the way these data were used in making a graphic illustration of the extent to which the telecast fell short of the desired goals in content.

The Scale for Evaluation of Production was handled in similar fashion. Figure 9 illustrates the use of the production rating scale.

The graphs for each of the experimental programs described in this chapter are contained in Appendix S.

Summary of the Results of the Experiment

The plan as explained, looked at four major problems: (1) training of staff, (2) criteria for ETV on small budgets, (3) experiments with simulcasting, and (4) test conditions for rating scales. The results of the seminar are discussed in this order.

Excellent results were obtained in the training of the members of the seminar group. All moved into educational TV from educational radio, smoothly and efficiently. There was excellent program planning of a creative nature. The manner in which they adapted themselves to television, while continuing their responsibilities in educational radio, convinced the director of the seminar that it is

Figure 8

A SCALE FOR EVALUATION OF CONTENT OF
EDUCATIONAL TELEVISION PROGRAMS

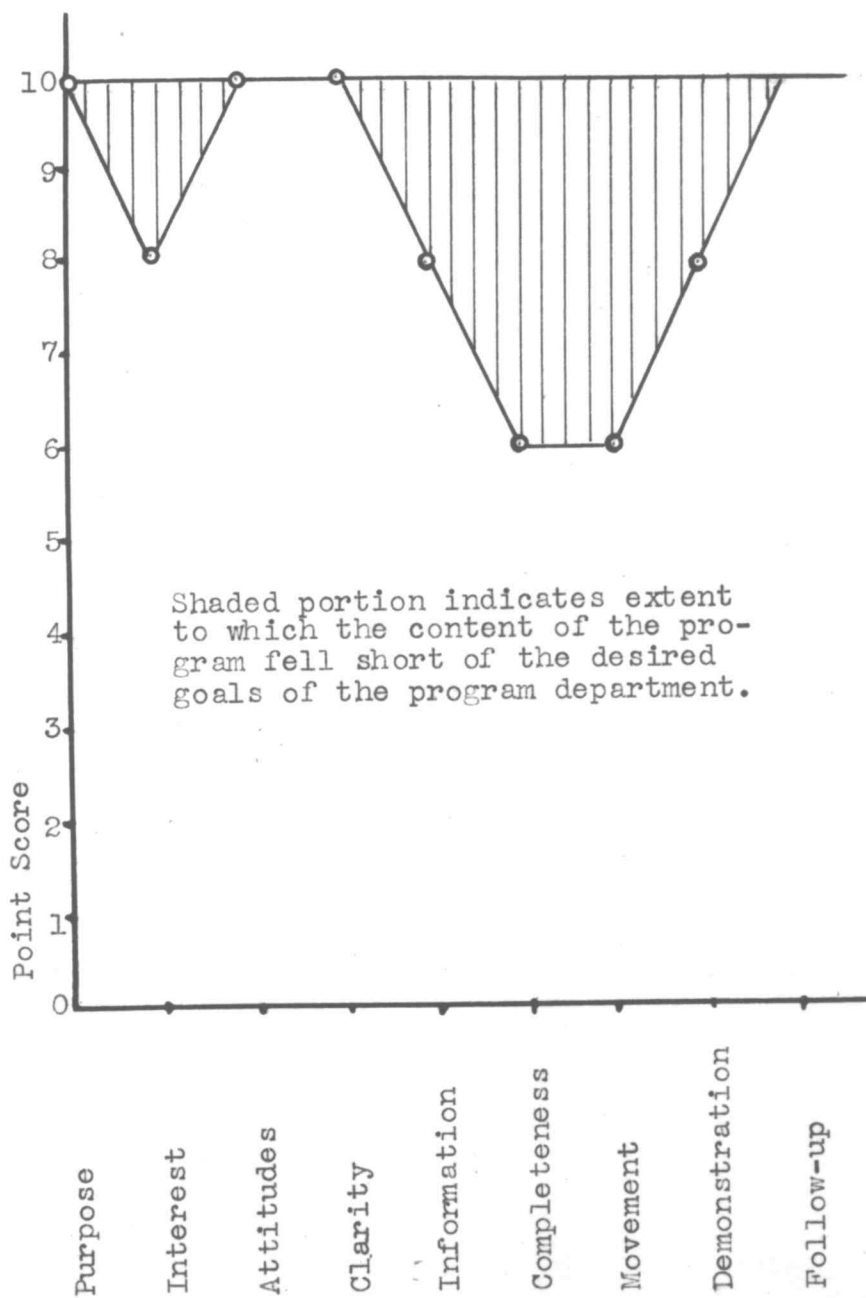
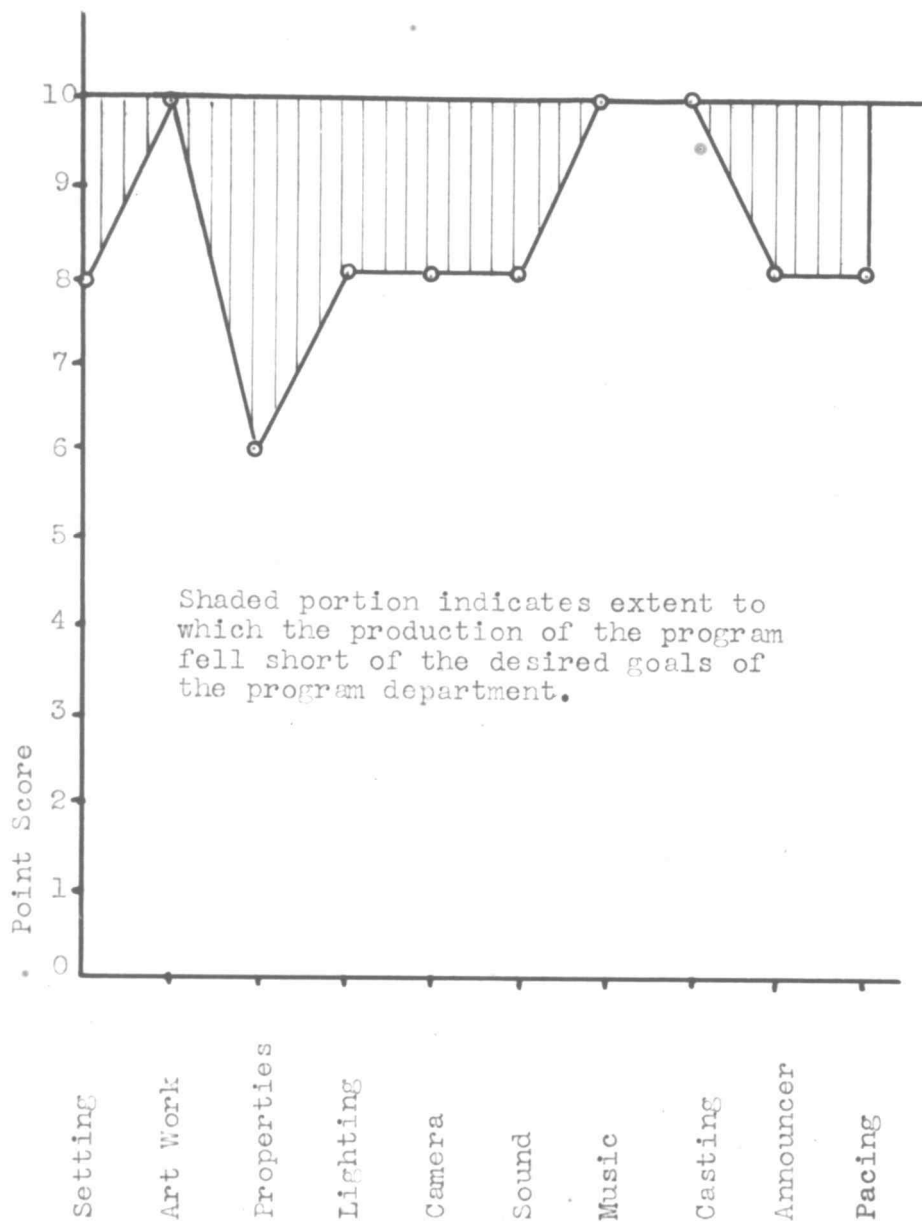


Figure 9

A SCALE FOR EVALUATION OF PRODUCTION OF
EDUCATIONAL TELEVISION PROGRAMS

entirely feasible to program educational radio and television with the same staff.

The criteria for successful ETV programming on low budgets are essentially the same as apply to educational radio. These seem to center around the trends in development which will hold costs down: inexpensive but adequate art work and graphics; use of low-cost properties where they will do equally as well as complicated, expensive ones; simplified production techniques which at the same time hold the interest of the viewer.

The seminar was faced with two emergencies in production. In one telecast, one camera was not working, resulting in last minute changes and use of one camera for the entire broadcast. In another, the projection of a film sequence failed in rehearsal, and script had to be changed to eliminate what had originally been considered as a scene necessary to the production. These two changes illustrated to the seminar group the fact that there is usually more than one way to handle a given scene in production.

Costs for the series of five programs was less than \$4.00 in actual cash. This money was spent for crepe-hair for make-up, chalk, art paper, and poster board for title cards. The hourly cost of operating the closed-circuit equipment is not known and has not been considered

in the present estimate of costs. Staff time amounting to approximately 200 hours was given to the series. A value of approximately \$500.00 could be placed on the time of personnel involved. This cost divided among the five productions would give an average cost of \$100 per program.

The production of Drama In Poetry was planned for simulcast on both radio and TV. The tape recording of the audio portion of this telecast proved to be good listening, meeting the standards of radio production. This broadcast did not lose its effectiveness for radio by having been planned for use on television.

Actual test conditions for studying the experimental production and educational content rating scales were provided by this series of programs. The rating scales appear to be valuable tools in the hands of a program director and should be continued in their use.

CHAPTER VII

APPLICATION OF TELEVISION GUIDES TO OREGON
WITH RECOMMENDATIONSIntroduction

Educational television should come to Oregon as a truly state-wide service to the people, both as to groups served, and as to program resources. The educational TV staff thus becomes a link between the educational-cultural resources of Oregon and its citizens, finding the wants and the needs of the people and the communities in which they live, and planning programs to meet those wants and needs.

Educational Objectives

The programs to be practical must be geared to specific educational objectives. The four aims of the Educational Policies Commission should guide ETV in programming in the areas of: (1) Self-Realization; (2) Human-Relationships; (3) Economic Efficiency; and (4) Civic-Responsibility.

Through the study made of programming schedules of existing ETV stations, these objectives show themselves as logical guides to the planning of an educational TV service for Oregon.

Procedures

Program planners should see as one of their guides the needs and wants of the potential majority audience as well as supplementing the programs in areas of need not being successfully served by other existing mass media, particularly commercial television. The program staff should find out the needs of the people in regard to program content and determine whether such education is being accomplished by other media.

The staff should experiment with new ideas and new concepts in teaching and television presentation always seeking to advance the art of educational broadcasting. Programs should strive for variety, logical organization, and interesting forms of presentation.

The ETV station schedule should contribute in the area of ideas, seeking to present authorities with facts in areas and subjects of controversy. Programs should use means which insure fair and responsible presentation and which assist the viewer to arrive at personal decisions and conclusions in a democratic manner. Purely personal opinions in programs of controversy should be plainly labeled as such.

An Oregon ETV service should make provision for exchange of programs through arrangements with the Educational Television and Radio Center, and with other ETV

stations, thus extending the program content of the station beyond that which the local staff would be able to create.

There should be a continuing plan of study and analysis, to determine insofar as possible, what happens to the listener after he turns the dial at the end of the program. Methods should be determined for measuring the educational growth of the listener as well as the size of the audience.

Audience Factors

While complete data are not available, the existing audience studies show that all eight major age groups (pre-school through old-age) exist in the audience which is currently attracted to educational radio in Oregon. There are no facts available which would lead one to think the situation would be otherwise for educational television. ETV programs must be planned in Oregon for all age groups.

The percentages of programs for these audience segments, found in applying the purposive scale to existing ETV stations, should not be taken as the literal standard for Oregon. It would appear that undue emphasis is placed upon the adult segments of the audience in the national averages computed in this study. It seems to the writer that television has a greater responsibility to

children and youth than is shown by these national averages.

Much of the early programming on ETV in Oregon, as in other parts of the country, will likely be based on expediency rather than on audience needs. Easy programs to produce will be scheduled in the first few months of station operation, if the example set in other parts of the United States is a guide to procedure to be followed in Oregon. Yet those in charge of programming policy are urged to consider the techniques employed in this study based upon the educational objectives of the Educational Policies Commission, and to use this scale as a yardstick in analyzing program schedules as to purpose and intent for the various segments of the audience.

The proposed ETV development in Oregon should provide for a continuing audience research project to keep the administration and the content specialists more fully informed as to audience factors which should determine program content and level of difficulty of the material presented.

Since it has been emphasized that educational television should be a supplemental program service, audience study must also reveal the extent of coverage of the TV transmitters which are finally constructed, and the characteristics of the people who may obtain their only

television service from these educational stations. If such a group is considerable in numbers, the program department may have special responsibilities to this group.

Arrangements should be made whereby a study is conducted into the problems presented by the offering of telecourses for college credit. What should be the procedure of registration, class participation, and examinations for those who wish academic credit toward requirements for graduation from any one of the institutions of the State System of Higher Education? How should the courses be prepared so that they will not consist merely of TV lectures superimposed on existing correspondence study course outlines? Should not provision be made whereby independent colleges and universities might take advantage of these same telecourses for academic credit in their own institutions?

A study should be conducted in cooperation with the State Department of Education as to the possible need for telecourses at the high school level which might be used by teen-agers, or adults whose high school educations have been interrupted, and who might now wish to continue and to make up areas in which deficiencies exist.

Programming should recognize the many "target audiences" the groups with special needs such as those with

limited education; those who wish telecourses of a continuing-educational nature; telecourses for on-campus use by the institutions; other special needs of college students; children who need in-school programs and out-of-school choices; pre-schoolers; adults, of all three age brackets. All of these groups will be in the Oregon audience and should be recognized and served through this beamed-programming to special-interest groups.

Program Resources

Basic programming of an Oregon ETV service will need to come from the several institutions and extension services of the Oregon State System of Higher Education. These institutions and services have the resource people and many teachers upon whom to draw for programs to be presented on educational television.

It is recommended that program coordinators be appointed in the several schools and colleges of each of the institutions. Each coordinator would act as liaison between the ETV program department and his division of the institution with two basic responsibilities: (1) to suggest and submit program ideas to the station, and (2) to develop programs and assist with their production.

A Program Advisory Committee should be appointed as a part of the basic ETV staff structure, with wide membership among private educational institutions, public and

private schools, community and public agencies, as well as higher education. It should be the duty of this committee to meet at regularly-stated intervals with the station director and his program and production specialists. These conferences would be charged with the responsibility of giving direction to the state-wide nature of the program service, as well as contributing information regarding audience reaction, public relations problems, assisting with fund-raising campaigns, and the many other details of operation as a community-wide ETV service.

Every effort should be given to aiding other program sources, institutions and public school systems, in their plans to create television programs for release over this ETV development.

Personnel

In view of the success that has been achieved in both educational and commercial organizations in the combining of radio and TV program staffs and facilities, it is recommended that such joint use of resources be planned for educational broadcasting in Oregon. Substantial savings in personnel, equipment, administration, and operating budgets are achieved by thus combining program and office personnel. Most efficient use of program

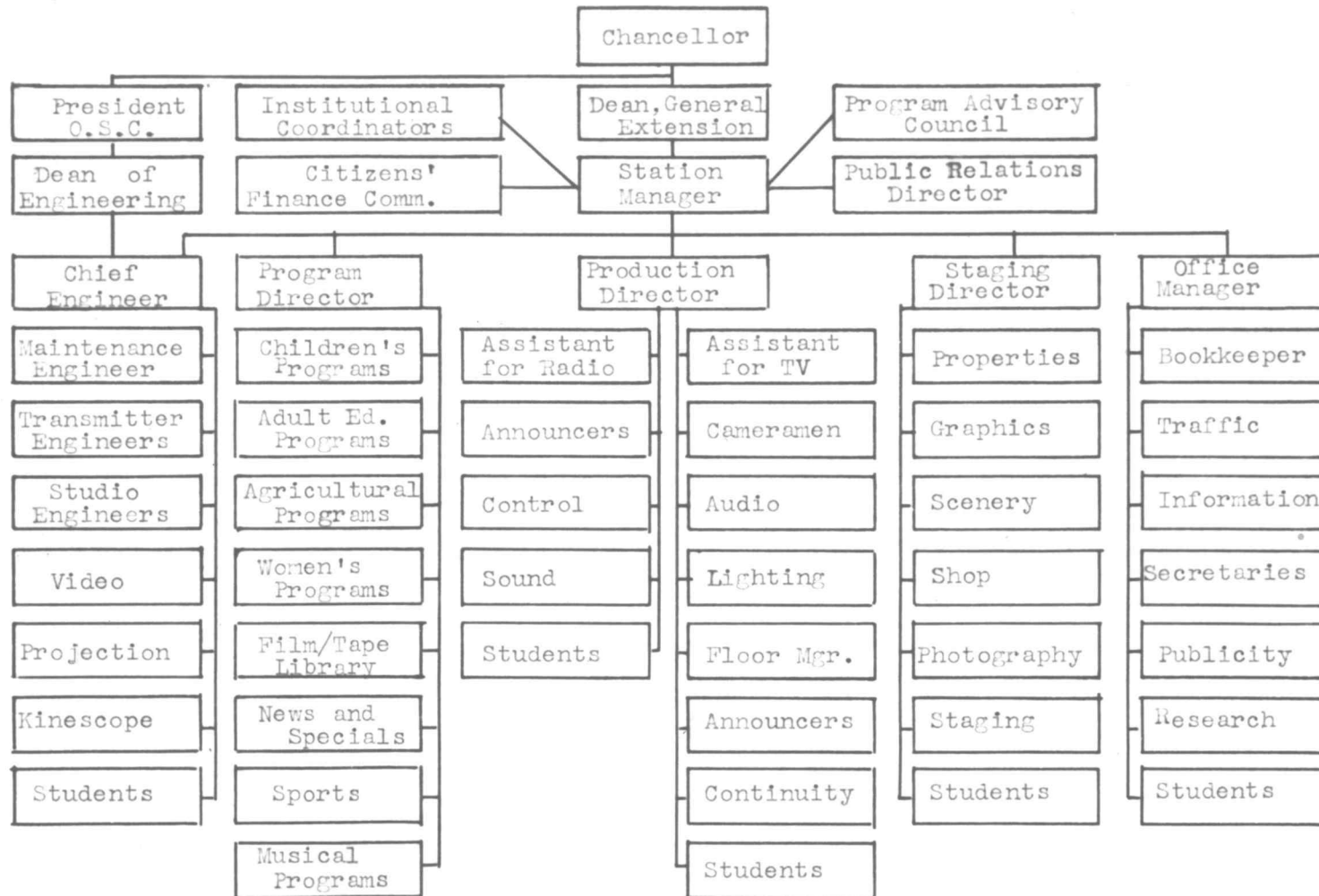
resources is evident in such a joint staff, and simulcasts on both media of those programs for which such procedure is feasible provides a maximum audience for the programs so presented.

Figure 10 shows in graphic form the organizational procedure which is recommended for the central staff for this integrated operation of educational radio and television. It is recognized that a number of the positions shown on the chart will probably not be occupied by full-time employees. A combination of various assignments can be worked out by the administration to hold the total number of employees to a minimum. The actual number to be employed depends upon the budgetary provisions for the station and the actual operating hours decided upon.

Educational TV stations, in order to hold budgets to a reasonable level, need to make extensive use of students and volunteer labor. Provision must be made in the teaching program on the campuses of the State System of Higher Education so that interested students can gain practical laboratory experience in the television studios. There will need to be revision of course schedules and perhaps the addition of new courses at both graduate and undergraduate levels, as well as through the General Extension Division, to provide for the needs of these students.

Figure 10.

PROPOSED ORGANIZATIONAL CHART FOR OREGON ETV DEVELOPMENT



Arrangements should be made for volunteers to gain similar experience, and in turn to serve the station, but the work should be organized on an apprenticeship basis to insure dependability of such volunteer labor.

Recognition must be given to the problems of faculty load for instructors assigned to teaching by television. It has been found that some faculty are paid over-time for TV teaching, some have adjustments made in their regular teaching loads to compensate for the TV courses, others participate on television as an extra-curricular activity with no recognition either by over-time pay or reduced teaching load. While occasional appearances over TV by faculty will always be in the extra-curricular capacity, it is recommended that compensation for regular television assignments be through reduced classroom teaching load, rather than by over-time pay.

Technical Facilities

Transmitters.

It is recommended that two transmitters be constructed in the early stages of the ETV development in Oregon. One of these should be on channel 7, assigned to Corvallis for educational, non-commercial purposes. This transmitter should be located on top of Mary's Peak, highest point in the Coast Range of mountains, and using the highest power

permitted under existing rules of the Federal Communications Commission. The second transmitter should be located on channel 10, in Portland, with a transmitter of sufficient power to cover the metropolitan area of the city.

Programming for the residents of Oregon outside the viewing range of these two transmitters must wait on the future developments in lower-cost TV equipment, such that transmitters in other areas will be economically possible. Until that time kinescope recordings of TV programs created by these two initial stations should be distributed wherever possible in these distant areas. Local TV distribution systems should be encouraged to put the ETV programs on one of the channels of their cable systems in order that these telecasts reach the maximum possible Oregon audience. On the basis of recent evidence it is predicted that almost all of the cable systems in Oregon would be able to use the signal from a transmitter on top of Mary's Peak.

Studios.

It is recommended that the State System of Higher Education develop complete studio installations for the origination of ETV programs on each of the three major campuses, namely: Oregon State College, Corvallis; University of Oregon, Eugene; and Portland State College.

These studios should be equipped with a minimum of two image-orthicon cameras each, film and slide projection equipment, lighting, and audio equipment adequate to a fully professional TV programming effort.

In line with the previous recommendation that educational broadcasting in Oregon combine radio and TV in a joint state-wide effort, one studio location should become the point of origin of a substantial share of the station's daily schedule including that portion devoted to exchange features on film and kinescope recording. This location should therefore be equipped with multiple studios and increased film editing facilities, shop and storage space.

For such a common operation of TV and radio, the radio offices and studios should be moved to the site chosen for the television studios, and the two sets of studios closely integrated for maximum efficiency. Technical provision should be made for simulcasting of desired educational broadcasts on both radio and television transmitters. Radio and TV facilities in Eugene and Portland should be integrated in similar fashion for most efficient operation.

Technical provision should be made through the use of micro-wave relay systems, or direct rebroadcast, or a combination of both, for programs to originate in any

one of the studios and be released over either or both of the transmitters.

Kinescope Recording

A kinescope recording unit will be essential to the plan if the financial support of the Fund for Adult Education is to be obtained and if programs are to be prepared for exchange through the Educational Television and Radio Center. If the technical provision for linking the system together is provided as outlined above, one kinescope recording unit located in the central studios would be adequate to serve the entire ETV development.

The ETV plans should provide facilities for a filming unit, thus making possible the preparation of standard sound films for use in conjunction with the station programs. These facilities should be such that they are available for coverage of news and special events anywhere in Oregon. This service might be obtainable through arrangements with existing photographic services on the campuses.

Mobile Studio Unit

A mobile studio unit should be a part of the total plan for development of educational television in Oregon, though for financial reasons it might not be a part of the early construction. Such a portable unit would

permit programming direct from the State Capitol, in Salem, and from other parts of the state, including the more distant institutions of the State System of Higher Education.

Other Studios in Portland

Technical provision should be made for the TV station to receive programs which might originate in Portland through studios located elsewhere in the metropolitan area, such as the Portland Public Schools, or in one of the private colleges or universities.

Sources of Revenue

A wide variation in methods of financial support of educational television has been shown for the existing stations. These methods range from financing by a single large foundation or by a philanthropist, through combinations of gifts and public funds, to total financing by public subscription and small donations.

Oregon's experience to date would indicate that it is unlikely that total financing by state appropriation can be achieved in the same manner that it has been done in educational radio. It is recommended that a combination of state funds and public subscription be employed to build the station. A substantial portion of the annual operating budget should be contained in the budget of the

State Board of Higher Education, but use should be made of a wide variety of fund-raising techniques to obtain the balance of the annual budget.

Publication of a monthly program preview, paid for by advertising within its pages, and furnished to all donors in return for annual contributions, is recommended as one means of obtaining funds for annual operation.

The program department is urged to develop series for distribution by the Educational Television and Radio Center, thus providing operating funds in return for the series on kinescope recordings or film for national use.

The program department should seek funds from industries and public agencies with which to finance special series of broadcasts. Such funds earmarked for expenses in specified content areas will free other budgeted monies for further program development.

The program department should explore the possibility of entering into annual contracts with individual school districts in Oregon to supply in-school ETV programs at a stated per-pupil annual cost. These funds would be used to develop instructional programs on the Oregon School of the Air.

The Fund for Adult Education of the Ford Foundation should again be approached for funds to assist in

television station construction.

Business firms should be encouraged to contribute on an annual basis a specified amount per employee in their organizations.

Such a plan of encompassing a wide variety of sources of revenue seems necessary in view of the high cost of establishing educational television and of the large annual operating budget which is needed if an extensive and worthwhile program schedule is to be presented. This plan makes a special financial emphasis essential. A strong public-relations program and fund-raising organization must be continually maintained.

Cost Factors and Budgets

It has been shown throughout this study that financial problems are among the major factors which guide those who would program educational television. Funds with which to purchase equipment for studios and transmitters determine the nature of the programming which the staff will find it possible to produce. The evidence presented indicates that no two stations have the same conditions under which operation is conducted and that annual costs cover a wide range, from the approximate \$100 per hour to \$200 or more. Stations use such estimates when computing annual program costs for proposed fund-raising campaigns and in planning series to be

offered for contract-financing under a special project. Then program personnel use every method of economizing with the funds obtained in order to stretch the money over as much actual program time as possible.

In view of the necessity to economize with educational monies the writer recommends that the beginning budget be developed on the basis of \$100 per hour of TV programs. In view of the savings which will be made with the integration of ETV with radio previously recommended, this budget should prove adequate during the developmental period.

As already suggested the staff should proceed rapidly to develop programs under contract to industrial groups and foundations, as well as for exchange through the ETRC. Such funds will bolster the minimum budget suggested and permit the station to rapidly expand its hours of operation.

The committee appointed by Chancellor Charles D. Byrne, in 1952, of which the writer was chairman, made the following recommendations as to costs (The complete report is found in Appendix D):

Capital Outlay (Mary's Peak Transmitter)

Transmitter	\$265,331.00
Corvallis studio	140,419.72
Eugene "	139,508.78
Kinescope recorder	37,784.00
Remote mobile unit	66,791.60
TOTAL	\$649,835.10

Annual Engineering Costs

Transmitter	\$24,400.00	
Corvallis studio	26,600.00	
Remote mobile unit	21,800.00	
TOTAL		\$72,800.00

Annual Programming Costs

Corvallis studios (4 hours per day, 7 days per week, approximately 50% live, 50% film and kinescope recordings.)

Salaries and wages	\$90,000.00	
Materials and expense	27,500.00	
TOTAL		\$117,500.00

Eugene studios (1 hour daily, live programming)

Salaries and wages	\$19,000.00	
Materials and expense	5,000.00	
TOTAL		\$24,000.00

Remote Mobile Unit

Salaries and wages	\$4,000.00	
TOTAL		\$4,000.00

Total annual programming costs	\$218,300.00	
Less existing radio budget	\$52,000.00	
Net additional funds for ETV		\$166,300.00

It should be noted here that the same committee which made the above study of costs is up-dating the report to conditions as they are known in 1956. During the coming summer months nationally known experts in both engineering and programming will be in Oregon to work with the committee in preparing the final report which will be given to Governor Elmo Smith. This procedure will be in keeping

with the instructions that the late Governor Paul L. Patterson made following passage of House Bill No.748 (Appendix H) in the 1955 session of the Oregon Legislative Assembly.

At the present time the writer sees prospect of little change in the basic plan of the report. The evidence of existing television stations that have gone on the air since the report was first written four years ago seems to support the study and it remains valid for Oregon in 1956.

First Steps in Development

On the basis of the material covered in this study, it has been seen that educational television in other parts of the country has proceeded in several stages of expansion beginning with the initial on-the-air steps. Conditions have often dictated reduced equipment, reduced budgets, and reduced hours of operation.

Here in Oregon it seems likely that programming will have to use this same guide to the early growth, beginning with some stage of limited facilities, gradually expanding through the years to the complete plan. It would be the writer's recommendation that no partial steps be taken at any time which involved equipment and procedures not adaptable to the total plan. In his estimation it seems foolish to spend funds for obsolete or

composite equipment which is never likely to work satisfactorily, or for equipment which is below broadcast standard in any way and which will be discarded at the earliest opportunity. Each piece of equipment acquired, each step taken, should be in the direction of the final ETV structure. Only in this way will the most efficient use of the money be made. Any other procedure will waste money while attempting to save it.

Partial steps most evident in the development appear in the actual number of units included in the initial budget period, for example: one transmitter and one studio; two units of the overall plan instead of all six of them.

In regard to transmitters, this problem might be analyzed in the following ways:

(1) A low-power transmitter, consisting of used, out-of-date equipment which might be installed on the campus at Corvallis, or at Granger, Oregon, adjacent to the existing KOAC radio installation. This would be sufficient to occupy and protect channel 7, reserved for Corvallis, but producing a signal which could be received by relatively few people in the Corvallis-Albany area.

(2) A similar transmitter might be installed in Portland, which would serve the same purpose of protecting channel 10, reserved for ETV in Portland. This

equipment (like the low-power mentioned above for Corvallis) would need to be replaced when any real ETV coverage of Oregon was to be achieved.

(3) A high-power transmitter might be installed on Mary's Peak. Such a transmitter would broadcast a signal reaching all of the densely populated Willamette Valley, the Oregon coastal area, and many sections of Central Oregon. This transmitter would broadcast a signal well within the range of most Oregon cable distribution systems.

(4) A relatively high-power transmitter might be planned for the hills in Southwest Portland which would furnish a good ETV signal to the metropolitan Portland population.

Any one of the above four plans could be a "first step" in transmitter installation, though it would seem best to install one of the two main transmitters for the most efficient use of public funds. Portland and the Willamette Valley residents could furnish several reasons why each of the two locations should be the first to be built. In view of the accessability of the Mary's Peak transmitter to the School of Engineering at Oregon State College for operation and maintenance, the fact that many persons in the coverage area of this transmitter are now receiving no television, or fringe reception at best, and

the ease of delivering the programs to the transmitter from a valley studio, it would seem wise to build first on Mary's Peak. Even many areas in metropolitan Portland could receive the signal direct from Mary's Peak if city viewers wished to point a channel 7 antenna in the direction of the transmitter on Mary's Peak.

Three studio locations have been recommended in the basic plan for educational television. These are to be located in Eugene, Corvallis, and Portland. If any one of the three locations were to be chosen for initial construction the following conditions would prevail:

Eugene Studios.

(1) Immediately available to the faculty of the University of Oregon.

(2) Available to students majoring in television in the Speech Department of the University of Oregon, and to students in Journalism.

(3) Possible, but difficult, to integrate the KOAC central program staff since the department is currently located in Corvallis.

(4) Travel would be difficult for the Oregon State College faculty, and for the program participants from the Federal Extension Service and Agricultural Experiment Station.

(5) Relatively difficult for faculty participants

from the Oregon College of Education.

(6) Extremely difficult for faculty members of the Portland State College to participate on any regular basis.

Corvallis Studio.

(1) Immediately available to Oregon State College faculty and to staff from the Federal Extension Service and the Agricultural Experiment Station.

(2) Easily integrated with the existing radio facilities and providing most efficient use of station staff in both media.

(3) Available to students in Engineering and Speech Departments at Oregon State College.

(4) Within easy driving distance for faculty members from the Oregon College of Education, Monmouth.

(5) Travel would be more difficult for faculty and students of the University of Oregon, Eugene.

(6) Participation of staff from Portland State College would be difficult, but not impossible on a regular basis.

Portland Studio.

(1) Immediately available to the faculty of Portland State College and the central staff of the General Extension Division.

(2) Relatively few students would be available for

laboratory training and staff positions would be very difficult to fill.

(3) Difficult to integrate the KOAC central program staff into the organizational pattern of the studio.

(4) Difficult, if not impossible, to tap the resources of the Eugene campus for any regular or extensive programming or student training due to the distance involved in transporting staff and properties for such programs.

(5) Participation of staff from Oregon State College and the Federal Extension Service would be difficult, but not impossible on a regular basis.

(6) Participation of students from Oregon State College would be very limited due to distances involved.

It has been recommended in a previous section of this chapter under "technical facilities" that the basic state plan include two transmitters and three sets of studios, one on each major campus. In view of these relationships of studios and transmitters to each other, to the audience, and to the location of the program and staff resources for such educational TV in Oregon, it is recommended that careful consideration be given to the possible first steps. If funds are available, the entire basic plan should be constructed as a unit. Financially this would be comparable to a new school building for

one of Oregon's school districts; less than the financial outlay for a modern high school plant in a city district.

If funds are not sufficient to implement the basic plan, two alternatives must be faced:

(1) The construction of one transmitter and one complete studio facility employing: two or more studios, rehearsal area, three image-orthicon cameras (two of the field type for dual use in the studio and on remotes), complete projection equipment for films and slides, 16 mm film camera, studio lighting, audio equipment, kinescope recorder.

(2) The construction of one transmitter and two minimum studio facilities located in Eugene and Corvallis, each employing: a single studio, one image-orthicon camera of the field type, first unit of the projection equipment, 16 mm film camera, lighting, audio equipment (this latter might be borrowed from existing radio facilities during the initial months of TV operation).

The opportunity to establish educational television in Oregon should not hinge on an "all-or-none" philosophy. In view of the television opportunities outlined for the Eugene and Corvallis campuses, and the existing vidicon industrial-type TV facilities on both campuses presently available for student training purposes, and which might

be made available for additional rehearsal purposes in connection with the establishment of an ETV station, it is recommended that the first stage of development involve the construction of the two minimum studios discussed above under the second alternative procedure.

Such a first step should be taken with the full knowledge and understanding that additional studio facilities and the second transmitter are to be added as rapidly as possible. Those persons in Eugene and Corvallis should know that their operations will not be limited to single-camera equipment for an extended period of time. Portland should be assured that the third studio would be installed at the earliest possible date, and the residents of the metropolitan area should understand that the second transmitter will be constructed according to the basic plan as soon as funds can be raised.

Community Television, Inc. should be encouraged to continue to actively work toward establishment of the Portland transmitter on channel 10, and toward including that transmitter as one of the units of the basic plan for educational television in Oregon.

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A P P E N D E X E S

APPENDIX A

EDUCATIONAL TELEVISION PROGRAMMING REPORT FOR
1954

Governor Paul Patterson's Citizens Committee by a sub-committee of which Dr. John R. Richards was chairman.

Educational television may be analyzed by dividing the various audiences that may be formed and by studying the learning needs and desires of each of these. One such breakdown would be: (a) pre-school, (b) in-school, (c) after-school, (d) adult informal, or programs with wide audience appeal, and (e) adult formal, those with narrower appeal.

PRE-SCHOOL PROGRAMMING

One of the large potential audiences of educational television is the pre-school child who has no opportunity for group learning; previously not reached by mass media. Children at age two begin to learn well in groups. Yet there is little opportunity for such group learning in the cases of most children between that age and the age of five or six years. Television provides a means for reaching this group at low per capita cost. Participation in learning is a practical goal of the TV programs planned for the pre-school group. In addition, the particular hours needed are readily available because of the fact that the only competing audience is that of the women in the home.

Experimentation in this particular field of teaching is still somewhat limited, but experience has already shown that the following types of programs have been successful with the pre-school audience:

"THE TOY SHOP" a good daily series for the tiny tots in the TV audience currently on WKAR-TV, Michigan State College, East Lansing.

"THE PLAY WAGON" a series of pre-school listening hours from the University of Wisconsin, WHA-TV, Madison.

"DOODLE" featuring art and music for small children from the Syracuse University Nursery School, on WSYR-TV, Syracuse.

"DING DONG SCHOOL" pre-school telecast featuring Dr. Francis Horwich, on NBC, Chicago.

"TELEVENTURES FOR CHILDREN" under guidance of Seattle educational groups. On KING-TV, Seattle.

"NOAH'S ARK" a religious program for children with Father Haley using cartoons to illustrate his bible stories. On KOIN-TV, Portland.

"DENTAL HEALTH FOR TINY TOTS" stars two pre-school youngsters, their mothers, and the director of a health clinic. Creighton University, on WOW-TV, Omaha.

"THE ZOO PARADE" entertaining the very young viewers with zoo animals "beyond the kitty and the puppy stage", to parakeets, monkeys and lions. Special emphasis is on the very young animals. Northwestern University on WGN-TV, Chicago.

"CARTOON TIME" daily feature for the very young child which schedules some of the best from the library of cartoon films. Always popular with the kiddies. On many TV stations.

"LET'S DRAW" a TV series which leads the kindergarten boys and girls to the proper creative use of various available art materials for the youngster's age. A good "doing" program which needs the assistance of the mother, therefore bringing artist, mother, and child together in a creative experience. New York Board of Education on WPIX-TV, New York City.

"THE STORY LADY" combination of dramatic narrative illustrative scenes, and studio group of boys and girls. Philadelphia Public Schools WIFFLE PLAYHOUSE, on WFIL-TV. (A common and successful pattern on many stations and a good public library feature on any TV station.)

IN-SCHOOL PROGRAMMING

While it seems possible that the new device of television will, in some circumstances, allow a teacher to

handle more pupils, it seems probable that television will find its most significant use as an adjunct to the regular teaching process. It has been suggested by some that the new medium of television may be used to substitute for the teachers needed for the vast new armies of children entering our elementary schools. The teacher will not be replaced in any way but rather will find it possible to be more stimulating and more creative by reason of having this new educational tool.

It may be expected that many of the new non-commercial stations will concentrate on this particular area by reason of the fact that some of them enjoy financial support, either on an assessed or voluntary basis, from the public schools of their communities. We may expect that many fine programs will be developed and will be available for Oregon use on a systematic and easily scheduled basis. This has been the experience on educational radio.

Because non-commercial television stations are new, most of the experimentation has been carried on over commercial stations. The use of radio has been successful in public school teaching and a glance at the following list of successful in-school programs over television already in operation will demonstrate that this new medium is likely to repeat this success.

"EXPLORING THE FINE ARTS" a series planned for upper elementary and secondary school pupils. Includes exhibitions of modern art treasures, dramatic scenes, etc. Operation Blackboard, Philadelphia Schools, WCAU-TV.

"THE WORLD AT YOUR DOOR" problems of education, government, industry and agriculture, with guests from other lands, music, and art of the country. Philadelphia Schools on WCAU-TV and WFIL-TV.

"HOW'S YOUR SOCIAL I.Q." teenage manners and social problems discussed with a guest expert. Philadelphia Schools on WFIL-TV and WPTZ-TV.

"SCIENCE IS FUN" planned for the upper elementary and junior high grades. Discussion, demonstration of a wide variety of science activities. Philadelphia Schools on WFIL-TV.

"FIT AS A FIDDLE" a physician answers questions of a 9-year old pupil on health. Liberal use of visual aids. Philadelphia Schools on WPTZ-TV.

"FACE THE FACTS" weekly series on current events for the Living Blackboard. New York City Board of Education on WPIX-TV, New York City.

"WHAT'S THE BIG IDEA?" weekly science series for the New York Board of Education, on WPIX-TV.

"ART IN YOUR LIFE" weekly art series for the New York Board of Education, on WPIX-TV.

"ON PERSONAL ADJUSTMENT" a series of programs for high school students in the field of personal adjustment. On WOI-TV, Iowa State College, Ames. (Other programs on science, government, art, history.)

"FOLLOWING CONSERVATION TRAILS" motivation for youngsters towards a deeper appreciation of our natural resources. Minnesota State Department of Conservation and University of Minnesota, on WCCO-TV, St. Paul-Minneapolis.

"FIRST CINCINNATIAN" from the Museum of Natural History aimed at 5th and 6th graders with emphasis on social studies, science and recreation. On WCET, Cincinnati.

"ART AS EDUCATION" produced under the direction of Harris Teachers College as an in-school program for the St. Louis area. On KETC-TV, St. Louis.

"THE WATER CYCLE" by Harris Teachers College, a science series covering the cycle from ocean to clouds to rain to run-off and back to ocean. On KETC-TV, St. Louis.

"LET'S TALK FRENCH" the teaching of modern language for high school students. New Jersey State Department of Education, on WTLV-TV.

AFTER-SCHOOL PROGRAMMING

One of the great weaknesses of commercial television seems to have been in the area of programs offered in after-school hours to boys and girls in their impressionable years. Possible damage to young minds caused by wide-spread

viewing of crime stories has caused a considerable uproar among parents. The complaints have been listened to by commercial telecasters and much is being done in the way of developing improved programs for boys and girls.

The commercial stations are handicapped, however, by lack of materials. It appears that communities need to do much in the way of assisting in the provision of local talent shows and other materials suitable for this presentation and yet sufficiently entertaining to command large audiences of young people. Some examples of programs which are emerging as a result of this combined effort on the part of stations and the communities are as follows:

"THE CHILDREN'S CORNER" a daily variety hour for the youngsters timed to keep them off the streets of the city during congested traffic and while mother is busy in the kitchen getting dinner. Includes "It's a Small World", "Doodle 'N Do", "Chalk Talk", "Animal Alphabet", and lots of specials. On WQED-TV, Pittsburgh.

"THROUGH THE ENCHANTED GATE" featuring programs from the Museum of Modern Art. New York. On WNET-TV.

"THE FRIENDLY GIANT" an after-school story hour for boys and girls. University of Wisconsin, on WHA-TV, Madison.

"THE MAGIC WINDOW" planned especially for boys and girls as an after-school experience. University of Houston, KUHT-TV, Houston.

"FROM THE PAGES OF VIRGINIA HISTORY" produced by the Arlington Public Schools, featuring Virginia homes and historic sites. On WMAL-TV, Washington, D.C.

"YOUTH FORUM" features a weekly program with a group of college students discussing vital issues, i.e. "Can We Have a World Without Fear?" WQED-TV, Pittsburgh.

"ARE YOU READY FOR SENIOR HIGH?" a series of counselors presenting a panel of students with evaluation of their school experiences. WQED-TV, Pittsburgh.

"PARTNERS IN PROGRESS" showing how students learn about business, commerce and industry, demonstrating interrelations between business and industry, etc. Bay Area Public School System, on PKIX-TV, San Francisco.

"SURPRISE PACKAGE" a community feature highlighting a local event and local talent in an entertaining ad-lib fashion. Iowa State College, WOI-TV, Ames.

"THE PHILADELPHIA ZOO" experiments with this series with children popping the questions the home audiences have about the animals on camera. A lively and informal show. WPTZ-TV, Philadelphia.

"HOW DOES IT WORK?" demonstrating some phase of school biology, chemistry, physics, etc. just as they are taught in school by applying them to life and happenings in the everyday world. California Teachers Association on KTTV, Los Angeles.

"NOAH'S ARK" (see pre-school schedule) Boys and girls encouraged to send in their own illustrations of the bible story on the telecast. On KOIN-TV, Portland.

ADULT INFORMAL PROGRAMMING

Most of the material now being telecast that may be said to be educational in nature falls in this category. Commercial stations have made much time available for local civic and cultural groups, although most of the scheduling falls during the day-time hours when not many adults may listen.

Depending upon the breadth of definition, large amounts of present commercial programming are educational in nature. When one includes music and drama in this category, the present offerings appear very large indeed. Religious programs, of which there are many, may also be included in this category.

One great advantage of this form of programming over commercial stations is the large audiences that may thereby be developed. It can be expected that commercial stations will continue to allot large blocks of time to this form of telecasting. A principle responsibility of those who are developing educational television, then, is to improve

the quality of programs that are offered. Much work needs to be done in this direction of assuring that the better resources of the community are given full advantage of this opportunity to reach a mass audience.

The breadth and maturity of offerings in this field nationally are best illustrated by a list of programs now in operation.

"SCHOOLS ON PARADE" meeting the local superintendents that are in the station area and seeing what special projects are being carried on in the various districts. On WQED-TV, Pittsburgh.

"ORDER PLEASE" a series of programs on parliamentary procedure presented by the local branches of three national women's organizations. WQED, Pittsburgh.

"REFLECTIONS IN ART" a series of art and artists beginning with ancient Egypt. WQED-TV, Pittsburgh.

"LOOKING AT LONG BEACH" produced by the Long Beach Educational TV Council and presenting a workshop on community problems. Originally on KTHE, Los Angeles. Now on commercial TV.

"COMMUNITY PORTRAITS" surprising some of the citizens with the resources right in their own community. A good place to see "what's new". WQED, Pittsburgh.

"THE WHOLE TOWN'S TALKING" bringing a cross-section of an Iowa community together to discuss serious local problems: school district reorganization, reapportionment, gambling, law enforcement, juvenile delinquency, financing a new hospital, etc. Iowa State College, on WOI-TV, Ames.

"YOUR MONEY" a TV telephone forum permitting viewers to question the experts while the program is on the air: how their money controls operate, competition, living standards, other aspects of government and business. On WHAM, Rochester.

"INTERPRETING THE NEWS" a week-end review of news in words and photos, drawing upon college resources for interpretation. Michigan State College, WKAR-TV, East Lansing.

"COMMUNITY WORKSHOP" a varied series by the public schools, YMCA, YWCA, Art Museum, Junior League, Library, and others, on KING-TV, Seattle.

"BETTER FARMING" a series of daily 30-minute "how-to-do-it" programs for farm families by faculty and farm group personnel. Michigan State College, on WKAR-TV, East Lansing.

"FROM THE MIND OF MAN" series of discussions of great literary works and how they apply to our living today. Moderator and three panelists. Iowa State College, on WOI-TV, Ames.

"EXTENSION CLOSE-UP" featuring the resources of the Federal Extension Service at the University of Wisconsin, on WHA-TV, Madison.

"THE PARENTS AND DR. SPOCK" presenting the authority of Child Care Pocket Book fame and a group of mothers discussing problems of a universal nature. On WQED-TV, Pittsburgh.

"FILMS FROM BRITAIN" a series of films of places most of us have longed to see, but may never have the chance, such as Edinburgh Festival of Drama. WQED, Pittsburgh.

"AMERICA'S WORKSHOP" featuring educational tours of America's great industries. WTTW, Chicago.

"DISCOVERY" the weekly series from the San Francisco Museum of Art. Station KPIX, San Francisco.

"IT'S YOUR POLITICS" aimed at making citizens more fully aware of political operations at all levels of government. WQED, Pittsburgh.

"FRENCH FOR TRAVEL" simple, practical French needed for travelers going through customs, shopping, ordering a meal, etc. University of Rochester, on WHAM-TV.

"VETERAN'S ADMINISTRATION" TV films on employment and rehabilitation of the handicapped, and the investment in human welfare, the handicapped's contribution to business and industry. Information Service, Washington, D.C. (On many stations).

"IN THE BEGINNING - THE PRIMITIVE EARTH" featuring the origin of the universe, a world is built, the growth of life, etc. University of Nebraska, KUON-TV.

"EXPLORER AND SETTLER - WHITE MAN ARRIVES" the pioneer story of the Great Plains. University of Nebraska, KUON-TV.

"SAFETY EDUCATION" with members of the Rochester Safety Council and the health and accident prevention bureaus discussing ways of preventing accidents to members of the family circle. On WHAM-TV.

"FREE ENTERPRISE OF THE MIND" or The Truth Shall Make You Free. Consolidated University of North Carolina, WUNC-TV.

Also: "THIS WORLD OF CHEMISTRY"
 "HOW THE STATE IS GOVERNED"
 "EVERYBODY'S BUSINESS"
 "HANDLING YOUR HOME BUDGET"
 "TO YOUR GOOD HEALTH"
 "SEARCH AND RESEARCH"

FORMAL ADULT PROGRAMMING

The colleges of the nation have been particularly interested in providing a regular and systematic presentation of materials in specific fields of study. By definition, this type of serious, carefully organized material requiring strict attention by the listeners, will have a different appeal than programs with the emphasis upon entertainment. It may be expected that a lesser segment of the potential audience will follow such a presentation and herein lies the disadvantage of dependence upon commercial stations.

They, in order to live economically, must aim for continuing large audiences throughout each station's transmission period. A commercial station can ill-afford to deliberately narrow its audience for, once lost, it is hard to regain for ensuing programs with wider appeal.

Further, it appears that much experimentation must be done with this type of program in order to enhance its effectiveness. Teaching by television is a brand new art form and new techniques will emerge only as more and better

teachers are given the opportunity to use the medium. It appears obvious that this experimentation may go on best over non-commercial facilities. In most cases, these need to be convenient to the educators, i.e., studios need to be located on campuses.

The General Extension Division of the Oregon State System of Higher Education is at present experimenting with telecourses over several commercial stations. This is useful experimentation but it has already been determined that evening hours will not be available in the Portland area for such courses. Men, thus eliminated from the audience, have comprised over half the registrants in some instances.

An examination of the various formal educational programs for adults now in operation throughout the country serves to demonstrate that television presents a great opportunity to bring to our citizenry the systematic study of complex problems so badly needed in these difficult years at the beginning of an atomic age. An essential of this kind of teaching is continuity of offering at a regular and favorable hour. Some samples of formal adult education courses, both credit and non-credit, would include:

"MAN IN THIS WORLD - MODERN PHYSICS" telecourse for college credit from the University of Michigan, discussing atomic power, nuclear fission, cathode rays, x-rays, radar and other physical phenomenon. On WWJ-TV, Detroit.

"PRIMITIVE ART" telecourse from the University of Washington. Art is the language of primitive cultures speaking to anthropologists. On KING-TV, Seattle.

"DOMESTIC ARCHITECTURE" telecourse from Washington. A critical analysis of good design in domestic architecture. KING-TV, Seattle.

"HISTORY OF THE THEATER" from the School of Drama, University of Washington. John Ashby Conway lectures on the theater from primitive to modern times. KING-TV

"UNDERSTANDING MUSIC - THE VOCAL ARTS" presenting background information and evaluations of standards of performance in concert work, etc. University of Washington, KING-TV.

"CREATIVE ARTISTS AT WORK" examining the artist's work in terms of his thought processes and creative techniques. University of Michigan, WWJ, Detroit.

"ELEMENTARY PSYCHOLOGY" one of the five half-hour shows a week in the field of adult education by Western Reserve University, Cleveland, on WEWS-TV. Others include: "COMPARATIVE LITERATURE", and a "COURSE IN ECONOMICS". For college credit or audit.

"SHAKESPEARE ON TV" course for college credit with Dr. Frank C. Baxter, professor of English at USC. First seen on commercial TV in Los Angeles and now by kinescope on many stations.

"INTERPRETATION OF DRAMATIC LITERATURE" telecourse for college credit from Michigan State College. On WKAR-TV, East Lansing.

"SALESMANSHIP PRINCIPLES" telecourse for college credit from Michigan State College. WKAR-TV.

"DRIVER EDUCATION" series of twice-weekly non-credit classes with a State Trooper discussing the accident of the week, discussion of major traffic situation, and problem solution. Michigan State College, WKAR-TV.

"HOME NURSING" non-credit course with lecture and demonstration teaching of the complete Red Cross Home Nursing curriculum. University of Houston and the American Red Cross, on KUHT-TV, Houston.

"WORLD PROBLEMS" telecourse for credit or audit through the General Extension Division and Southern Oregon College. On KBES-TV, Medford.

"HIGH SCHOOL OF THE AIR" state-approved courses for high school credit telecasts in English, algebra, etc. Organized labor especially approves. On WQED, Pittsburgh.

PROGRAM RESOURCE DEVELOPMENT

One has only to be reminded that such programs as the Kefauver hearings and offerings of the Metropolitan Opera were on TV stations in the early fifties to realize that important education will in any case be accomplished over

commercial television. The task ahead in "educational television" is to develop and enhance the educational and cultural activities of communities in order that this education by television will be more effective even than at present. There are many ways in which this can be done. Principally, it seems that some liaison agency is needed to bring the cultural resources of communities to the telecasters. Whether the final program goes out over a commercial antenna or a non-commercial one makes no difference at the receiving end. Again, educational and cultural agencies need to provide themselves with studios, in many cases, so that programs may be telecast at least cost in terms of talent time. In many cases, these agencies need to consider placing their program on film so that it may be used again and again and in different places. Many times, kinescoping an actual program will serve the same purpose since these recordings may also be used again and again and exchanged with other resource agencies.

APPENDIX B

THE PITTSBURGH STORY

As published in the Kiplinger magazine Changing Times ,
for July, 1954.

People in Pittsburgh scratch their heads if anyone asks: "Say, who owns television station WQED?" In a sort of Alice-in-Wonderland double talk, they are likely to reply: "Well, WQED belongs to everybody and is owned by nobody." It has but one purpose - to provide programs that are worthwhile without being dull. For WQED is Pittsburgh's educational television station and answers to no one but its audience.

Since April 1, 1954, the station has been on the air three and a half hours a day, five days a week. This is only a beginning. But getting just this far has taken the sweat and the dedicated spirit of thousands of people who believe that from television can come a great cultural and educational bounty.

To appreciate the drama of how it was done, you must go back three years to April 1, 1951.

On that day Mayor David L. Lawrence brought together representatives of the schools, colleges and universities in the Pittsburgh area. There was, he said, a good chance that Pittsburgh would be eligible for an educational TV channel, one of 242 shortly to be allocated by the Federal Communications Commission. What was the educators pleasure?

It was an exciting proposition. Alfred W. Beattie, superintendent of the Allegheny County schools, headed up the committee of 18 which was to get things ready. But early enthusiasm soon faded to hoplessness. Money, of course, was the big problem. It takes hundreds of thousands of dollars to build and support an educational TV station, and not a sou was in sight. In February 1952 the committee turned the problem over to more experienced heads, the members of the Allegheny Conference on Community Development.

"You don't get anywhere in Pittsburgh without the conference," is a saying often heard in that city. It has obtained better roads, bigger skyscrapers, cleaner rivers

and smokeless ozone. But in its urgency to clean up Pittsburgh, the conference neglected the city's cultural needs. It moved fast to make up for lost time.

Park H. Martin, conference director, surveyed the need for a station. His findings were startling. Example: Only one Pittsburgher in a hundred had ever heard the Pittsburgh Symphony. Other findings stood out unpleasantly. People weren't sharing in the riches of the Carnegie Museum, the University of Pittsburgh, the Mellon Institute and other centers of learning. Outstanding teachers weren't being heard beyond the classroom walls. There was obviously public hunger for self-improvement which could be satisfied only through mass instruction. An educational TV station looked like the ideal medium for filling these needs.

DOWN TO BUSINESS. To Leland Hazard, vice president of the Pittsburgh Plate Glass Co., went the assignment of getting the station going. A lawyer and an industrialist, fond of quoting Shakespeare and Aristotle, Hazard became the force which ultimately put the station in business. He lived for the job. Here is how he tackled it.

MONEY. Hazard needed \$250,000 just to set up the station. He got more than this - from the Fund for Adult Education, \$100,000, from the Mellon Trust, \$100,000, and from the Arbuckle-Jamison Foundation, \$100,000. All but \$75,000 went for studios, equipment, air conditioning. The \$75,000 was kept in reserve.

Luckily Hazard did not have to buy land or building. He was able to rent - for \$1 a year from the University of Pittsburgh - a 50-year-old mansion across the way from the campus.

POLICY. Anything as new as WQED needed strong hands to guide it. Hazard hand-picked a board of nine men (since expanded to 24) all leaders in the business, professional and cultural life of the city. Board members represent no one but themselves. This gives each member a chance to make decisions without pressure from any special group or interest.

PUBLIC REPRESENTATION. A Citizens' Committee of 400 was selected and then broken up into manageable sub-committees to handle the leg work that had to be done.

Its members were drawn from every type of community organization, and each one of them was considered to be a "dedicated native". Its job: to advise the board, raise funds, come up with program ideas.

RAISING ANOTHER \$250,000. But it took a woman to give WQED the extra vitality it needed. She is Mrs. Dorothy Daniel, considered by all to have been the dynamo who energized the whole project. Ask Mrs. Daniel why she took the job of promotion director, and she'll tell you, "I guess I was the only one crazy enough to try it."

Her first office was in a loft on Ross Street. She had no staff. All she knew was that somehow, some way, she must raise a quarter of a million dollars. That amount, remember, was over and above the original \$250,000 needed to build the station. It was the estimated budget for one year's operation. The first \$50,000 came easy. The Mellon Trust gave it as "seed money" to get things started. The question was how to get the rest of the money. Mail solicitations were tried. So were booths in stores and theaters and letter appeals to big organizations. These efforts all flopped. Looking back Dorothy Daniel says the trouble was that there was no intimacy in the appeals. The station had to be sold personally or it could not be sold at all.

So Dorothy Daniel's staff got up 10,000 kits containing literature and donation pledge blanks. Women's clubs all over town took them and began a city-wide door-step and telephone appeal for \$2 contributions. Staff members made talks to every organization that could be reached, from the Rotary Club to the local union. At the same time the newspapers, radio stations and -yes- TV stations began to drum up enthusiasm for the new station. The idea caught on. Friends told friends, club members informed other club members, school kids told their parents. Women did most of the talking - not men. The men raised an eyebrow of interest, but remained pretty much on the sidelines. (A \$2 subscription carries with it membership in WQED and a WQED Guild, of which there are more than 46. In addition, \$2 members receive a subscription to WQED Program Previews, a jaunty monthly magazine filled with program schedules and chit-chat.

Another source of funds was the 500 school districts in Greater Pittsburgh. Each district is autonomous and

controls its own money. To each, WQED said, "We plan lots of programs for educational purposes in the schools. In return, we ask that you voluntarily contribute 30 cents per year per child in your schools." Around \$70,000 has come in thus far as a result of this appeal.

The money raising can never end. If it did, the lifeblood of the station would seep out. No, Pittsburgher industries have not yet contributed. Their turn will come once it is clear to everyone that the station is not under the control of any single group.

WQED PRESENTS. People constantly knock at the door of the station for auditions. Program ideas are equally plentiful. Housewives, college professors, school teachers, school kids, puppeteers, scientists, businessmen - just about anyone with any special talent - are likely to be seen on the shows. Most are outstanding. Most are not paid. Youngsters, especially, seem to do better in front of a TV camera than in front of a TV screen.

Will it pan out? Is educational TV a workable idea? No one can say - yet. But in Pittsburgh they will bet you that WQED will one day justify its Latin initials: Quod Erat Demonstrandum - that which was to be proved!

APPENDIX C

EDUCATIONAL TELEVISION STATIONS IN THE UNITED STATES

(On the Air as of January 1, 1956)

KUHT, Houston, Texas	Channel 5
WKAR-TV, East Lansing, Michigan	" 60
WQED, Pittsburgh, Pa.	" 13
WHA-TV, Madison, Wisconsin	" 21
KQED, San Francisco, California	" 9
WCET, Cincinnati, Ohio	" 8
KETC, St. Louis, Missouri	" 9
KUON-TV, Lincoln, Nebraska	" 12
KCTS-TV, Seattle, Washington	" 9
WTIQ, Munford, Alabama	" 7
WUNC-TV, Chapel Hill, N. C.	" 4
WBIQ, Birmingham, Alabama	" 10
WGBH-TV, Boston, Mass.	" 2
WILL-TV, Urbana, Illinois	" 12
WTHS-TV, Miami, Florida	" 2
WTTW, Chicago, Illinois	" 11
WTVS, Detroit, Michigan	" 56

Eight other stations are either on the air as this study is completed or close to their final operating dates:

Andalusia, Alabama: Alabama ETV Commission	Channel 2
Atlanta, Georgia: Board of Education of City	" 30
Columbus, Ohio: Ohio State University	" 34
Denver, Colorado: Denver Public Schools	" 6
Memphis, Tennessee: Memphis Community TV	" 10
Monroe, Louisiana: State Dept. of Education	" 13
New Orleans, La.: Greater New Orleans ETV	" 8
Oklahoma City, Okla.: Oklahoma ETV Authority	" 13

Other stations in the planning stage, with construction permits or applications pending before the Federal Communications Commission, as of September 15, 1955:

Sacramento, California: Central California ETV, Inc.;
 Bridgeport, Hartford, and Norwich, Conn., Connecticut State
 Board of Education; Jacksonville, Florida: Educational

TV, Inc. Board of Education for City of Savannah and County of Chatham; Lawrence, University of Kansas; Manhattan, Kansas State College; Ann Arbor, University of Michigan; New Brunswick, New Jersey State Department of Education; Albany, Binghampton, Buffalo, Ithaca, New York, Rochester, Syracuse, Utica, Board of Regents of the State of New York; Greater Toledo, Educational TV Association; Tulsa, Oklahoma, Educational TV Authority; Philadelphia, Delaware Valley ETV Corporation; Providence, Rhode Island Board of Education; Nashville, Educational TV Foundation; San Antonio, Council for ETV; Milwaukee, Wisconsin, Board of Vocational and Adult Education and Wisconsin State Radio Council; Puerto Rico, Board of Education.

APPENDIX D

THE TELEVISION REPORT

Submitted July 1, 1952, to Chancellor Charles D. Byrne, Oregon State System of Higher Education, by D. Glenn Starlin, University of Oregon, Grant S. Feikert, Oregon State College, and James M. Morris, General Extension Division (Chairman).

PREAMBLE:

The committee recommends strongly that the state of Oregon should take definite steps to provide educational television facilities for the people of the state.

The reader of this report may be greatly concerned over the cost of establishing and operating a television station. An initial reaction may be that the state cannot afford to support such an enterprise. The committee submits that the question is not one of "can we afford it," but rather "can we afford not to afford it?" We have long talked about "the state as the campus." Here is a way of reaching a community of understanding, a genuine sharing of the educational resources of the institutions that is unique and unparalleled in educational history. The Allocation Report of the Federal Communications Commission and its consequences will affect every parent, every teacher, every social worker, every citizen. As Chairman Paul A. Walker, of the Federal Communications Commission, said at State College, Pennsylvania, April 21, 1951, "This new element (television) will have to be reckoned with in all deliberations of American educators from now on....You and your fellow educators over the nation must realize the realities of the situation. These precious television assignments cannot be reserved for you indefinitely. They may not be reserved for you beyond the year unless you give the Commission concrete, convincing evidence of the validity of your intent.

"I have the faith that you educators will guard these hard won assignments. You, your Boards of Education, your Boards of Trustees, your benefactors through endowment funds, your State Legislatures, you, and they will make the decisions. In the words of the poet, 'There is a tide in the affairs of men, which taken at flood tide, leads on to fortune. Omitted, all the voyage of their lives is bound in sorrows of misery.' To you members of the American Council on Education, and to all American educators, I say that the tide is in. If you do not take it at its flood, you may foreclose yourselves forever from the full utilization of the greatest spectrological discovery offered education since the inventing of the printing press."

At the recent Institute for Education by Radio-Television at Columbus, Chairman Walker closed his address with these words: "In my state of Oklahoma, the Five Civilized Tribes at one time had vast holdings under a

treaty with the United States. They understood that they were to have these lands, to use in their own picturesque phrase, 'as long as grass grows and water runs.' There is nothing in the Commission's Sixth Report and Order that gives you any assurance that your channels will be reserved 'as long as grass grows and water runs.' Or anything like it. So you see that you have only won the first round in this fight. If you relax now, you may find that you have won the battle and lost the war."

I WHAT IS THE BEST PLAN?

It is the recommendation that one television station be built by the Oregon State System of Higher Education, using channel 7 and that the transmitter be located on Mary's Peak, west of Corvallis, with the studios located on the University of Oregon campus, in Eugene, and at Oregon State College, Corvallis. The committee also recommends that a mobile unit be purchased which would serve other departments of state government in Salem and Portland, as well as institutions of the State System of Higher Education located in Monmouth, Portland, La Grande, and Ashland.

It is recognized that this does not solve the problem in Portland. It would appear that if the problem of educational television in Portland is to be solved it must be a cooperative venture with the Portland School District taking the lead as a tax supported institution in cooperation with private and public institutions in the metropolitan area. If such a venture is developed we believe that the Oregon State System should cooperate due to our obligation to serve the units of the State System located in Portland and to supply educational television programs to the people of Portland.

It appears that Mary's Peak is the best transmitter location for the following reasons:

- a. By using microwave equipment, programs can be broadcast direct from the University at Eugene and the State College at Corvallis. Thus, a single installation will serve both institutions.
- b. Excellent coverage of the Willamette Valley will be obtained, and a significant area along the coast will be served. In fact the committee suggests that in the Mary's Peak location the state of Oregon has one of the best sites for a

television transmitter to be found in the entire country. It is perhaps second only to Mt. Wilson in the Los Angeles area, and provides us with the opportunity to apply to the Federal Communications Commission for the maximum usable power of a television transmitting plant.

The committee feels that it would be sound development to follow this plan rather than to consider a single state television station in the Portland area for these reasons:

- a. If the station were located in Portland, the studios would be far removed from the program resources of the campuses of the University and the State College.
- b. Studios would be far removed from the student training programs on the major campuses.
- c. There would be little possibility of holding down programming costs by coordinating the staffs of radio and television.
- d. A considerable amount of Oregon tax money would be used in televising to a portion of the neighboring state of Washington instead of to the Oregon audience.

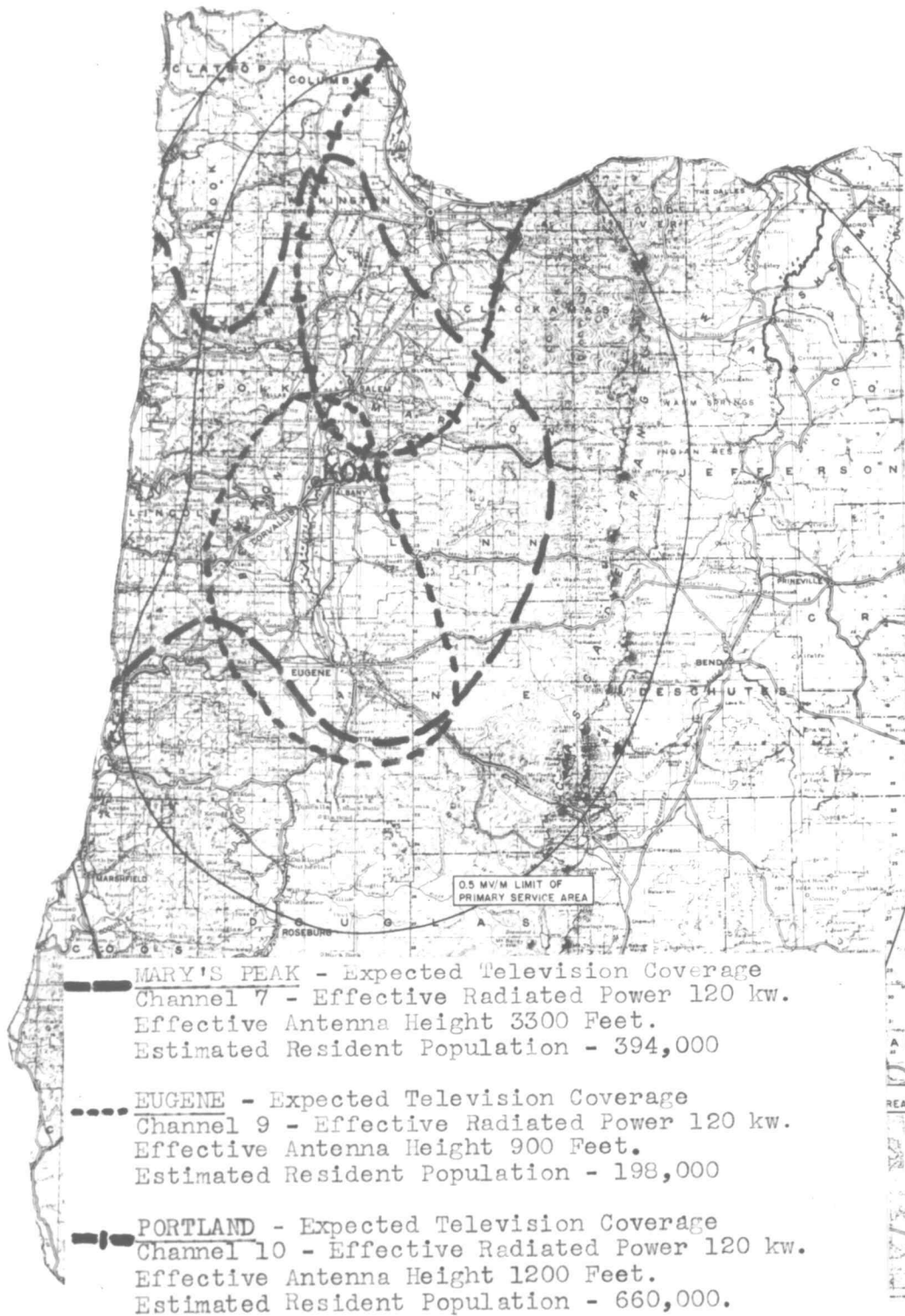
WHAT ARE THE COSTS?

Capital Outlay (Mary's Peak Transmitting Plant)

Transmitter	\$265,331.00
Corvallis Studios	140,419.72
Eugene Studios	139,508.78
Kinescope Recording Unit	37,784.00
Remote Program Mobile Unit	66,791.60

TOTAL \$649,835.10

For this cost which is admittedly higher than the average TV installation it should be emphasized that we will accomplish far more than the average for the people of Oregon. With the transmitter located on the best possible mountain top, programmed from two complete studio locations on the major campuses of the State System of Higher Education, and a unit combining the essentials of a third and highly portable studio, the program



Solid Contour Lines Represent KOAC Radio Coverage

department would be able to provide a television service unique to the Oregon situation.

In keeping with our obligation as the state station to serve all departments of the state government, in addition to the major institutions of the State System of Higher Education, this combination of equipment in a mobile unit can provide for release of live and recorded broadcasts from the State Capitol, the University of Oregon Medical and Dental Schools, the Portland State Extension Center, and the three Colleges of Education, as well as special events around the state.

Delayed recordings could be made anywhere in the state. The kinescope unit by itself could be used either at the Eugene or Corvallis studios for the preparation of recordings of programs for delayed broadcast or for distribution to other Oregon stations, as exchange features for release to the network of the National Association of Educational Broadcasters, as well as serving with the mobile unit on its schedule of special telecasts.

ANNUAL ENGINEERING COSTS

Transmitter	\$24,400.00
Corvallis Studio	26,600.00
Remote Control Equipment	21,800.00
	\$72,800.00

ANNUAL PROGRAMMING COSTS.

Corvallis Studios: This cost estimate is based upon coordinated programming of television and the existing standard AM educational radio station. Budget estimates are based on 4 hours per day, 7 days per week of television programming from the main studios in Corvallis, with one or two hours per day of live studio and remote, supplemented with film and program exchange from the NAEB network. Students would be used extensively to augment the paid staff. In addition, a full 12-hour daily schedule would be maintained on the state-owned radio station under this budget.

Salaries and wages	\$90,000.00
Materials and expense	27,500.00

Combined radio and television programming \$117,500.00

Eugene Studios: It is assumed that the University of Oregon would be responsible for approximately one hour of live broadcast time daily. Over-all supervision and direction of programs would be handled by the instructional staff at the University and student help would be used extensively in production. At least one program person and three technicians would be needed to augment the present staff.

Salaries and wages	\$19,000.00	
Materials and expense	5,000.00	
		<u>\$24,000.00</u>

Remote Control Unit: One program director would be needed to staff the mobile unit in addition to the technical crew provided for under annual engineering costs.

Salaries and wages	<u>\$4,000.00</u>	
		\$4,000.00

TOTAL		<u>\$218,300.00</u>
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Less present radio program budget		<u>52,000.00</u>
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Net additional funds for television		\$166,300.00
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NEW DEVELOPMENTS

Television is a fast moving, rapidly changing medium. Therefore the committee wants to call attention to the fact that the state should contemplate the expenditure of more monies in the future to keep abreast of new developments, such as color television.

It should be recognized, too, that the costs included in this report are based upon today's price quotations. No one can predict what added costs might be necessary if a rising price spiral were to appear before actual construction of the station was begun.

II SEMI-COMMERCIAL OPERATION

- a. Semi-commercial operation on the educational channels reserved for institutional use has been prohibited by the Federal Communications Commission. The State System could only wait for the one-year period and file for such commercial operation of the channel in competition with the regular commercial interests.
- b. WOI-TV, at Iowa State College, reports no opposition from the local audience to its semi-commercial operation. One reason probably is found in the fact that WOI-TV at the present time is the only television available in the area. Listeners can get programs from no other station.

Opposition to the ban on local advertising has been expressed by merchants in the area who wish to purchase local advertising time. This protest has gone through all administrative channels up to and including the state executive department.

Recently, WOI's station policy to accept only national accounts was modified to a wide regional basis due to pressure from advertising agencies.

III ASSISTANCE ON CAPITAL AND OPERATIONAL EXPENSE

- a. Capital Outlay - No assistance appears to be available. Officers of the Joint Committee on Educational Television indicate that capital outlay is an individual problem of the institutions. The Fund for Adult Education says no money can be used for technical equipment to assist a station in getting on the air.
- b. Programming - The Joint Committee on Educational Television promises that by the time a station such as that proposed for Oregon is ready to go on the air, there will be some two to four hours per day of exchange programming available. Such a program exchange will materially reduce the over-all program cost of maintaining the station schedule and has been considered in the costs outlined in this report.

Interest of the E.C. Brown Trust has been indicated in an educational series in the field of Health. There are indications of such interest on the part of other foundations, but no commitments have been obtained due to the uncertainties involved. It should be noted that such assistance would be used to enrich the program offerings of the station in specified areas of education rather than to depend upon such outside assistance for the basic programming of the station. Funds for the Joint Committee on Educational television exchange programs will come largely from groups such as the Fund for Adult Education and the Kellogg Foundation.

Income from fees for courses scheduled for telecast in cooperation with the program of Correspondence Study of the General Extension Division can be used to underwrite the costs of programs in this area of service.

Use of students in a television training program to supplement the full-time professional staff will give assistance to the program department in lowering the budgetary requirements of the proposed TV station. A much smaller full-time staff will be needed if adequate use is made of television in a student training program.

IV CONTINUANCE OF RADIO

The question has been raised concerning the continued operation of the educational radio station after we have a state television station. The committee submits that radio and television supplement each other, they do not displace. Television takes its place as a new media in the field of mass communications but radio does not cease as a valuable tool of education.

There are many areas where, according to our present understanding of the medium, radio will continue to serve more effectively than television. Examples include:

- a. Daytime programming (where less concentrated attention is available.)
- b. Classical Music

- c. Distributing of general information
- d. In-school teaching
- e. Out-of-home audience (car radios, portables, etc.)

Under the proposed coordinated programming of radio and television, programs will be assigned to the media best suited to the individual broadcast. If there is little or no visual appeal, the program will be assigned to radio. If the program content is high in visual appeal, it will be assigned to television. Many programs, both studio and of a special event nature, will be of extreme value to both radio and television, and will, therefore, be simulcast to reach the maximum audience resulting from the full use of both media.

It is the committee's feeling that radio's wider coverage will always give this method of broadcasting an audience impossible to obtain on television, and that Oregon, saturated as it is with radio receivers (from one to five per family), will continue to provide KOAC with an audience for its radio broadcasts.

The program department of KOAC recognizes that a continuing study of the Oregon audience, both radio and television, will be needed and that substantial changes may result in the radio broadcast schedule as a result of the addition of television to the area of mass communication. Increased emphasis may be given to the daytime schedule of the state-owned radio station including the necessity for the addition of the early-morning hours not now used by KOAC and added attention given to the areas of service and informational programs, to classical music, and such other broadcasts as are not adequately presented by commercial radio stations. It is not anticipated that the addition of television will reduce the effectiveness of radio to a point where the State of Oregon should cease its educational radio broadcasting. If, on the other hand, the new TV medium should develop to such stature that radio was no longer useful to the state, then consideration should be given to devoting our entire efforts to television.

V COORDINATION OF RADIO AND TELEVISION

1. Technical - No coordination between the two technical staffs is planned except at the administrative level.
2. Programming - A great deal of coordination is necessary and important to the successful operation of the program department.
 - a. The staff of trained resource people in the field of mass communications and education and experienced in working with the academic staff would plan programming in subject-matter areas for both radio and television. This combined staff would work in both media and with faculty in planning and presenting the program schedule.
 - b. Programs will be simulcast when the nature of the material is such that both good listening and good viewing are part of the program. Bad audio - one of the present faults of TV, both technically and in program content, would be corrected by a staff experienced in aural broadcasting to make simulcasts also good listening.
3. Savings by Coordination
 - a. Technical - none.
 - b. Programming - Salaried personnel will devote their full time to the creative side of broadcasting and lower salaried employees would take over some of the more routine jobs in radio now being done by staff resource people in the higher pay brackets.

More advanced students could be used through the training program thus supplementing the teaching program of the institutions.

Office and administrative personnel now experienced in program routine could assume the increased work for TV programming at lower cost than could be done by an entirely separate television staff.

Routine items under the requisition budget could serve both radio and television: teletype news service, telephones, record and sound effect libraries, mailing department, duplicating equipment, etc.

The high-morale factor among the staff resulting from efficient combination of radio and television into one mass-media staff would result in higher output per individual on the staff.

The program budget for the main studios under the combined plan for radio and television is proposed as follows:

Salaries	\$49,850.00
Wages	40,150.00
Materials and Expense	23,500.00
Travel	2,000.00
Equipment	2,000.00
TOTAL	\$117,500.00

The program budget for the main studios under a plan of individual staffing and programming for radio and television would be as follows:

Radio: (Present Budget)

Salaries	\$31,640.00
Wages	12,695.00
Materials and Expense	5,800.00
Travel	1,100.00
Equipment	800.00
TOTAL	\$52,035.00

Television: (Proposed Budget)

Salaries	\$48,000.00
Wages	17,000.00
Materials and Expense	18,500.00
Travel	1,000.00
Equipment	1,500.00
TOTAL	\$96,000.00

Combined total for radio and TV.....\$148,035.00

ESTIMATED SAVING BY THE PROPOSED COORDINATED
PROGRAMMING OF RADIO AND TELEVISION.... \$30,535.00

VI EDUCATIONAL IMPLICATIONS

The committee is not sure where curriculum changes should come, but it took the liberty of including this section dealing with educational implications in view of the importance of the entire student training program to the successful operation of the proposed television program. In like manner the television development will provide complete laboratory facilities for students in residence on the campuses of the State System of Higher Education.

UNIVERSITY OF OREGON

In order to discharge its instructional obligations in the area of television, the Department of Speech of the University of Oregon would recommend the following adjustment in course offerings in the radio and television field.

Course Title	Present Credit	Proposed Credit
Radio Program Production	9	6
Television Program Production	-	6
Radio Workshop	6	4
Television Workshop	-	4
Radio (and TV) Writing	6	9
Fundamentals of Broadcasting	2	3
Radio (and TV) and the Public	<u>3</u>	<u>3</u>
	26	35

This would increase course offerings nine hours and provide basic instructional coverage in television arts.

It might be well to note that the use of motion picture film is a very important feature in television broadcasting, and the University and the State System might well consider the advisability of introducing courses and laboratory work in the area of Cinematography. This would be a valuable

supplement to the offerings in the whole field of mass communications in education.

NEW COURSE DESCRIPTIONS:

SP. 446, 447 TELEVISION PROGRAM PRODUCTION (3-3 cr.)

Prerequisite: Television Workshop. Theory and application of television programming and production. Particular emphasis to creative and executive aspects of producer's problems and to directing methods involved in planning, rehearsing and telecasting of various types of programs.

SP. 343, 344 TELEVISION WORKSHOP (2-2 cr.)

Theory and application of television performance technique; care and operation of equipment; interpretative theory and its application. Selected television material used for laboratory projects.

OREGON STATE COLLEGE

The Speech Department at Oregon State College is recommending the following course adjustments in the radio and television field:

Course Title	Present Credit	Proposed Credit
Radio Speaking	9	9
Television Workshop	-	3
Television Program Production	<u>-</u>	<u>3</u>
	9	15

The two service courses in television are recommended, understanding that training facilities are made available for practical training and experience through the proposed television studios on the Oregon State College campus.

NEW COURSE DESCRIPTIONS:

SP. 337 - TELEVISION WORKSHOP (3 cr.)

Prerequisite: Radio Speech 334. Comparison of

radio and television media in terms of speech techniques, production facilities, fundamental vocabulary of television, the TV script, taboos of television, preparation of talks, interviews, discussion programs, laboratory drill in television communication techniques.

SP. 338 - TELEVISION PROGRAM PRODUCTION (3 cr.)

Prerequisite: SP.337. Television production techniques including lighting and make-up, cameras and microphone, principles of dramatic expression, psychology of directing for both audio and video. Television techniques in educational programming, demonstration scripts, adapting radio material to educational television, laboratory communication drill in direction and production TV methods.

GENERAL EXTENSION DIVISION

It is recommended that an extension course, APPLIED TELEVISION TECHNIQUES, be established which would provide course assignments of an advanced nature in actual TV production, available to students from all institutions who might make special arrangements through their major schools to work on specific television projects in fields allied to their major study. This course would provide an opportunity for all major schools of the State System of Higher Education to take advantage of the special teaching techniques of the proposed television station.

ED. 451 - APPLIED TELEVISION TECHNIQUES (2-5 cr.G)

Prerequisite: Basic courses in radio and television, or equivalent experience, and consent of the TV instructor and major advisor. Students will apply the special techniques of television to their major study in art, architecture, agriculture, science, home economics, education, etc., working together here to produce television shows for broadcast.

ED. 450 - RADIO AND TELEVISION EDUCATION (3 cr.G)

The revision of a present course in the General Extension Division to include television as well as radio education.

To substantiate Part III of this report, these courses would provide qualified students to aid in the staffing of the proposed station and in lowering programming costs.

The committee recognizes that these are recommendations of a theoretical instructional plan and should be reviewed and altered as needed at the end of a year's trial.

TELEVISION REPORT

KOAC Program Department
Program Appendix

INSTITUTIONAL PROGRAMS

The television programming should be rich in features from the several institutions of the State System of Higher Education. With faculties of outstanding ability and varied interests and abilities in all areas of education, Oregon's educational television resources are unusually rich. On the campuses to be touched by the proposed TV programming are special events of state-wide interest and importance which only a few persons can attend. Television can take these events to the people wherever they live within the coverage area of the stations. College sports can enrich the offerings from the campuses and widen the scope of interest and the following which teams can have among Oregonians. Especially would this be true among the minor sports which today attract only a meager crowd.

The proposed television schedule would carry such programs as:

Convocations	Dramatic Productions
Assemblies	Student Training
College Concerts	Collegiate Sports
Faculty Programs	College Tours
Student Productions	Research Stories

FEDERAL EXTENSION SERVICE

The Federal Land Grant Act which established institutions such as Oregon State College and its Federal Extension Service designates use of all media of communication in the exercise of responsibility in extension.

The Federal Extension Service would use the proposed television station in a way similar to its present use of Radio Station KOAC, but it should be recognized that television's combination of sight and sound would be a much more powerful medium of use in an area where demonstration plays such a vital part. Demonstration and informational programs from the Federal Extension Service will form a definite part of the programming. Extension specialists who today speak before groups of perhaps 30 interested individuals in demonstrations located in distant parts of the state could conceivably give the same materials to classes of more than 3,000 by educational television.

The proposed television schedule would carry such programs as:

Market Information	Illustrated Discussions
Weather Reports	Field Demonstrations
4-H Club Broadcasts	Extension Classes

GENERAL EXTENSION DIVISION

The General Extension Division to which is assigned those state-wide educational services common to all institutions of the State System of Higher Education would be responsible for the basic programming in television as now in effect in radio broadcasting.

The proposed television schedule would carry such programs as:

Adult Education	News
Extension Classes (Non-credit and credit)	News Commentary
School of the Air	Children's Programs
Women's Interests	State-wide Special Events
Travel(State and national)	Citizenship (Local,state, national)
Cultural (Books,literature, music, etc.)	

It is proposed to offer educational television courses for college credit in cooperation with the Correspondence Study Department of the General Extension Division, using the present course structure, and administrative routine of registration, payment of fees, conducting of examinations, and granting of credit for work successfully completed.

Suggested courses for the first television schedule:

OSCT 311-312-313 NATURAL HISTORY OF OREGON(3 cr.each)

The environment, influence of topography, climate, and plant cover on distribution of animals.
Common invertebrates: local distribution, habits, collection and maintenance in laboratory. Identification, distribution, and habits of common land vertebrates.

CTCT 217 CLOTHING SELECTION 3 hours

To develop good taste in dress and to give an appreciation in selection and purchasing of clothing from standpoint of beauty, health, and economy.

AACT 298 SKETCHING 2 hours

Sketching from models to develop ability to observe clearly and record accurately. Offered for students who have had no previous training in sketching or drawing.

OTHER STATE DEPARTMENTS

It is assumed by the committee that Radio Station KOAC, designated as the state station to serve other departments of state government, would continue this policy in its television development. Other departments of state government would be invited to share in the programming of the television schedule.

The proposed television schedule would carry such programs as:

Traffic Safety	Bureau of Labor
Civil Defense	State Institutions
Accident Prevention	Department of Education
State Fair Board	Motor Vehicle Division
Civil Service	Legislative Branch
Vocational Education	Vocational Rehabilitation
Board of Aeronautics	Executive Department

OTHER PROGRAM SOURCES

Through the National Association of Educational Broadcasters, special financing of certain foundations, and cooperation of commercial firms interested in institutional presentations, the KOAC television development is assured of from two to four hours daily of exchange programs both on film and video recordings. These would be among some of the finest educational television programs developed in the nation and would augment the station's own live television programming to build a well-balanced schedule in the same way as the NAEB tape network is today supporting the KOAC radio program schedule.

The Federal Communications Commission has also authorized educational non-commercial television stations to carry selected network TV programs from which the commercial announcements have been deleted. Certain nationwide events of public service nature would therefore be available to educational stations providing facilities for bridging the networks were made available. Certain other commercial programs might also be obtained to enrich the station's schedule.

The proposed television schedule would carry such programs as:

Adventures in Research (Westinghouse)	Whole Town's Talking (Fund for Adult Ed.)
The Standard Hour (Standard Oil)	United Nations (UNESCO)
You and Your Health (Amer. Med. Ass'n)	Telenews
	The Endless Frontier (Health Ed. Foundation)

Educational film libraries contain subject area film for which permission to release on educational television can be obtained. Many companies are beginning to enter the field of preparation of films and video recordings for such public service use.

A TYPICAL TELEVISION BROADCAST SCHEDULE FOLLOWS:

It should be noted that the program outlined is only suggested as the type of weekly schedule it is proposed to broadcast by state-owned television. When the actual schedule is developed certain time problems and possible coordination with the broadcast schedule of the Portland educational station would make changes advisable. In addition, any schedule finally arranged will be subject to change as special events on the campuses and sports broadcasts create their own individual problems for the program department.

SUGGESTED DAILY PROGRAM SCHEDULE
(KOAC TELEVISION DEVELOPMENT)

SUNDAY

<u>TIME</u>	<u>PROGRAM</u>
5:00pm	TEST PATTERN - A design carrying the station call letters on the screen.
5:25	THE NEWS AND WEATHER - Five-minute summary of the news and weather conditions.
5:30	CHILDREN'S THEATER - KOAC staff programs of songs and stories for the very young.
6:00	CHURCH CHOIRS - Non-denominational programs of church choirs of all faiths.
6:30	WORLD BROTHERHOOD - An exchange program on film dramatizing world brotherhood.
6:45	THE NEWS AND WEATHER - Detailed analysis of the news and weather supplementing the 5:25 headlines.
7:00	THE STANDARD HOUR - KOAC release of the outstanding network program.
7:30	SCIENCE REVIEW - The now justly famous Johns Hopkins Science Review by Lynn Poole. Featuring Johns Hopkins staff.
8:00	YOUR STATE GOVERNMENT - Program planned by the KOAC staff as an informative series about Oregon's state government. State elective and appointive officials answering questions.
8:15	THE U. N. STORY - Dramatizations on film prepared by U.N. organizations.
8:30	FAMILY FILM THEATER - A series of drama filmed by the FAE for educational stations.
9:00	OREGON INVENTORY- KOAC staff production dealing with Oregon resources, business, recreation, etc. Special event and news filmed around the state used freely on this series.
9:15	NAEB NETWORK - Exchange recordings and films selected from the network and from other offerings of ETV stations.
9:45	LATE EVENING NEWS AND WEATHER - Final news for the day and discussion of the weather.
10:00	SIGN OFF

MONDAY

<u>TIME</u>	<u>PROGRAM</u>
5:00pm	TEST PATTERN - A design carrying the station call letters on the screen.
5:25	WATCH THE WEATHER - Material from the Weather Bureau and the OSC Physics Department.
5:30	THE CHILDREN'S THEATER - KOAC staff programs of songs and stories for very young.
6:00	THE KNOTHOLE CLUB - A film and recording series for older boys and girls.
6:15	OREGON SCHOOL OF THE AIR - Planned in cooperation with State Department of Education to correlate with curriculum.
6:30	LET'S TAKE A LOOK - A series from Geography Dept. about our own and other countries.
6:45	THE NEWS AND WEATHER - The days news and review of the weather.
7:00	CAMPUS RECITAL - Students of the University of Oregon School of Music.
7:15	ADVENTURES IN RESEARCH - Science series prepared by Westinghouse.
7:30	THIS IS YOUR UNIVERSITY - Variety magazine by and about the University of Oregon.
8:00	THE FARM REPORTER, - Planned by KOAC's farm man in cooperation with Federal Extension Service and Agriculture School.
8:15	ESPECIALLY FOR WOMEN - Women's television edition of the popular radio feature with School of Home Economics and other women's organizations.
8:30	TELECOURSE - Television courses for college credit presented in cooperation with Correspondence Study.
9:00	NAEB NETWORK - Exchange recordings and films from National Association of Educational Broadcasters and other ETV stations.
9:45	LATE EVENING NEWS AND WEATHER - Final news for the day and discussion of the weather.
10:00	SIGN OFF

TUESDAY

<u>TIME</u>	<u>PROGRAM</u>
5:00pm	TEST PATTERN - A design carrying the station call letters on the screen.
5:25	WATCH THE WEATHER - Material from the Weather Bureau and OSC Physics Department.
5:30	THE CHILDREN'S THEATER - KOAC staff programs of songs and stories for very young.
6:00	THE KNOTHOLE CLUB - A film and recording series for older boys and girls.
6:15	OREGON SCHOOL OF THE AIR - Planned in cooperation with State Department of Education to correlate with curriculum.
6:30	YOU NEVER KNOW - TV version of the current radio broadcast for the Traffic Safety Division and Oregon State Police.
6:45	THE NEWS AND WEATHER - The days news and review of the weather.
7:00	THE PUBLIC SCHOOLS - Presented with State Department of Education discussing the problems of Oregon schools.
7:15	THE BOOK PARADE - Book reviews, criticism, and service of local libraries.
7:30	TELECOURSE - An educational television course for college credit.
8:00	THE FARM REPORTER - Planned by KOAC's farm man in cooperation with Federal Extension Service and School of Agriculture.
8:15	ESPECIALLY FOR WOMEN - Women's television educational feature for School of Home Economics.
8:30	HOME BOUND - Planned especially for Oregon's home bound boys and girls by the Oregon School of the Air.
8:45	NAEB NETWORK - Exchange recordings and films from National Association of Educational Broadcasters and other ETV stations.
9:45	LATE EVENING NEWS AND WEATHER - Final news for the day and discussion of the weather.
10:00	SIGN OFF

WEDNESDAY

<u>TIME</u>	<u>PROGRAM</u>
5:00pm	TEST PATTERN - A design carrying the station call letters on the screen.
5:25	WATCH THE WEATHER - Material from the Weather Bureau and OSC Physics Department.
5:30	THE CHILDREN'S THEATER - KOAC staff programs of songs and stories for very young.
6:00	THE KNOTHOLE CLUB - A film and recording series for older boys and girls.
6:15	OREGON SCHOOL OF THE AIR - Planned in cooperation with State Department of Education to correlate with curriculum.
6:30	COLLEGE TOUR - Film and kinescope recordings from the Colleges of Education.
7:00	TELECOURSE - An educational television course for college credit.
7:30	THIS IS OREGON STATE - Variety magazine by and about Oregon State College.
8:00	THE FARM REPORTER - Planned by KOAC's farm man in cooperation with Federal Extension Service and the School of Agriculture.
8:15	ESPECIALLY FOR WOMEN - Women's television educational feature for School of Home Economics and organizations.
8:30	YOU AND YOUR HEALTH - Documented programs on our health problems in cooperation with Oregon State Board of Health.
8:45	FLYING TIME - Television version of a program by Oregon State Board of Aeronautics.
9:00	NAEB NETWORK - Exchange recordings and films from National Association of Educational Broadcasters and other ETV stations.
9:45	LATE EVENING NEWS AND WEATHER - Final news for the day and discussion of the weather.
10:00	SIGN OFF

THURSDAY

<u>TIME</u>	<u>PROGRAM</u>
5:00pm	TEST PATTERN - A design carrying the station call letters on the screen.
5:25	WATCH THE WEATHER - Material from the Weather Bureau and OSC Physics Department.
5:30	THE CHILDREN'S THEATER - KOAC staff programs of songs and stories for very young.
6:00	THE KNOTHOLE CLUB - A film and recording series for older boys and girls.
6:15	OREGON SCHOOL OF THE AIR - Planned in cooperation with State Department of Education to correlate with curriculum.
6:30	REALM OF RESEARCH - Interviews with graduate students and faculty concerning the research projects under study.
6:45	THE NEWS AND WEATHER - The news of the day and a review of the weather.
7:00	FOR SAFETY'S SAKE - Dramatized series in cooperation with Industrial Accident Commission of Oregon.
7:30	HEADLINE FORUM - Discussion of current problems by faculty members and guests.
8:00	THE FARM REPORTER - Planned by KOAC's farm man in cooperation with Federal Extension Service and School of Agriculture.
8:15	ESPECIALLY FOR WOMEN - Women's television educational feature for School of Home Economics and other organizations.
8:30	COLLEGE CONCERTS - Kinescope recordings of concerts on the campuses of the State System of Higher Education with students of the several departments and schools of music.
9:30	NAEB NETWORK - Exchange recordings and films from National Association of Educational Broadcasters and other ETV stations.
9:45	LATE EVENING NEWS AND WEATHER - Final news for the day and discussion of the weather.
10:00	SIGN OFF

FRIDAY

<u>TIME</u>	<u>PROGRAM</u>
5:00pm	TEST PATTERN - A design carrying the station call letters on the screen.
5:25	WATCH THE WEATHER - Material from the Weather Bureau and OSC Physics Department.
5:30	THE CHILDREN'S THEATER - KOAC staff programs of songs and stories for very young.
6:00	THE KNOTHOLE CLUB - A film and recording series for older boys and girls.
6:15	OREGON SCHOOL OF THE AIR - Planned in Cooperation with State Department of Education to correlate with curriculum.
6:30	OREGON CIVIL DEFENSE - Presented in cooperation with Civil Defense Agency.
6:45	THE NEWS AND WEATHER - The days news and review of the weather.
7:00	COLLEGE RECITAL - Students and faculty of the OSC Department of Music.
7:15	NAEB NETWORK - Exchange recordings and films from National Association of Educational Broadcasters and other ETV stations.
7:30	MONEY IN THE HOME - Everyday problems of handling home finances discussed by faculty from School of Business Administration at the University of Oregon.
7:45	G.E.JOURNAL-TV EDITION - Telling the story of the activities of the General Extension Division.
8:00	THE FARM REPORTER - Planned by KOAC's farm man in cooperation with Federal Extension Service and School of Agriculture.
8:15	ESPECIALLY FOR WOMEN - Women's television educational feature for School of Home Economics and other organizations.
8:30	COLLEGIATE SPORTS REVIEW - Remote broadcasts, film, and kinescope recordings of sports (wrestling, boxing, football, baseball, basketball, etc.) from the several campuses.
9:45	LATE EVENING NEWS AND WEATHER - Final news for the day and discussion of the weather.
10:00	SIGN OFF

SATURDAY

<u>TIME</u>	<u>PROGRAM</u>
5:00pm	TEST PATTERN - A design carrying the station call letters on the screen.
5:25	WATCH THE WEATHER - Material from the Weather Bureau and OSC Physics Department.
5:30	THE CHILDREN'S THEATER - KOAC staff programs of songs and stories for very young.
6:00	THE KNOTHOLE CLUB - A film and recording series for older boys and girls.
6:15	TEEN TEST - A program for teen-agers using the quiz-show technique and inviting boys and girls to the studio to participate.
6:45	THE NEWS AND WEATHER - The days news and review of the weather.
7:00	OREGON ON PARADE - A round-up of special events throughout the state during the week compiled by the special-event staff and using live studio, film, and kinescope recording.
8:00	NAEB NETWORK - Exchange recordings and films from National Association of Educational Broadcasters and other ETV stations.
9:45	LATE EVENING NEWS AND WEATHER - Final news for the day and discussion of the weather.
10:00	SIGN OFF

APPENDIX E

A PROPOSAL TO CREATE A STATE-OWNED EDUCATIONAL
TELEVISION SERVICE

Submitted to the Oregon Citizens Committee for Educational Television by the television committee of the Oregon Education Association, and adopted unanimously Friday, January 16, 1953, on the occasion of a citizens' meeting in Portland, Oregon. Elmer McClure, Master, Oregon State Grange, chairman.

Whereas: The Federal Communications Commission has set aside certain television channels to be reserved solely for non-commercial educational purposes:

And Whereas: Said television channels are reserved exclusively for educational purposes until June 2, 1953, under the rules of the FCC,

And Whereas: A plan has been developed for using Channel 7 assigned to Corvallis and Channel 10 assigned to Portland, with transmitters located on Mary's Peak, 4,000 foot elevation in the Coast Range, and on Council Crest, respectively. Program facilities to include studios in Eugene, Corvallis and Portland, a mobile studio unit, and a kinescope recorder which would make possible recorded programs for use on any television station as well as for national distribution in exchange for programs televised by other educational stations.

Costs at current quotations and being subject to change, being estimated at: Mary's Peak transmitter \$265,331.00, Corvallis studios \$140,419, Eugene studios \$139,508, kinescope recording unit \$37,784, remote program unit \$66,791, Portland studio \$100,000, Council Crest transmitter \$145,000,

And Whereas: Engineering studies indicate the proposed site is so advantageous that a transmitter as designed, having 120 kilowatts of effective radiated power, would cover an area equal to that which would be served by three normal transmitting installations located in Eugene, Corvallis, and Salem. It is determined that such a Mary's Peak transmitter is

the most economical use of the educational reservations available in the Willamette Valley, and also serves the Oregon Coast from Tillamook to Florence, and coupled with the Council Crest station would serve more than 1,100,000 persons living within the boundaries of the State of Oregon.

And Whereas: The Fund for Adult Education, an independent agency of the Ford Foundation, has made a grant of \$100,000 towards the Mary's Peak project contingent upon the state of Oregon appropriating the remaining amount to erect the station, and contingent upon the installation of kinescope recorder as provided herein for the preparation of recorded television programs for exchange with other educational stations similarly awarded grants under the Fund for Adult Education,

And Whereas: The Fund for Adult Education has further submitted a tentative grant of \$100,000 contingent upon the construction of the educational station using channel 10 in Portland,

And Whereas: The State Board of Higher Education is the licensee for the existing state-owned educational radio service and has the administrative staff to develop the proposed educational television service in accordance with the needs of all state departments and the educational demands of the area to be served, the State Board of Higher Education is hereby directed to develop educational television according to the proposed plan.

There is Hereby Appropriated: An amount of \$694,833.00 to be used for the erection of the two transmitters, supplying utilities, purchase of associated broadcast studio equipment, kinescope recorder, remote mobile unit, etc. Funds to be made available to the State Board of Higher Education beginning July 1, 1953 for use during the 1953-1955 biennium.

There is Further Appropriated: The sum of \$200,000.00 for one year's operation of the state-owned television station under the State Board of Higher Education beginning July 1, 1954.

It is hereby provided in this act that the State Board of Higher Education through the administrative officer of the station is granted authority to prorate such added costs of program production as the special demands of participating departments, public agencies, school districts, etc. may require. The station management is given authority to seek such outside funds from agencies, institutions, and foundations to augment the programming of the station, and to develop the maximum distribution of its programs to commercial stations which are planned for construction in other areas of the state of Oregon.

And Provided Further: That the State Board of Higher Education, having autonomy with respect to carrying out the state's educational program, and as such having authority under the law of the Federal Communications Commission to hold these non-commercial, educational licenses, should proceed immediately to protect the interest of the state of Oregon in the reservation of Channel 7 in Corvallis and Channel 10 in Portland. The educational television service herein provided for is also directed to continue its engineering studies as to the future location of satellite transmitters which might be used to carry these educational television programs to other population areas of the state, and to take such steps with the Federal Communications Commission as will make channels available for future use in those areas.

APPENDIX F

FORTY-SEVENTH LEGISLATIVE ASSEMBLY - REGULAR SESSION

SENATE CONCURRENT RESOLUTION NO.7
(Substitute for Senate Resolution No.22)

Introduced by Committee on Education
and read April 15, 1953

Whereas the Federal Communications Commission has reserved until June 2, 1953, certain television channels in Oregon to be used exclusively for noncommercial, educational purposes; and

Whereas said reservation and educational television are of recent origin and this is the first Legislative Assembly of the State of Oregon to which the matter of state-owned educational television stations and programs has been presented for consideration; and

Whereas considerable interest has been manifested in establishment and operation of a state-owned and operated educational television station by an agency of the state; and

Whereas due to unavailability of data and lack of time for a thorough study of the matter, this Legislative Assembly is unable to take definite action during the present session in regard to such establishment and operation but has determined that channels 7 and 10 are the channels which it desires reserved for future use exclusively for noncommercial educational purposes until such time as this Legislative Assembly has studied the matter sufficiently to be able to make an informed decision; and

Whereas the Legislative Assembly of the State of Oregon meets biennially and the next regular session at which this entire matter can first be adequately considered will convene in January, 1955; and

Whereas this Legislative Assembly deems it necessary that a thorough study of the problems relating to state-owned and operated educational television stations and programs be made before legislation is enacted; now, therefore,

BE IT RESOLVED BY THE SENATE OF THE STATE OF OREGON, THE HOUSE OF REPRESENTATIVES CONCURRING THEREIN:

That the Governor hereby is empowered to take all steps necessary to protect the interest of the State of Oregon in said channels 7 and 10 and is empowered to appoint such persons as he deems necessary or desirable to appear before the Federal Communications Commission to represent this state in securing the continued reservation of channels 7 and 10 for noncommercial educational television purposes, be it further

Resolved, That the Forty-seventh Legislative Assembly of the State of Oregon hereby urges the Federal Communications Commission of the United States of America to retain the present reservations and to continue to reserve channels 7 and 10 for the exclusive use for non-commercial educational television purposes in order that the Legislative Assembly of the State of Oregon may have an opportunity to adequately study the matter and take informed action on the matter at its next regular session beginning in January, 1955; and be it further

Resolved, That copies of this resolution be forwarded by the Chief Clerk of the Senate to the Federal Communications Commission of the United States of America; to the Honorable Guy Cordon, United States Senator from Oregon; to the Honorable Wayne Morse, United States Senator from Oregon; to the Honorable Sam Coon, Representative in Congress from the State of Oregon; to the Honorable Walter Norblad, Representative in Congress from the State of Oregon; to the Honorable Homer D. Angell, Representative in Congress from the State of Oregon; and to the Honorable Harris Ellsworth, Representative in Congress from the State of Oregon.

APPENDIX G

FORTY-EIGHTH LEGISLATIVE ASSEMBLY

SENATE BILL NO. 327

Introduced by Senator Holmes and Representative Neuberger
and read first time February 15, 1955

A BILL FOR
AN ACT

Relating to educational television and establishing educational television as a department in the higher education system under the State Board of Higher Education.

Be it enacted by the People of the State of Oregon:

Section 1. There is created a separate and distinct department in the higher education system to be under the jurisdiction, management and control of the State Board of Higher Education known as educational television. The State Board of Higher Education may acquire such land and acquire or construct such buildings and facilities as are necessary to provide facilities for the production, transmission and televising of educational programs and the teaching of every phase of television production.

Section 2. The State Board of Higher Education in the management and operation of educational television shall have all the general powers and duties so far as applicable or necessary that are granted or imposed upon the State Board of Higher Education in the management and operation of the institutions under its control and such additional powers as are necessary or convenient to carry out the objects and purposes of this act.

Section 3. This Act does not prohibit the use of commercial television stations and facilities in disseminating educational television programs.

APPENDIX H

FORTY-EIGHTH LEGISLATIVE ASSEMBLY - REGULAR SESSION

HOUSE BILL NO. 748

Introduced by Join Ways and Means and
read first time April 26, 1955

A BILL FOR
AN ACT

Relating to television for concommercial educational
purposes; and appropriating money.

Be it enacted by the people of the State of Oregon;

Section 1. During the biennium ending June 30, 1957, the Governor, or the state agency or person designated by the Governor, for the purpose of studying the problems relating to educational, noncommercial television and the state's entry into such field, may cause to be made such engineering studies and may cause to be prepared such plans with reference thereto as may by the Governor seem justified.

Section 2. There hereby is appropriated to the office of the Governor for the biennium ending June 30, 1957, out of the General Fund the sum of \$5,000 for the purpose of carrying out the provisions of section 1, of this Act.

APPENDIX I

PURPOSE AS A FACTOR IN PROGRAMMING ETV

Statements from National Leaders

Howard L. Bevis: Television is a medium for the accomplishment of broad educational purposes. It is a superb medium for demonstration and the teaching of specific skills. It has amazing power for the projection of personalities and thus for motivating interest and action. It has no rival in accomplishing tasks which depend primarily upon sight, such as the identification of objects, processes and phenomena.

Eugene R. Black: Educational television can bring to Americans vivid impressive reports of people, nations and events all over the world. Moreover television's combined power of sight and sound makes a more lasting impact than other forms of communication. So here, in educational TV is a great means of telling Americans the facts about international affairs in such a way that they will be better prepared to make decisions in this field intelligently and dispassionately.

Mrs. Theodore S. Chapman: Educational television can be the most important and effective medium of adult education known to man. It has a tremendous potential and should command the respect and support of every thinking American.

William K. Cumming: Television has the potential for becoming a highly significant tool in the total educational process. If educational television is not to become a potpourri of trivia, educators must decide what and how to communicate via the medium, and what and how to teach in training for television.

Irving Edison: Nothing is more modern, more progressive and more promising than national educational television. It will help to give us a more informed, intelligent, and courageous citizenry on which the internal strength and development of our country depends.

Milton S. Eisenhower: Television may well be the greatest single aid to both resident instruction and adult education devised in this century.

Leland Hazard: Non-profit, non-commercial television, voluntarily supported, can afford to experiment - in the belief that if some important minority of the public finds satisfaction, improvement and happiness from the experiment, then all of television will be enriched.

David D. Henry: In the presence of the almost overwhelming problem of teacher supply for the load ahead, the present academic indifference to the use of radio and television as teaching tools is difficult to understand. The traditional apathy of college teachers with reference to teacher recruitment and preparation was not important as long as we had enough reasonably good teachers to go around. Now, however, we cannot indulge in the luxury of indifference. In science a new chemical process excites the profession, and all are alert to find out about it and what it means. In medicine, a new drug is quickly analyzed, and a new vaccine will be tried on a national scale. In the humanities, a new journal is read and appraised. The parallel is clear. In television we have a great new force in communication. To ignore its potential is neither scholarly, nor professional, nor sensible in the presence of the overwhelming load ahead.

Rt. Rev. Msgr. F. G. Hochwalt: There is no doubt that television offers an unprecedented opportunity to raise the levels of knowledge, skills and cultural appreciation of millions of people. To let this opportunity slip through our fingers would be an almost unprecedented bit of negligence. The cooperative efforts now being made by educators, community leaders, and individual citizens to establish TV stations, is, therefore a most heartening sign of moral and civic responsibility.

Paul C. Hoffman: And now comes television, capable, if we use it rightly, of ending a type of mental parochialism. It can project us into unexplored areas of thought and action. This is particularly true of non-commercial, educational television because with its focus on what improves rather than merely amuses, it can open fresh vista of self-improvement and hence of national and international improvement. I have felt all along that the technological wonders of television deserve an equally wonderful appreciation. I am hopeful that educational television will supply it.

Willard M. Kiplinger: Television is a tremendous force for either good or bad or both. I know in a vague sort of way that it is going to revolutionize things. Educational television will take a whole generation to develop and we

as well get going and the sooner the better.

Thomas S. Parsons: The greatest chances for success of television may lie in the unabashed exploitation of the medium's intrinsic advantages rather than in the cautious aping of tried and proven classroom techniques.

George Meany: The American Federation of Labor is genuinely interested in the widest possible extension of the use of television for educational purposes.

Nathan M. Pusey: Television, for good or evil, is going to make more impact on human minds than any earlier means of communication. In view of this it seems to me clearly important that an effort be made to establish throughout the nation a system of educational television.

Walter Reuther: We in the Congress of Industrial Organizations proudly endorse the very worthwhile objectives of the National Citizens Committee for Educational Television.

Edward L. Ryerson: Channel 11 is the most exciting community project I have ever been associated with, and I have been associated with a great many over a period of 35 years. I can't conceive of anything more important for good in our community, or any force with such tremendous possibilities. Channel 11 can be the answer to many of the civic problems I have been concerned with over the years. It can interpret these problems to a wider audience than ever - we are told there are more TV sets than telephones in the Chicago area - and will be a much needed supplement to the work of all social, civic and cultural agencies.

Constance Warren: We in the United States pride ourselves on being quick to break through old conventions and make use of new ideas, new viewpoints, new inventions. The speed with which we have responded to the entertainment possibilities of commercial television has been remarkable even for us. Have we the vision to grasp the almost unlimited cultural possibilities of educational television before it is too late?

Earl Warren: Science has placed at the disposal of the people a device the educational potentialities of which appear to be tremendous. It may be that we are coming to grips with the richest opportunity in history to make available to every person all the cultural resources

that have been painstakingly formed and assembled throughout the centuries.

Charles E. Wilson: Nationwide educational television is economically sound. Education is big business, perhaps the biggest single business existing today. If it increased the educational level only a few percentage points, and I feel it can do more than that, the increase in the value and the product of increased skill and knowledge would more than pay the cost.

James R. Wigren: Educational television programs should be a means by which many creative and thought-provoking experiences can come to the individual. The program should have an educational purpose and should be so presented that the viewer comes out better than he went in.

APPENDIX J

PURPOSE AS A FACTOR IN PROGRAMMING ETV

Statements from Oregon Educators

Howard J. Akers: Educational television broadcasters have, I believe, at least five purposes. First, they provide general educational programs for the general public. Such programs combine offerings in what educators call the liberal arts or general education areas. These programs are of the cultural pattern, using the term in a limited manner. They bring some of the better things of life to the adult audience. Second, these directors have a citizenship duty to perform. They can make available unedited facts that will make possible intelligent action on the part of every man and woman in our country. Citizens have a right to know; perhaps it is our responsibility in this great new venture to assist them by bringing factual presentations upon which they can make intelligent decisions. Third, educational directors can do much avocationally for a population that is finding itself blessed with greater leisure time and a longer life span. Fourth, these program directors will be interested in channelling important events into classrooms. Special programs can also be provided for this type of audience. Fifth, educational television directors will probably want to make available practical demonstrations in homemaking and other crafts and skills. Vocational programs will probably be popular and might include all non-professional types of activity.

Wallace S. Baldinger: I regard educational television broadcasts as an indispensable adjunct to the sort of educational program which is conducted by the State Extension Division of Higher Education. I do not regard it as qualified to replace extension courses or correspondence courses, since the personal contact made between the student and teacher, either by letter or face to face in the case of extension courses, provides a factor essential to educational procedure, and no amount of personal appearance over television can take the place of this contact. On the other hand, there are certain types of presentation which television is peculiarly able to offer - types of presentation involving the detailed showing of objects like works of art (providing only that the blur and flicker so sadly characteristic of television broadcasts can be

eliminated). Such presentations should be regarded as introductions to a field, inviting further study than as completely satisfactory offerings in themselves.

Frank B. Bennett: To supplement the content of course materials through the personal presentation of authorities in the field and by demonstrations that assist the learner through the visual and auditory approach.

A.G.B. Bouquet: Any television program involving concrete and live material such as is possible in the tremendously wide field of horticulture enhances the value of the educational possibilities of TV as a whole. Horticulture actually comprises over 90% of the plants outdoors. It is likewise within the lives and outdoor living of most of our citizens excepting perhaps those who live in apartments and can not participate in growing things of beauty and of food. Horticultural operations involve multitudinous practices, a great many of which can be demonstrated in being discussed. Prior to TV they could be but discussed. If it is true that learning is by doing then we now have, through demonstrating the doing, the greatest outlet for teaching the masses of the people who participate in one form of horticulture or another. Any field of endeavor where practices involve the culture of growing plants by the majority of a country's population immediately opens the door of unusual opportunities for teaching by showing.

William Carlson: I believe the motivation should be specifically what the question implies - educational. Not in any narrow classroom sense, however, and a program could easily, or rather possibly be entertaining and also entertaining. But in developing it the emphasis should be on education and not entertainment. I suppose, too, that programs should be developed to appeal to various levels of intelligence and degrees of cultural background. Last Sunday's OSSHE program over KVAL-TV, two University of Oregon professors discussing radium prospecting, seemed to me to be a good educational program on a subject of lively interest.

John F. Cramer: Educational television can be of value in the classroom by reinforcing, through another visual and audio medium, the lessons which are taught in the conventional ways. It is not intended to replace any of the conventional methods of teaching, but to bring the lessons to the pupils in a new and striking form which will render easier the task of the teachers. It provides a medium which attracts the attention of the pupils, and

says again, with greater force, the same things which the teacher is trying to say. It is not intended to be an amusement or entertainment device. It is to be expected that the pupils will remember better those lessons which they receive through a variety of channels.

George E. Crossen: Promotion of better understanding and elevation of the educational level of ALL the citizens of the state of Oregon through presentations which stimulate independent thinking in addition to basic principles of science and logic. Insofar as possible, presentations should be "package units" complete within themselves, and each one geared to a specific lesson.

Charles T. Duncan: Educational television, ideally, ought to offer something of interest and value, at one time or another, to everyone from the age of four upwards, including all ranges of the economic, cultural and educational levels. Its emphasis should be serious and constructive, but if this means dullness then the purpose has been defeated. To walk that narrow and elusive line between the cultural but stodgy and the entertaining but vapid is of course the challenge that faces ETV (given the financing!) By definition, ETV should be educational, in the fully professional sense of the term. That is, it should actually do some teaching. But it should also serve the citizen who is not interested in formal education for himself but who looks to the marvel of television to bring him - more than rarely - what I can only call "the better things" (a terribly trite and subjective term) in music, art, literature, drama - - where do we stop? Certainly not before including current public affairs. To know that it can never completely satisfy this bewildering array of needs, but to keep trying, that's how ETV must be conducted.

Arnold C. Ebert: Basically, we turn to television for entertainment or information. As educators, we have an opportunity to use both to "lift our viewers up." With TV we can take our viewer by the hand and lead him from where he is to a spot somewhat farther along the road. This may be in the field of social science, agriculture, music appreciation, current events, civic affairs - and so on - the list is endless. The distance that the viewer is taken along this road, and the distance that he will travel voluntarily as a result of this lift, will depend upon the skill of the TV educator.

F. A. Gilfillan: In the next ten years, educational institutions are going to be called upon to take care of more people than ever before. In order to meet this situation, we should utilize every device to increase our efficiency. Educational television can do this, particularly in non-laboratory science courses, many of which are directed to the non-science major. This appears to me to offer the best opportunity for educational TV.

Gordon Gilkey: Educational TV will make visible the visual arts and bring those arts to a much greater audience.

George W. Gleeson: From several prolonged discussions, I have come to the conclusion that educational television cannot be operated in as "offhand" a manner as radio and that the time and effort which must go into program preparation is far greater than was at first assumed. Accordingly, I would conclude that "shoe string" operations have extreme difficulty and should not be attempted. It would appear that a budget of sufficient amount to insure adequate programs and continuity would be a first requisite. Even for minimum operation, such a budget will not be small. It is my conclusion that educational television should be what the name implies and that a large part of the effort should be directed toward courses for credit. Anything less is bound, sooner or later, to become superficial and lean heavily toward entertainment. I also conclude that the value of educational television may be currently over-rated since all response has included a newness factor which in eight to ten years will not be present. I believe that the newness factor may be largely responsible for some recent evaluations.

George Henderson: Educational television in Oregon should be geared to the broad goals of American Public Education: the imparting of information, knowledges and skills for better personal and social living in Oregon, the USA, and the World; the development of the highest type of democratic citizenship -- culture, vocationally, socially, politically, and in a spiritual sense. Educational TV in Oregon should also be particularly geared to the specific current and changing educational needs of the citizens of Oregon, in the various aspects of their democratic living in this state. Educational television in Oregon should give a varied presentation of the elements of our way of life, with due recognition for the great range and variation of needs, interests, and ability and background levels for reception. Educational television in Oregon

should also be aimed at providing increased publicity, factual information, etc. to others so as to promote the economy and the general welfare of the citizens and the state of Oregon.

M.C.Huff: It would seem to me that the purpose and philosophy of educational television broadcasters should be somewhat as follows: 1. To provide instruction to many people over a wide area who cannot be easily brought together. 2. To improve on present practices and to introduce new ones in home life, schools, industry, and agriculture. 3. To widen the appreciation and participation in the cultural heritage of America and other nations. 4. To educate the public concerning community services and community improvements. 5. Educational programming plans need to come from a community or educational institution rather than be slanted by special commercial interests. 6. Seeing is a very important means of learning, probably next to actual doing. 7. Television has great potential for education in an enormous area. 8. To succeed it must be directed by professionally trained directors, with consideration for a varied audience with varied backgrounds and programs adjusted accordingly.

Errett Hummel: First, programs should be constructed and timed to assist teachers in instructing youngsters - and in slang talk, the big beef I hear about educational radio is that its programs consist of what the broadcasters decide is an assistance and not what the teachers feel the boys and girls need. Second, programs should be constructed and timed that will teach mature boys and girls and adults outside a classroom setting.

Herb Hungerford: There is no question in my mind that educational television is going to be an important tool in our future means of education for our people. In my opinion, the first thing that should be done is to educate the people as to its importance. One way of doing this would be to use it as a media of adult education, showing them how practical it is, consequently helping us to swing into the classroom a little later. Naturally the many fine programs that are on the air are doing that now, but it should be set up so the people absolutely realize that an education method is being put into use. I am not sure everyone has had an opportunity to be briefed on the possibilities of educational television. Speaking of the people in the educational field of course. If all educators could be made to realize the importance of this field, they in turn may help educate the people.

P. B. Jacobsen: Should show what the education program is. For example: How are teachers trained in Oregon.

William C. Jones: The possibilities of educational television in raising the levels of life in the U.S., civic, economic, educational, cultural, are limited only by the imagination and purposes of those who will plan its programs and enlist the support of the public. The educational television broadcasters, in their clear perception of the possibilities of this instrument of mass communication, which combines both sound and vision (and soon, color) should insist that all programs shall measure up to a standard of affording new ideas, new perspectives, new understandings - which are together the end purposes of education.

Donald R. Larson: In general, such a purpose might be defined as the intent to make available to the community a satisfactory continued learning experience to which the community justifiably will lend support. A purpose so defined might suitably serve to provide motivations and guides. At the outset and in his continuing function the educational broadcaster must cautiously utilize resources of all phases of education from elementary through graduate levels, apportioning his time availabilities for the utmost satisfaction of the various viewing groups. The specific description of the learning experience he is imparting through his medium might not be always definable through academic levels. However, in all instances he would do well to establish a gauge which he can readily apply to all proposed programming. Such a gauge would be apt to categorize the programming as (1) instructional, (2) informative, (3) significant educationally, (4) stimulating, and (5) general-timely interest.

W.F. McCulloch: More effective teaching: doing with TV those things which cannot be done without it. That's all the purpose we need.

Clifford E. Maser: I should judge that the purposes that ought to motivate and guide educational television broadcasters ought to be those of awakening in the public, both young and old, an interest and desire for learning and knowledge; to supply added information and stimulation to those intellectual needs which have been discovered to be already existent; and, to do everything possible from an educational point of view to raise the quality level of television programs by leading the way with quality.

Viron A. Moore: The purpose of educational television, it seems to me, is to provide listening experiences which are intended to lead toward the realization of the highest objectives of education for our citizens and for our democratic society. This would imply: 1. Common learnings. Experiences which would provide a common meeting ground of thinking, feeling, and acting necessary for personal and civic competence. 2. Cultural experiences intended to enrich living - to develop an appreciation of oneself and his adjustment to and in the environment. 3. Occupational experiences which would insure economic security and satisfactions found in chosen work. 4. Self understanding to insure competence in homemaking, parenthood, and happy life adjustment. 5. Listing experiences concerned with community and public affairs to increase citizenship competence.

D.T.Ordeman: Educational television broadcasters should have the same general purpose as other educators. They should realize the limitation of their medium and contain their efforts within those areas that can be well presented. They must be alert to resist the temptation to entertain rather than to inform. They must learn to present material without knowing the reaction of the audience and therefore cannot expect to transfer classroom techniques to the studio without making major adjustments. In fact a teacher must start fresh to become a TV lecturer or demonstrator.

F.E.Price: It seems to me like the purpose which should motivate and guide educational television broadcasters would be to develop a pattern of continuing education to the people of the State of Oregon which is representative of the field covered by the institutions for which the educational television broadcaster is speaking.

Miriam Scholl: To disseminate all kinds of information that will assist people to better living - in the arts, sciences, literature, music, social sciences, home economics - all fields of knowledge.

Walter E. Snyder: As a layman I see the following as possible purposes which should motivate and guide television broadcasters: To provide quality materials for classroom use in the public schools to supplement work in the areas of English, dramatics, science, home economics, etc.; To provide quality programs designed for the adult population of the state in areas not available through commercial broadcasting; To provide work

in areas in which adult education classes are held which may be used to supplement the regular instructional program of adult education teachers.

Don S. Somerville: The purpose which should motivate and guide educational television broadcasters should be to extend to the individual all educational and community resources. To carry out this program it is necessary to develop programming which will: provide the possibility for continuity from one program or series to the next; be constructed and presented as interestingly and entertainingly as possible; enable the broadcaster to attempt hitherto untried approaches to specific content; and enable the broadcaster to treat all areas of subject matter.

A.L.Strand: This question seems almost unnecessary to me. ETV would be KOAC with visual aids. (1) To enlighten the people on a wide variety of subjects important to them and important to OSC from the standpoint of accomplishing its purpose. (2) To combat the wave of anti-intellectualism in our midst by disrobing the scarecrows. (3) To promote interest in our indigenous culture. By this I mean the things right around us. In the Pacific Northwest the most conspicuous are the natural resources by which we live - but not to exclude a lot of other things mostly historical. (4) Entertainment, football, basketball, etc. (5) but not least, To run regular classroom programs in selected subjects for credit. Psychology, economics, general chemistry, geography, floriculture, gardening, etc.

Elmo N. Stevenson: The purpose which should motivate and guide educational television broadcasters is to make the broadcast informatively educational but in such a manner that good public relations will result.

Henry E. Tetz: There should be a realization that educational television should supplement and complement the present educational system and that broadcasters: First, be thoroughly familiar with, and understanding of, the needs and interests of school children and youth. Second, be aware of how schools are attempting to develop these interests and meet these needs of children and youth. Third: develop their program and present it in such a way as to increase the efficiency of the educational process as it is now carried out in the schools and related agencies. Needless to say there is a real opportunity in

educational television which should be capitalized on to the fullest extent. It is furthermore understood that this can best be done when it is motivated by service to children and youth as well as to adults rather than if it becomes "tied to" an immediate economic gain or profit. Perhaps it would be well to develop areas in which educational television could best serve the educational process as it now operates in the schools: (1) As an educational resource similar to newspapers, magazines, movies and radio; (2) As a means of giving pupil vital experiences in speech, music, drama, art, through taking part in telecasts; (3) As a means of multiplying the teaching power of master teachers; (4) As a means of interpreting what the schools are doing to the community.

O. Meredith Wilson: It seems to me that Oregon's interests in educational television needs to be directed toward the problems of teacher shortages in the colleges. The most immediate and practical application of which I can think, would be closed circuit which would include the University of Oregon and the Oregon State College, so that we could make greater use of our excellent teachers on our campuses, and share the talents of our sister institutions.

Robert B. Walls: It seems to me that the guiding principle of educational television broadcasters might be to present materials of genuine educational and cultural value in such a way as to stimulate curiosity about the material and further interest in it. Avoidance, insofar as possible, of "stuffiness" in presentation. An educational program can have some of the appeal of an entertainment program. I have in mind the best thing I have yet seen on TV -- the Murrow interview with Grandma Moses...and some top Omnibus programs. To me, these are "educational" in the best sense of the word.

Earl W. Wells: To raise the educational and cultural level of the general public.

S. E. Whitworth: It is easy to understand that television has vast possibilities as a means of teaching. It would seem to me that it can be used effectively to supplement classroom instruction in the school subjects as well as to present programs of an educational nature not necessarily related to school subjects. No doubt many such programs could be entertaining as well as educational. Probably much can be done here in the field of adult education.

APPENDIX K

PURPOSE AS A FACTOR IN PROGRAMMING ETV

Statements from Community Leaders in Oregon

Russell M. Adams: Good educational procedure that will teach facts that will tend toward better citizenship on the part of those who view the telecasts. The vital elements of interest catching and holding are essential for your pupil can voluntarily turn off the program. Elements of entertainment are therefore essential but they should be tied up with pertinent facts of vital importance to the nation or to people as groups or individuals. There are enough essential things in our lives to crowd out nonessential trash on educational television.

Mary Aldrich: We believe that educational TV should supplement the various educational systems of the state by presenting material not available on commercial stations. BUT we feel that these programs should be presented in an entertaining, vivid and interesting manner and not given a classroom presentation. The station should attempt to bring to the viewers quality programs from various community resources, but should be alert to the possibility of these programs becoming dull and preachy.

Perry D. Avery: To produce programs of cultural and informational value to supplement commercial programs. To give intelligent people a worthwhile alternative to many of the unintelligent commercial programs. To make education more available to the homes, by extending the talents, abilities, and wholesome influence of excellent teachers, through the medium of TV. Thus a corrective may be furnished for the lack of enough adequate educational facilities and of top-notch teachers.

L.R.Breithaupt: Make it educational, informative, and cultural, noncommercial and nonpolitical.

John B. Fenner: The basic purpose should be the most effective utilization of the TV channels available to education to augment and supplement present educational efforts to the end that we may have an intelligent, informed citizenry in this state. It seems to me that TV can be effective in areas not reached by other educational efforts or not reached as well as TV can reach those areas,

and that study should be directed toward ascertaining the areas in which TV can do a selling job better than any other method and then concentrate or pinpoint those efforts rather than use TV as a "shotgun" basis or an all-purpose medium.

Donald L. Helseth: To use the medium as a service to Society, rather than merely a commercial venture, as is the case of commercial TV stations. This would involve types of programming not usually seen on TV. Certain lectures and other guests on OSC and UO campuses could be shared with a much larger audience than usual. A few basic extension classes might be offered. Certainly there would be historical dramas, current events discussions and some fine musical productions among the programs. I should like to see a non-sectarian religious program if it is of good quality. Otherwise leave it out!

C. R. Hoyt: To provide information, entertainment, and instruction not generally available through commercial stations for which there is a potential demand by citizens of the state.

George Simerville: The most important purpose, in my opinion, for an educational television broadcaster would be to educate the citizens to have a better appreciation of democracy and his responsibilities and duties as an effective citizen. This would include television directed courses of a nature that would tend to improve citizenship and opportunity for vocational and special interest training. A good citizen should never stop learning.

Unsigned: A variety of types should be broadcast to have an appeal for all age levels in school as well as the adults of the community. Material should be chosen which is most difficult to present orally. Ways to do work which requires precise techniques and cultural programs, plays, operas, etc. Where the complete understanding depends upon visual experience.

APPENDIX L

PURPOSE AS A FACTOR IN PROGRAMMING ETV

Statements from Educational Broadcasters

Robert J. Coleman: The primary objective of any educational broadcaster, radio or television, should be to serve the public - first and always. Educational service includes providing for this public such materials of information or subject-matter import which will tend to increase the sum total of knowledge, stimulate constructive thinking and judgements and utilize the learning processes. Whether this is done as formal education or as indirect information depends upon the policies of the individual station. Television, because it employs the EQUAL use of both sight and sound, offers a unique opportunity to accomplish these objectives. Unfortunately, too much television programming is still either predominantly radio with incidental visuals or vice versa. The building of effective programs on educational television has yet to utilize the full potential of the dual nature and responsibility of the medium. Courses for credit, enrollments, text books - these are but the mechanics of organized education and may stimulate (or discourage) acceptance by the public. Motivation for educational television should be the development of really strong programs in the interest of the public, which will utilize the full impact of the medium. The objective should be to obtain educational results regardless of the mechanics employed.

B. Kendall Crane: I shall divide the statement into three categories: (a) the duty of the ETV broadcaster to his general public; (b) his duty to his students; and (c) his duty to "seekers of knowledge". In considering the duty of the ETV broadcaster to his general public I'm inclined to lean in the direction of Sir William Haley's outline of the BBC objectives. Sir William says in part "...the conception of the community as a broadly-based pyramid aspiring upwards. This cultural pyramid is served by... programs...the listener being induced through the years increasingly to discriminate in favor of the things that are more worthwhile. Each program at any given time must be ahead of its public, but not so far ahead as to lose their confidence. The viewer-listener must be led from good to better by curiosity, liking, and growth of understanding. As the standard of the education and culture of the community rise so should the program pyramid rise

as a whole." The educational processes, whether for the primary grades or the scholar, should not be stuffy, dry or education for education's sake. After all education is a means rather than an end. There should be time and opportunity not only to absorb the fundamentals of developing the television program, but time and opportunity to experiment, to evolve new methods of approach to a program problem; to try new techniques; to develop the student's sense of the dramatic, regardless of the type of program. Above all there should be time and the opportunity to demonstrate to the student that truth, morals and sensitivity to good taste are compatible with good showmanship. (c) Here the broadcaster and talent must work together closely so that teaching by TV does not merely become a mirror held up to an individual reciting a prepared portion of a study unit. This can be done by discovering and highlighting the personality and ability of the teacher through presentation techniques. The classroom cannot be transplanted to the studio. As a matter of fact, I am of the opinion that the purpose of the broadcaster - what he is trying to do - in his programs should be studied and drawn closer to perfection even before he starts getting gray hairs worrying about techniques for technique's sake, and gimmicks for his cameras.

Ola B. Hiller: To present the best that man has been able to discover of what is real and can be trusted in his age-long struggle in search of a better life. (2) To upgrade citizenship by clarifying issues and helping people understand situations that they may function effectively in a free society. (3) To give inspired leadership in meeting the needs and solving the problems of our time. (4) To give vision and direction to the search for better things to come. (5) To foster continuously the spirit which encourages man's humanity to man. These sound pretty idealistic, but I think we must be idealists!

Merle Kimball: (1) Educational television programs for in-school use to supplement the work of the instructional staff, and to provide "master teacher" instruction in specialized fields. (2) Special services to education including: teacher in-service training, service to certain trade or professional groups by extension training and advanced experimentation, and to serve the minority groups of physically handicapped and mentally deficient. (3) Programs for general adult audiences including broadcasts to the home, and formal courses for college credit. (4) The direction of the programs and the station by those

who are professionally qualified and who possess knowledge of education, a sound educational philosophy, and understanding of the scope of the medium.

James F. Macandrew: (1) It must create a program structure that will serve the community on all levels of age and of cultural and educational backgrounds. (2) Its programs should inform and instruct but should also educate in the fullest meaning of the word. (3) It should never take the position of seeking to emulate or to compete with commercial television but should have firm faith in the eternal values of the material it has to offer. (4) It should set and create standards of performance and of technical excellence at all times which will never call for apologies to anyone.

Allen Miller: Educational television, like educational radio, should be directed to the service of the needs and desires of audiences for information and for cultural and educational enrichment. Since television is a mass medium of communication its greatest value is in reaching the listeners who cannot be drawn together into sizable groups. Hence it is my conviction that the medium has particular value in adult and informal education. These statements definitely are not intended to imply that an educational television station should not carry programs for in-school use. However awareness of responsibility to an adult audience might well condition the nature of the programs produced for use in the classroom. Neither are the remarks directed against the inclusion of entertainment programs in the broadcast schedule. But in such instances the objective should not be that of entertainment alone. Either the program should have intrinsic merit in addition to being pleasurable or a light program should be used to attract more listeners to the station for more serious and meritorious programs which follow.

Elmer G. Sulzer: In the preparation of educational TV programs, the first consideration must be the audience that it is desired to reach. The second consideration is in the type and degree of motivation that it is desired to develop in such an audience. These two considerations are, in my opinion, the dominating factors in the preparation of all educational television programs. I have a feeling that both of these factors are not given proper consideration today by many educational television broadcasters, as a result of which the programs produced may meet general approval but are apt to be largely ineffective. Obviously, the matter of following through the second of the two criteria mentioned above involve some type of

observation to determine the degree of motivation accomplished. This may be formal research, or it may be observation which in many cases can suffice.

Patricia Green Swendson: Our purpose should be to supply to any given community a supplementary service of TV programs designed to meet basic needs in that community related to the areas of: (1) living in a home - family life, (2) getting and holding a job - making a living, (3) leisure time activities - improving minds and bodies and hands, (4) showing interrelatedness of peoples - city, state, nation, world, (5) culture for minority groups desiring it, and (6) education. The latter might be all of the first five items. ETV should be a supplementary service to that offered by commercial TV stations - a supplementary service in the areas of both communication and learning. Supplementary to schools, newspapers, radio, libraries, museums. I hope I make my philosophy clear. It's essence is in all areas of living to render a service which has as its purpose: to inform, to communicate, to educate, and to enrich lives of human beings at home, in school. It's so broad - such rich potential and opportunity. How can one capture and delineate it adequately.

Walt Whitaker: Purposes as they relate to educational television are four-fold: (1) To examine with various techniques questions which our viewers might consider significant to themselves, and to help formulate opinions and decisions through information about the questions. (2) To provide a variety of cultural arts experiences which are not otherwise readily available to our viewers, as enrichment of their lives and cultural interests. For example: a complete live telecast of Puccini's opera La Boheme. (3) To provide a supplement to teachers in the state's schools by offering in-school programs at grade and high school level and adult credit courses at a high school and college level. (4) To provide a medium for public relations between the university and the people of the state, to keep them informed and aware of activities, plans, research, etc. at the University.

In slightly different form from the previous statements submitted to the writer by the educational broadcasters are published statements of criteria for five of the existing educational television stations. These criteria follow to complete this study of purpose for educational television:

KUON-TV, University of Nebraska:

- To provide a wide variety of educational and informational programs.
- To serve, through beamed programming, the many special interest audiences i.e. housewives, shut-ins, art-lovers, rural youth, pre-schoolers, in-school viewers, telecourse viewers, and others.
- To provide general cultural and entertainment programs, if they are built upon a basic educational structure.
- To present the several points of view on important public issues, thus enabling the viewer to better inform himself as a citizen and individual.
- To serve the various and diversified educational needs of the community by providing time for educational institutions and civic and cultural groups, since the station exists for the good of the whole community.

KUHT-TV, Houston:

Systematic instruction which can bring the advantages of formal education to thousands of young and adult students who might otherwise be unable to acquire knowledge and information essential to their growth and development as informed citizens of a free society.

Programs of cultural value in the arts, music, and the humanities which are not otherwise available to large audiences.

Programs promoting and explaining the work of voluntary agencies such as the American Red Cross, the United Fund, youth organizations such as the Boy Scouts and the Y.M.C.A., and religious groups.

Programs discussing the controversial issues of our times with as able spokesmen for all sides of each controversy as can be obtained.

WCET-TV, Cincinnati:

Systematic programming for children of pre-school age.

Programs which will enrich the classroom experiences for children in the elementary and secondary schools.

Constructive programs for out-of-school hours for children of all ages.

Courses in formal education in highschool and college subjects for youths and adults.

Programs for the home viewer to improve skills and earning power; to better understand civic and community problems and projects; to demonstrate new developments in science, art, and international affairs.

Music, drama, and other programs in the field of the arts, that are both entertaining and self-improving.

Programs which will add to the store of personal values which may contribute to better family life, and the long-range welfare of the community and the country.

WQED-TV, Pittsburgh:

- To provide opportunities to educate in the broadest sense of the term;
- To draw forth from its viewers and listeners the highest intellectual and cultural response of which each is capable;
- To stimulate inquiry and interest in many diverse fields of human endeavor;
- To assist people to know themselves, to learn to work with others, to understand better a complex world;
- To inform citizens regarding the important issues of the day;
- To provide opportunities to train individuals to acquire better skills for better living.

In carrying out these objectives WQED will remain unique in the community in the following respects:

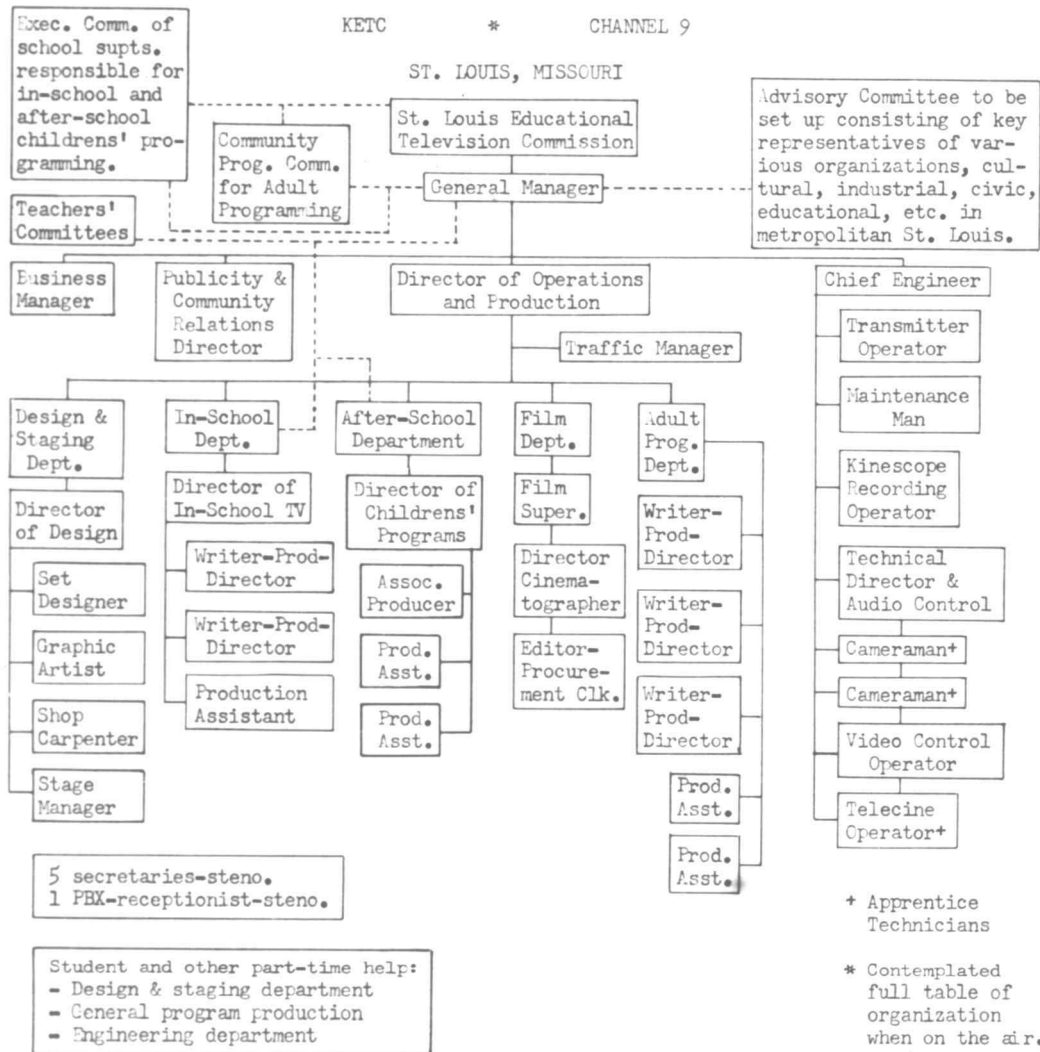
1. Availability of its air time for systematic programming for in-school viewing during fixed, predetermined, extended periods of time as required for the enhancement and enrichment of primary, secondary, and college level curricula.
2. Constant maintenance of children's programs consistent with the best standards of teaching, character development, and entertainment.
3. Systematic offering of adult programs designed primarily to satisfy a high level of taste and a lively interest in learning among people of the television community.

KQED-TV, San Francisco:

1. Is it a service not available on commercial television or available only at an inconvenient time?
2. Is it a subject which lends itself to television and can be made interesting to a reasonably large audience?
3. Is it constructive and worthwhile? Will it help to create new interests or activities? Will it enrich lives and broaden horizons?
4. Is it practically possible to do with KQED facilities? Can it be produced according to professional standards with a minimal staff?
5. Does the program help give a proper balance to the week's schedule?
6. Are the resources and the talent drawn upon for the program the best, or among the best, available in the area?
7. Is the material to be presented educationally sound? Does it avoid reflecting improper bias or the exclusive interest of any one group?

APPENDIX M

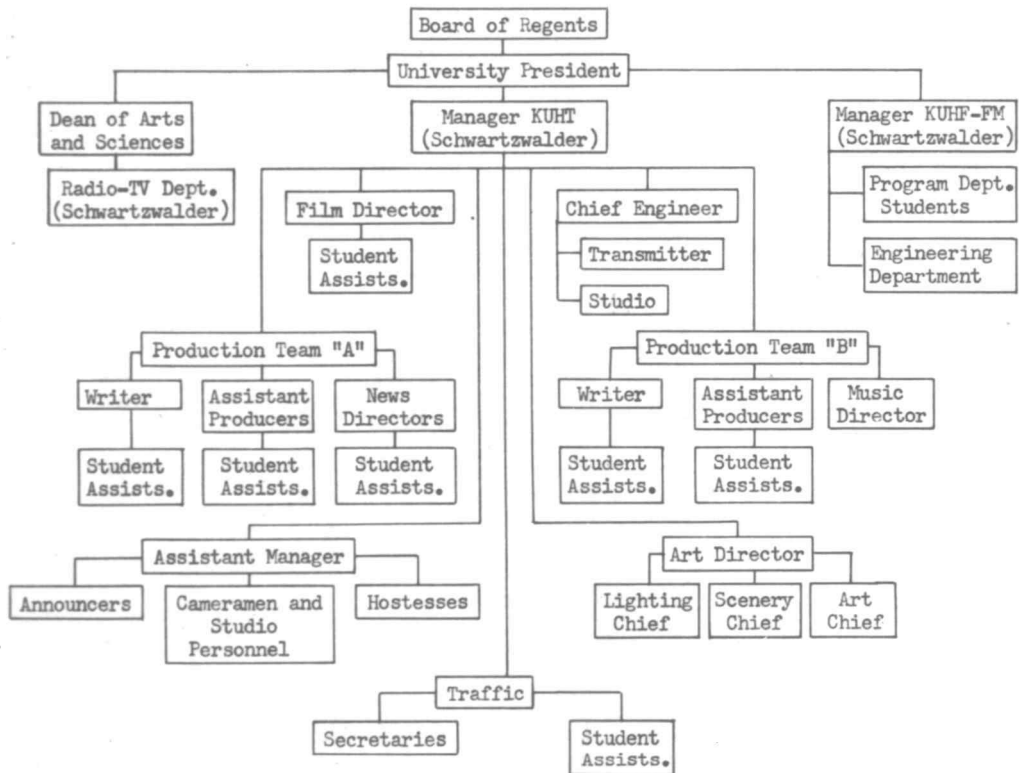
ORGANIZATIONAL CHART*



ORGANIZATIONAL CHART

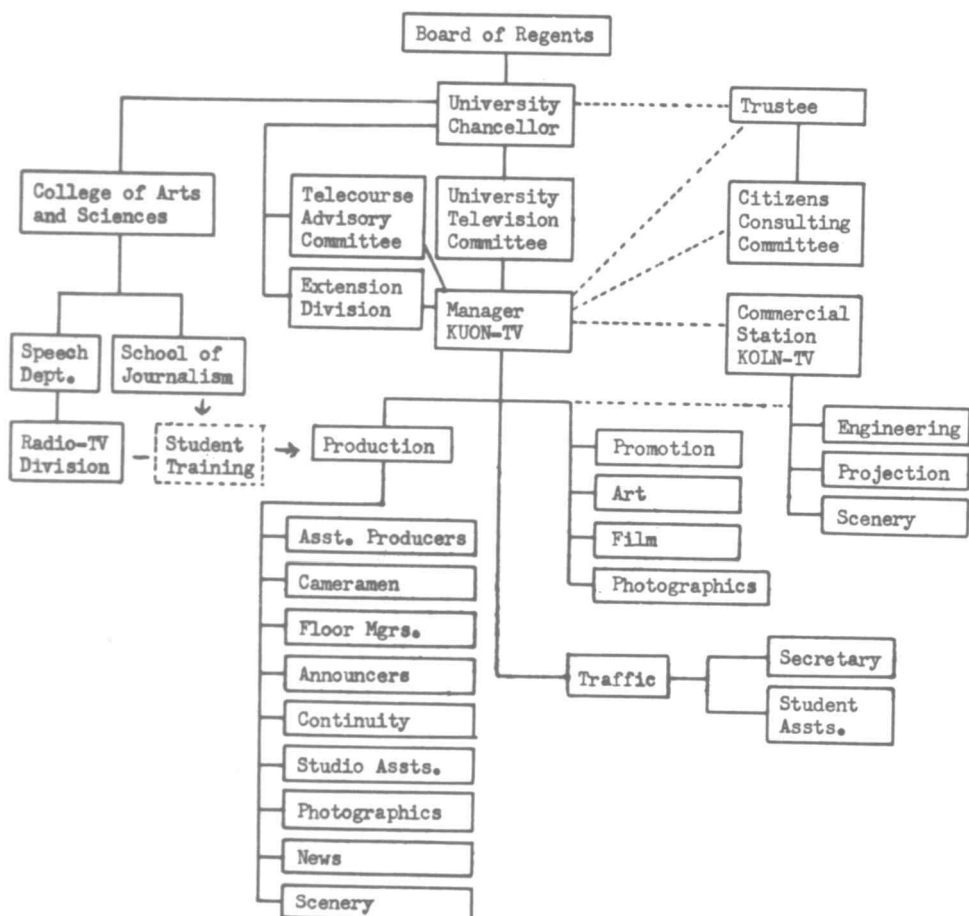
KUHT * CHANNEL 8

HOUSTON, TEXAS

UNIVERSITY OF HOUSTON
(Radio and TV)

ORGANIZATIONAL CHART

KUON-TV * CHANNEL 12
 LINCOLN, NEBRASKA
 UNIVERSITY OF NEBRASKA



ORGANIZATIONAL CHART

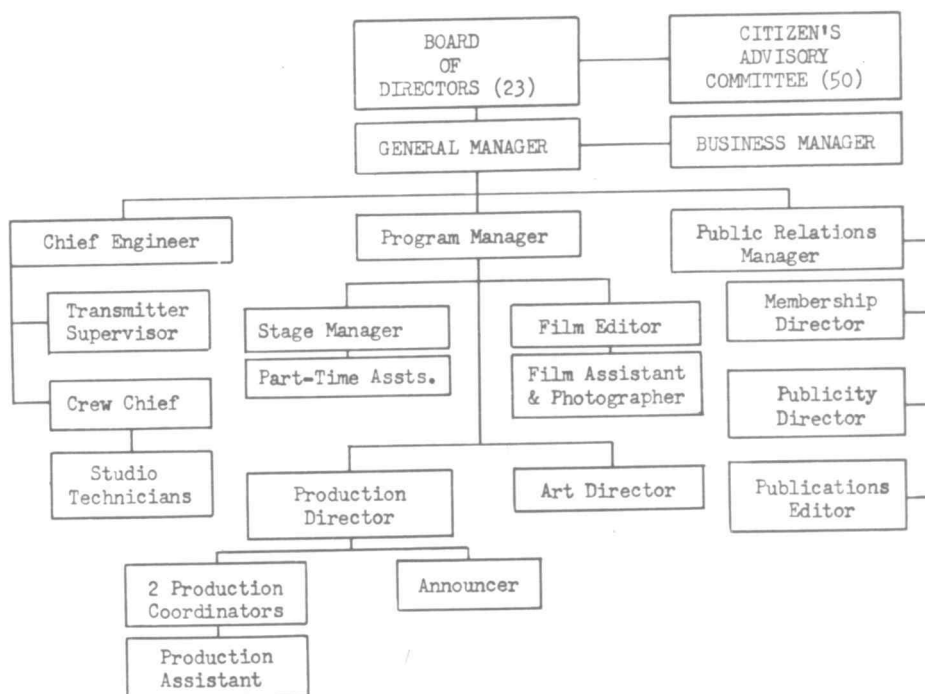
WUOM-TV * CHANNEL 26

ANN ARBOR

UNIVERSITY OF MICHIGAN



ORGANIZATIONAL CHART
 KQED * CHANNEL 9
 SAN FRANCISCO, CALIFORNIA
 BAY AREA EDUCATIONAL TELEVISION ASSOCIATION



ORGANIZATIONAL CHART

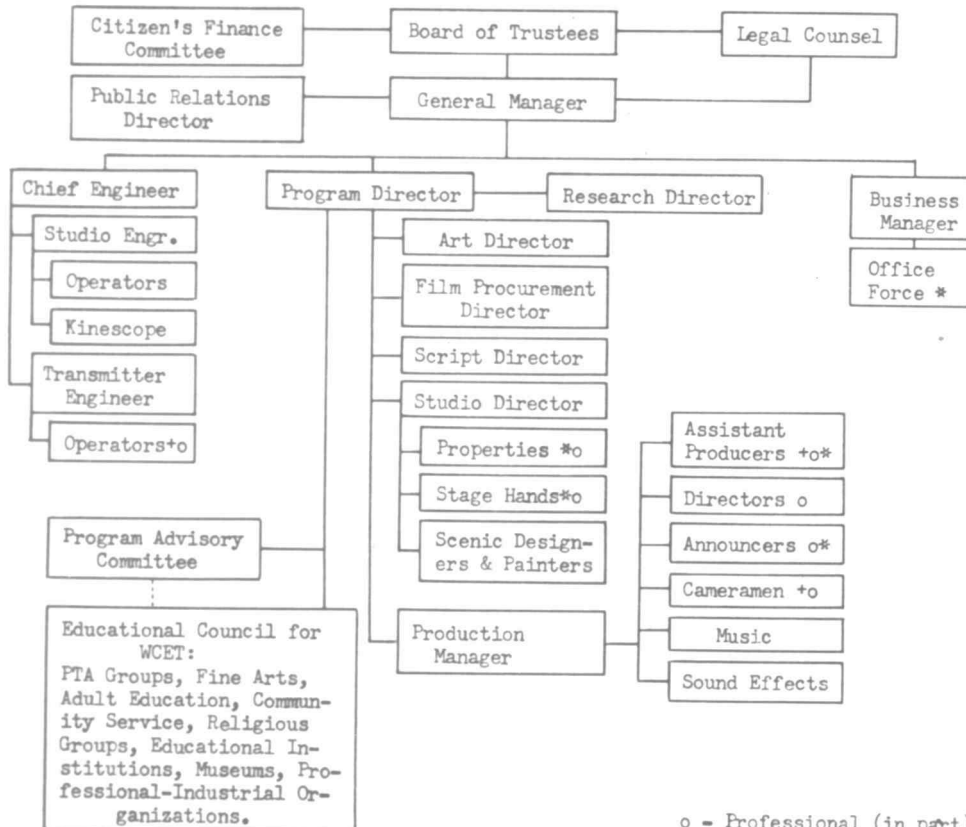
WCET

*

CHANNEL 48

CINCINNATI, OHIO

THE GREATER CINCINNATI TELEVISION EDUCATIONAL FOUNDATION



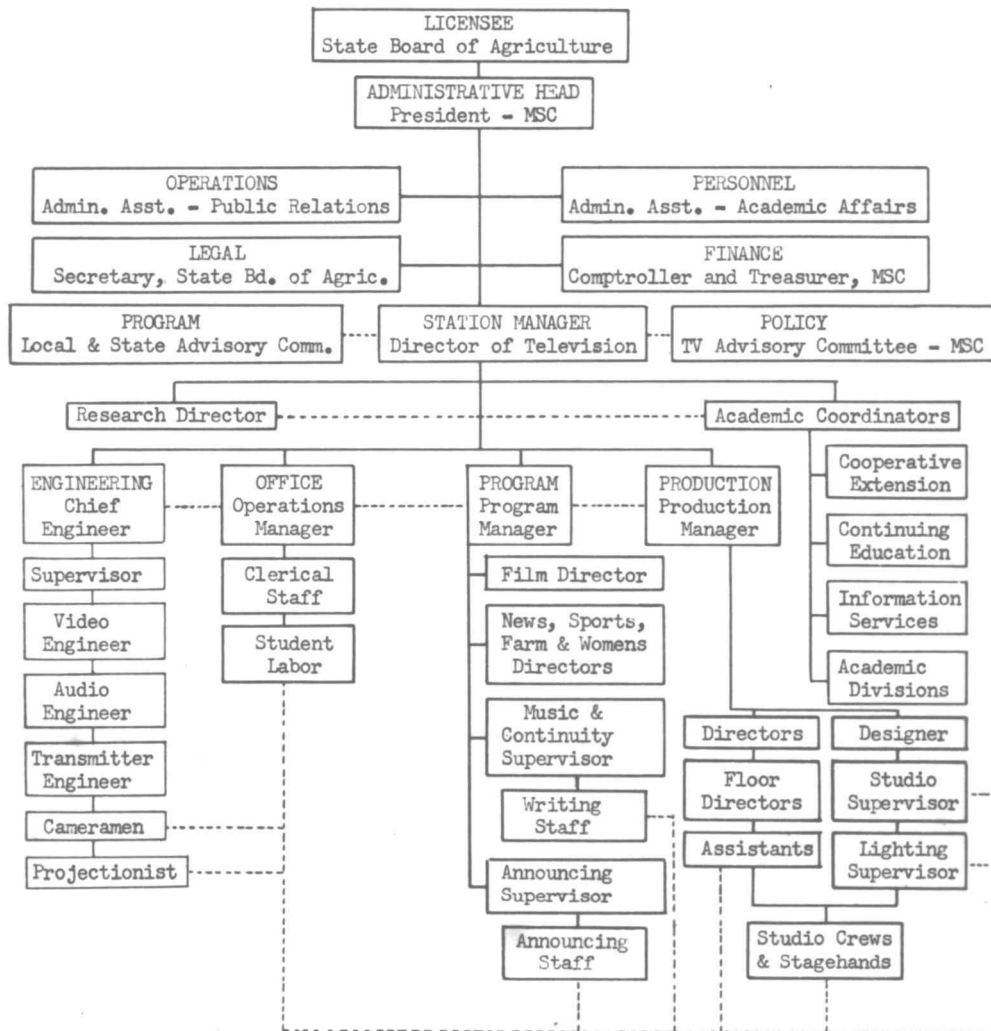
o - Professional (in part)

+ - Student (in part)

* - Volunteer (in part)

ORGANIZATIONAL CHART

WKAR-TV * CHANNEL 60
EAST LANSING
MICHIGAN STATE COLLEGE



APPENDIX N

*A SCALE FOR PURPOSIVE TELEVISION PROGRAMMING

To be completed on the basis of quarter-hours of program time; program segments should be credited to all areas in which they apply, not merely to the area of "best fit."

CIVIC RESPONSIBILITY Civic Duties Social Activity Social Understanding Social Friendships World Citizenship Political Citizenship Law Observances								
ECONOMIC EFFICIENCY Economic Concern Work Choices Work Adjustment Work Appreciation Consumer Judgment Consumer Protection Personal Expenditures								
HUMAN RELATIONSHIPS Concern of the Home Concern of the Family Concern of the Community Friendships Respect for Humanity Religious Life								
SELF REALIZATION Appetite for Learning Health Knowledge Health Habits Speech, Reading, Writing Intellectual Interests Esthetic Interests Character Interests								

Pre-School Lower Grades Upper Grades High School College Adults(20-40) Adults(40-60) Adults(Over 60)

Week of: _____
Total hours for the week: _____
Station: _____
Submitted by: _____

*Based upon the Objectives of the Educational Policies Commission in "The Purposes of Education in American Democracy" as applied to the several age groups in the intended educational television audience. (Designed by J.M.Morris, Corvallis, Oregon.)

APPENDIX O

PROGRAMMING FOR SELF-REALIZATION BY EDUCATIONAL TV STATIONS

STATION CITY	PRE- SCHOOL	LOWER GRADES	UPPER GRADES	HIGH SCHOOL	COLLEGE	ADULTS 20/40	ADULTS 40/60	ADULTS OVER 60	AVERAGE
WILL, Urbana	13%	18%	13%	44%	44%	44%	44%	44%	33%
WQED, Pittsburgh	26	42	35	25	18	19	17	4	23
KCTS, Seattle	10	48	53	59	60	59	50	48	48
KQED, San Francisco	17	10	17	31	24	31	31	24	24
WBIQ, Birmingham	6	10	13	13	12	11	13	8	11
KETC, St. Louis	1	7	9	8	14	23	23	13	12
WKAR, East Lansing	10	9	9	19	44	47	47	44	29
WTHS, Miami	-	-	5	5	7	11	11	11	6
WTIQ, Munford	6	10	13	13	12	11	13	8	11
WCET, Cincinnati	12	16	15	44	16	18	21	21	20
WUNC, Chapel Hill	6	31	32	23	32	34	35	34	28
WHA, Madison	6	8	11	30	69	71	74	13	35
KUHT, Houston	1	5	8	14	40	31	25	21	18
KUON, Lincoln	9	11	9	30	34	41	40	33	26
WTVS, Detroit	13	21	35	67	70	70	60	50	48

National Average..... 9%... 17%... 19%... 28%.... 33%... 35%... 34%... 25%..... 25%

National Range: 6% to 48%

PROGRAMMING FOR HUMAN-RELATIONSHIPS BY EDUCATIONAL TELEVISION STATIONS

STATION CITY	PRE- SCHOOL	LOWER GRADES	UPPER GRADES	HIGH SCHOOL	COLLEGE	ADULTS 20/40	ADULTS 40/60	ADULTS OVER 60	AVERAGE
WILL, Urbana	13%	13%	18%	36%	38%	38%	38%	38%	30%
WQED, Pittsburgh	-	-	4	-	1	9	9	3	3
KCTS, Seattle	5	6	6	14	14	14	14	10	10
KQED, San Francisco	9	6	6	7	13	19	16	16	12
WBIQ, Birmingham	-	2	4	4	15	15	13	21	9
KETC, St. Louis	1	1	4	4	4	6	6	2	4
WKAR, East Lansing	10	9	9	14	29	38	38	38	23
WTHS, Miami	-	-	5	11	11	11	11	11	8
WTIQ, Munford	-	2	4	4	15	15	13	21	9
WCET, Cincinnati	-	-	12	18	19	12	12	12	9
WUNC, Chapel Hill	-	-	2	9	13	13	13	13	8
WHA, Madison	-	-	-	-	3	11	11	3	4
KUHT, Houston	-	-	1	3	11	11	10	2	5
KUON, Lincoln	-	-	-	-	9	29	29	29	11
WTVS, Detroit	-	-	2	9	17	20	15	15	10

National Average:..... 3%..... 4%..... 5%..... 9%..... 14%... 17%... 16%... 16%..... 10%

National Range: 6% to 48%

PROGRAMMING FOR ECONOMIC-EFFICIENCY BY EDUCATIONAL TV STATIONS

STATION	CITY	PRE- SCHOOL	LOWER GRADES	UPPER GRADES	HIGH SCHOOL	COLLEGE	ADULTS 20/40	ADULTS 40/60	ADULTS OVER 60	AVERAGE
WILL,	Urbana	-	-	-	18%	21%	24%	24%	24%	14%
WQED,	Pittsburgh	-	-	-	-	-	2	2	-	1
KCTS,	Seattle	-	-	-	-	5	5	5	5	3
KQED,	San Francisco	6	2	10	14	4	3	3	3	6
WBIQ,	Birmingham	-	-	2	13	23	17	17	6	10
KETC,	St. Louis	-	-	-	-	-	1	1	1	1
WKAR,	East Lansing	-	-	-	9	17	26	26	26	13
WTHS,	Miami	-	-	3	7	7	7	7	7	5
WTIQ,	Munford	-	-	2	13	23	17	17	6	10
WCET,	Cincinnati	-	-	13	10	10	10	13	13	9
WUNC,	Chapel Hill	-	3	5	9	14	16	16	16	10
WHA,	Madison	-	-	-	-	5	9	9	-	3
KUHT,	Houston	1	1	-	2	18	7	3	-	4
KUON,	Lincoln	-	-	-	9	9	21	21	16	10
WTVS,	Detroit	-	-	-	5	5	5	5	5	3

National Average: 1%..... 1%..... 2%..... 7%..... 8%... 11%... 11%..... 9%..... 7%

National Range: 1% to 14%

PROGRAMMING FOR CIVIC-RESPONSIBILITY BY EDUCATIONAL TV STATIONS

STATION	CITY	PRE- SCHOOL	LOWER GRADES	UPPER GRADES	HIGH SCHOOL	COLLEGE	ADULTS 20/40	ADULTS 40/60	ADULTS OVER 60	AVERAGE
WILL,	Urbana	9%	13%	9%	42%	47%	47%	49%	47%	33%
WQED,	Pittsburgh	-	4	-	1	7	14	11	2	5
KCTS,	Seattle	-	5	10	8	6	8	8	5	6
KQED,	San Francisco	3	9	9	16	13	16	16	16	12
WBIQ,	Birmingham	2	2	2	8	21	21	21	17	12
KETC,	St. Louis	-	-	-	1	4	7	7	7	3
WKAR,	East Lansing	7	5	5	8	19	24	24	24	15
WTHS,	Miami	-	3	3	5	7	7	7	7	5
WTIQ,	Munford	2	2	2	8	21	21	21	17	12
WCET,	Cincinnati	-	-	12	21	9	9	9	9	9
WUNC,	Chapel Hill	-	9	8	24	26	25	26	26	18
WHA,	Madison	6	8	-	10	36	36	35	4	17
KUHT,	Houston	1	1	-	8	17	14	14	8	8
KUON,	Lincoln	3	2	4	4	4	13	11	11	7
WTVS,	Detroit	2	2	2	15	20	20	20	17	12

National Averages: 2%.... 4%.... 4%.... 12%... 18%.... 19%....19%... 15%..... 12%

National Range: 3% to 33%

APPENDIX P

KOAC ETV WORKSHOP PRODUCTION CHART

PROGRAM: _____

STAFF: _____

SOURCE: _____

DATE: _____ TIME: _____

PROD.DIR.VIDEO	FLOOR	#1	#2	SOUND	EFFECTS	ANN'CR	BOOM	OTHER

REMARKS:

APPENDIX Q

A SCALE FOR EVALUATION OF CONTENT
OF EDUCATIONAL TELEVISION PROGRAMS

Date: _____
 Production: _____
 Observer: _____

The observer using this Content Scale on which to evaluate a given television program is urged to be as objective as possible in ranking each of the items listed below. Do not allow factors of production to influence content evaluation. These will be judged on another form.

(Highest possible score for each item is to be 10 points)

PURPOSE	_____	
INTEREST	_____	
ATTITUDES	_____	Suggested Scoring:
CLARITY	_____	Bad 0
INFORMATION	_____	Poor. . . . 2
COMPLETENESS	_____	Fair. . . . 4
MOVEMENT	_____	Average . . 6
DEMONSTRATION	_____	Good. . . . 8
SUGGESTED FOLLOW-UP	_____	Excellent . 10

TOTAL _____

APPENDIX R

A SCALE FOR EVALUATION OF PRODUCTION OF EDUCATIONAL TELEVISION PROGRAMS

Date: _____
Production: _____
Observer: _____

The observer using this Production Scale on which to evaluate a given television program is urged to be as objective as possible in ranking each of the items listed below. Do not allow factors of content to influence production evaluation. These will be judged on another form.

(Highest possible score for each item is to be 10 points)

SETTING

ART WORK

PROPERTIES

LIGHTING

CAMERA

SOUND

MUSIC

CASTING

ANNOUNCER

PACING

Suggested

Scoring:

Bad 0

Poor.	.	.	.	2
-------	---	---	---	---

Fair.	. . .	4
-------	-------	---

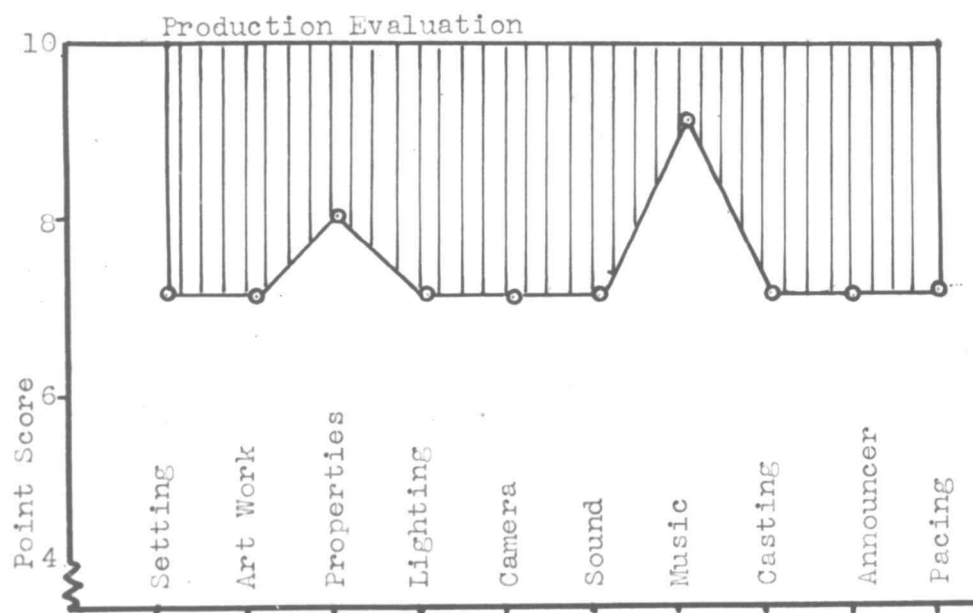
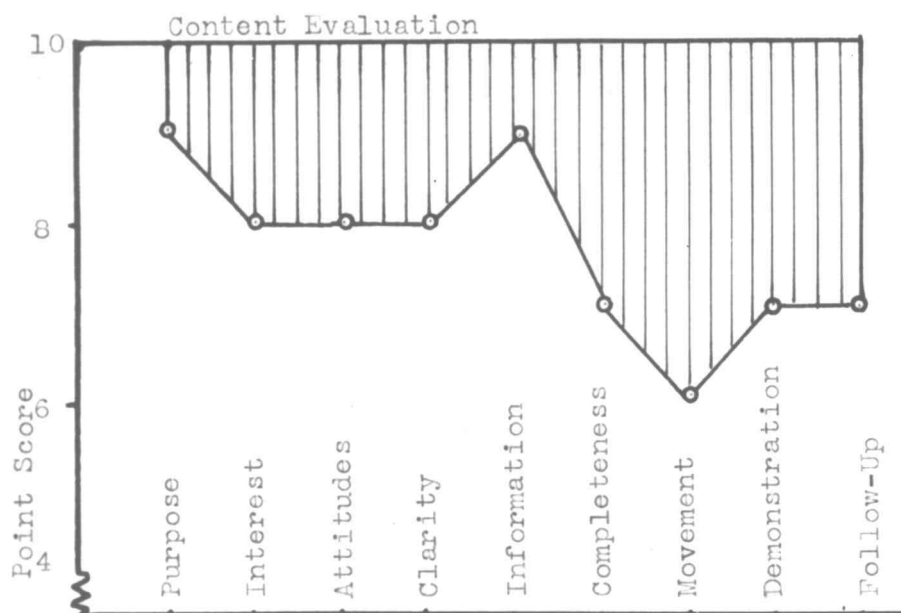
Average	6
---------	---

Good.	8
---------------	---

Excellent . 10

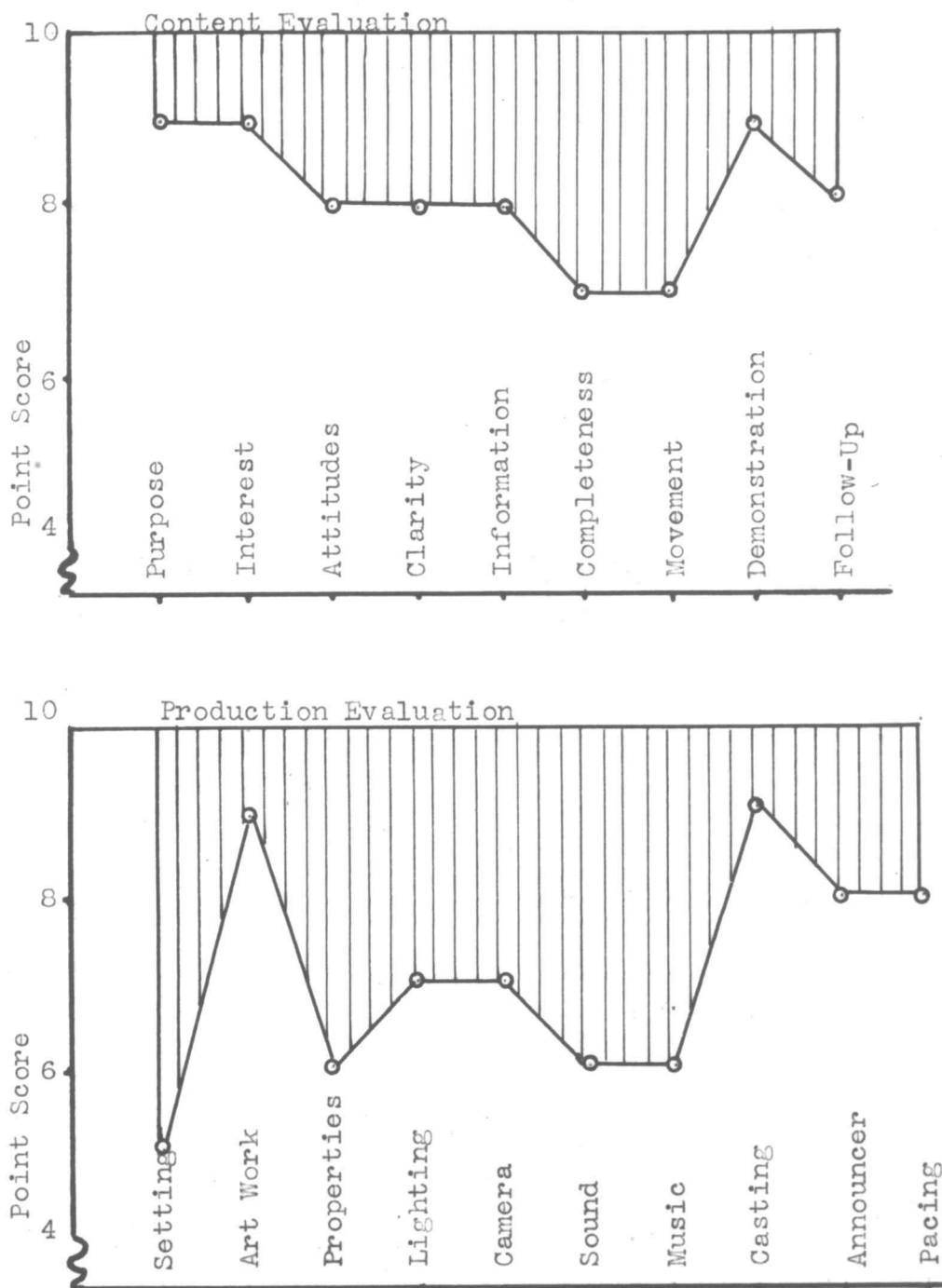
TOTAL

APPENDIX S

KOAC TELEVISION SEMINAR EVALUATION CHARTProgram: "Across the Desk"

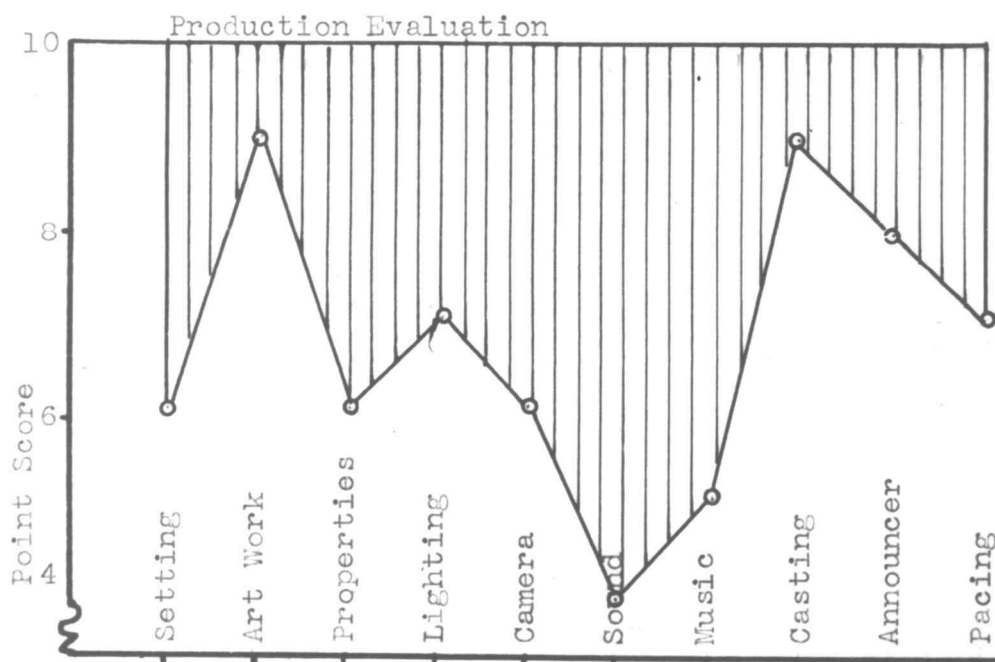
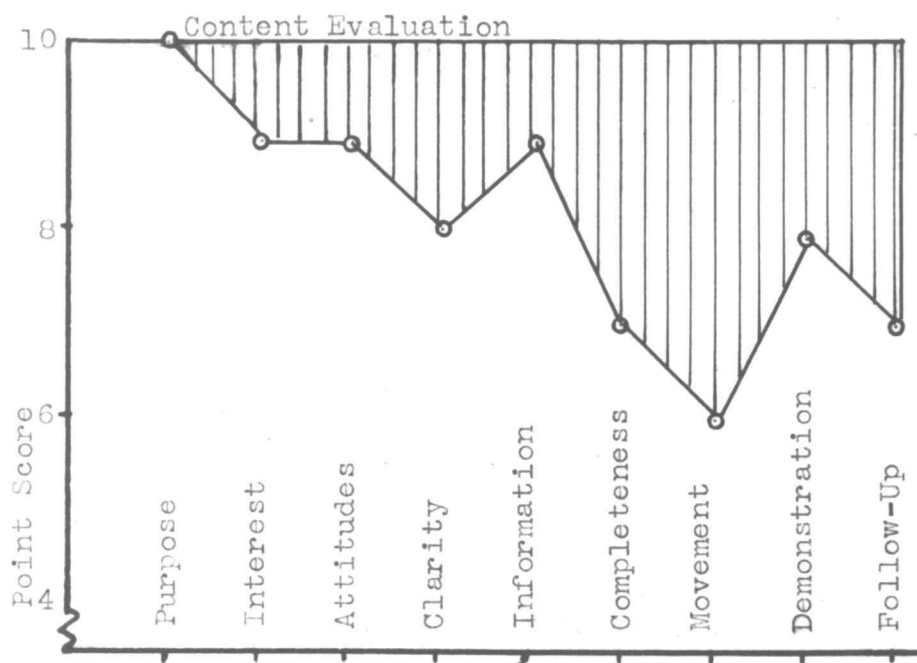
KOAC TELEVISION SEMINAR EVALUATION CHART

Program: "Let's Explore Art"



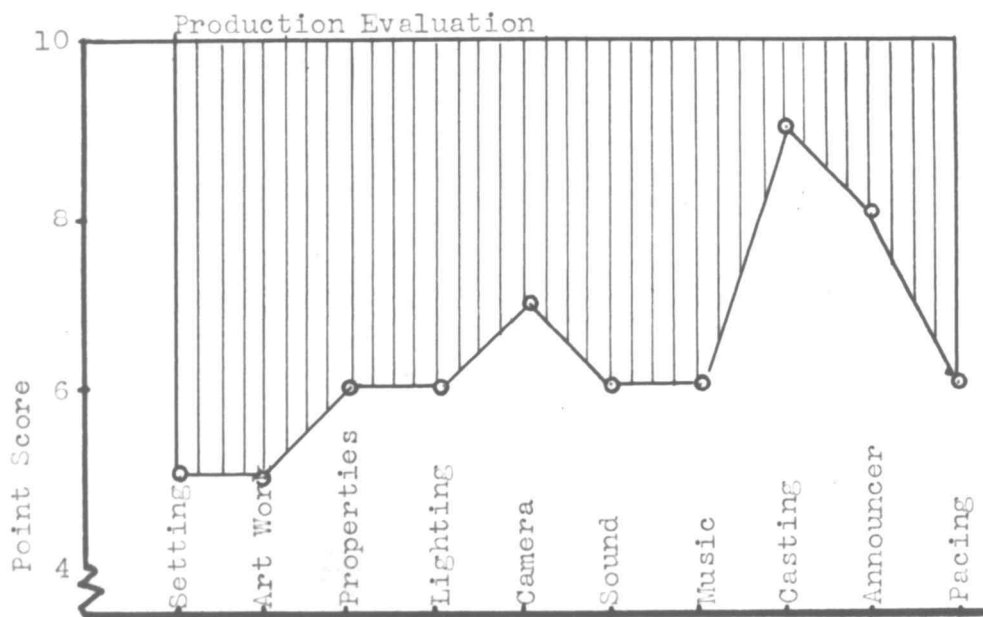
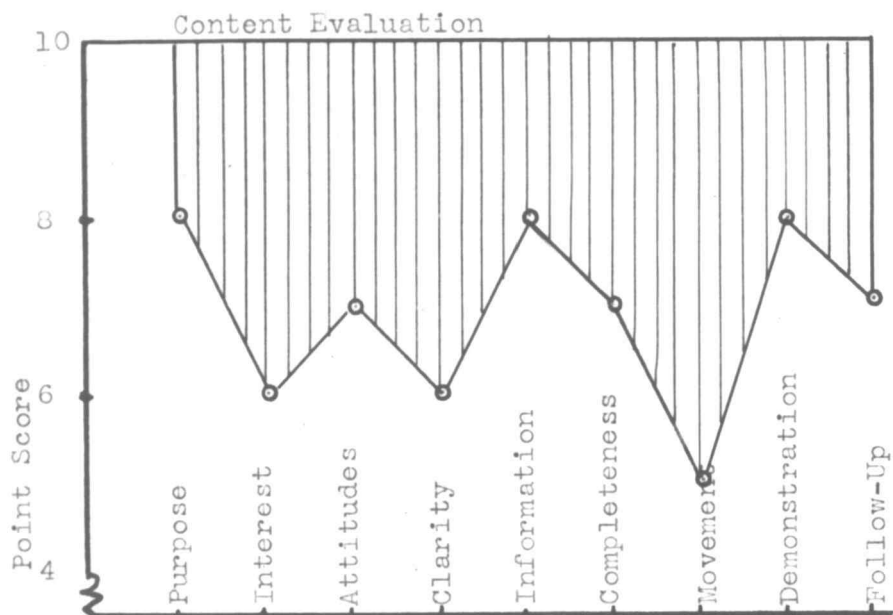
KOAC TELEVISION SEMINAR EVALUATION CHART

Program: "The Story and the Problem"



KOAC TELEVISION SEMINAR EVALUATION CHART

Program: "Farm Hour Weather"



KOAC TELEVISION SEMINAR EVALUATION CHARTProgram: "Drama In Poetry"