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I hereby recommend that the thesis prepared under my supervision by _____ **RUSSELL E. HELMICK** _____

entitled _____ **A SURVEY OF EDUCATORS' ATTITUDES AND** _____

_____ **OPINIONS TOWARD TELEVISION** _____

be accepted as fulfilling this part of the requirements for the degree of _____ **DOCTOR OF EDUCATION** _____

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A SURVEY OF
EDUCATORS' ATTITUDES AND OPINIONS
TOWARD TELEVISION

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of the University of Cincinnati
in partial fulfillment of the
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by

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CHAPTER I
INTRODUCTION
THE PROBLEM

Modern education received great impetus from the invention of the printing press. Indeed, it may be said that education as we know it would not have been possible without the printed word. Other developments have, of course, contributed to the expansion of the educational system. Among these may be mentioned improved transportation, the motion picture and similar visual developments, the telephone and telegraph, and radio broadcasting. The educational uses of these developments have been investigated in detail by researchers in education prior to World War II.

The principles underlying telecasting were generally understood by scientists before World War II, but developments in radar and similar devices received tremendous impetus from the necessity of defeating the enemy by means of every possible device. With the return to peace-time economy, commercial broadcasters in the radio field were quick to recognize and exploit the commercial and entertainment possibilities inherent in television. Telecasting stations were constructed in various parts of the country, television programs were designed and produced and thousands of television sets were produced and sold to the American public.

Before World War II educators at all levels had become interested in visual and auditory aids to instruction. Of these the radio, the phonograph, and the motion picture were perhaps the most commonly used. With the development of television, it is perhaps only a natural and

logical outcome that educators should be concerned with the educational uses of that medium which like the motion picture is both auditory and visual in character. In the field of education it is well known that techniques and methods which can be used in connection with any untried device or procedure must be developed after careful investigation and trial. Although the educational potentialities of television can be inferred from previous experience with related auditory and visual aids, more knowledge and information concerning television are obviously needed before either educators or commercial telecasters can fully exploit its potentialities to the best interests of boys and girls in the schools. It is the purpose of this study to investigate certain aspects of the educational potentialities of television and to set forth, if possible, some implications for its use in related instructional methods and procedures.

Specifically it is the purpose of this investigation to survey opinions and attitudes of teachers and administrators in selected high schools of the greater Cincinnati area toward the potential uses of television in relation to education. The study assumes that educators are vitally interested in television as an educational tool and that teachers and administrators will welcome the opportunity to assist in planning and giving direction to the development of experimental programs designed to indicate ways in which television programs can be used for instructional purposes. This study will determine, if possible, whether the foregoing assumptions are correct, and if so, the degree and character of the cooperation which may be expected from school people in adapting television to educational uses.

Since it is obviously impossible to investigate the potentialities of television as an educational tool at all levels of the school system, this investigation has been limited to a consideration of certain questions concerning instructional possibilities at the secondary level. In the main, this study undertakes to ascertain what are the attitudes of secondary school teachers, supervisors, and superintendents toward television in regard to:

- a. The use of television as an educational tool
- b. Practical curricular areas for the use of televised programs
- c. Other ways television may be used by the schools
- d. Amount of time for programs in the school schedule
- e. Willingness to help plan and give direction to programs
- f. Willingness to use the programs
- g. Acceptability of commercially sponsored programs
- h. Payment for equipment to receive programs

NEED FOR STUDY

Review of literature does not reveal any study of this nature in the field of television-education. So far as can be determined, no study has been made regarding the development and use of television in education as the joint concern of the television industry and the educators.

A study, therefore, designed to provide evidence whether

television can or cannot, will or will not, be used to implement instruction in the high schools should be of tremendous value in planning education for the future. It is essential also that information as to probable curricular areas for effective use of the medium by the schools should be revealed. Educators need to know how the medium can be used by the schools in enriching the educational offerings for future citizens. This can be accomplished through the development of programs telecast for and to the schools; programs which demonstrate the educational potentialities of television. For the educator the financial, commercial, and public relations problems arising from the introduction and use of the medium are of especial concern. It might also be said that the broadcasting industry as well is vitally concerned with these and related problems. There is no clear cut and valid evidence regarding their solution available either to industry or the educational profession. Obviously, research in this area is badly needed. Reliable information and data about the use of television in the schools, how it may be used, factors involved in developing experimental programs and matters relating to cost are, therefore, items of interest not only to the educators and the television industry but to the public in general.

It is realized, of course, that each community and the public in those communities possess individual characteristics and peculiarities. While this study has been confined to one community, namely Cincinnati and its television area, the study can be expected to provide usable and valuable data which can be adapted by other communities in developing television facilities for educational uses.

JUSTIFICATION OF STUDY

As indicated in the preceding paragraphs, it is expected that this study will be of interest not only to the television industry but to the general public as well. The justification of the study for each of these major areas can be readily seen in the following outline. The items set forth are not meant to be all inclusive, but are considered to be representative of the possible contributions that a study of this nature may make to instructional techniques.

1. For the television industry it is believed that the results obtained may:

- a. Serve as a pilot study for further investigation.
- b. Define some time limits for school use of programs.
- c. Reveal teacher-administrator interest for planning educational programs.
- d. Indicate curricular and other areas in which programs would be most useful for schools.
- e. Provide opportunity to know and study problems which will be common to station management and educators.
- f. Provide some criteria for evaluation of television programs designed for in-school purposes.

2. In relation to the educational profession this study will:

- a. Influence and give direction to the right types of television programs for the schools and community.
- b. Show what schools can do toward providing education through television programs.

- c. Provide an opportunity to learn the kinds of problems which may arise for the school and for the station in respect to production and utilization of programs.
 - d. Reveal limits to which schools can be expected to benefit from television programs.
 - e. Indicate possibilities of school contributions and opportunities for providing programs.
3. For the community and the general public the study may:
- a. Bring school and community closer together in the common enterprise of education.
 - b. Emphasize the use of community resources in the making of television programs.
 - c. Reveal program areas of value for special education, such as education for the physically handicapped.
 - d. Provide impetus for formation of an education-television council to advise both the industry and the profession in developing and evaluating television programs.

METHODS OF RESEARCH

The normative survey is the basic research technique used in this study. Data have been secured by means of especially-designed questionnaires; interviews with school administrators, teachers, and persons associated with the television industry; and an attitudes scale prepared to measure certain attitudes and reactions to television programs

produced for educational use. By use of the questionnaire, opinions of educators concerning future use of television in the schools, and costs and methods of paying for programs and television equipment, were obtained. The questionnaire also revealed availability and willingness of teachers to assist in planning and directing a series of trial programs for school use. Specifically the questionnaire sought reactions from educators regarding the following major areas:

1. Acceptance of television as an educational tool
2. Areas in which the medium might be supplemental to school programs
3. Scheduling arrangements which are practical as to time and days
4. Desire for television equipment and methods of obtaining such equipment

Fundamentally, the interviews were intended to be informative and explanatory in nature. Interviews were held with superintendents, teachers, and television executives for the purpose of acquainting these individuals with the purpose and need for the study. Pertinent questions and practical suggestions received from these interested persons were valuable in providing direction to the study.

Attitudes of school administrators and teachers concerning the use of television as an educational tool were measured by a scale constructed according to the Likert¹ technique. Total attitudes

¹ Renis Likert, "A Technique for the Measurement of Attitudes," Archives of Psychology, 22 (June, 1932), 5-55.

scores were obtained from 533 educators and "before" and "after" scores from approximately seventy teachers. Construction of the scale followed precisely the steps recommended by Likert and it is considered to be reasonably accurate in measuring attitudes of individuals concerning supplementary use of television as an instructional aid in the secondary school. Application of the scale, within its own inherent limitations and the representativeness of the sample, made possible an objective presentation of relative attitudes scores for various educator groups.

SOURCES OF DATA AND GENERAL PROCEDURE

The data for this study have been secured from school administrators and teachers in selected secondary schools of the Greater Cincinnati television area. In this area are included eight high schools in the Cincinnati Public School System and twenty private-parochial high schools in the Archdiocese of Cincinnati. Since it was obviously impossible to survey opinions of all teachers employed in these schools, it was arbitrarily decided to limit the number of participating schools to fourteen and to include within this number two suburban high schools. The schools selected were:

- Central Vocational High School
- East Vocational High School
- Western Hills High School
- Graphic Arts and Printing High School
- Hughes High School
- Mariemont High School
- Mother of Mercy Academy
- Norwood High School
- Purcell High School
- Regina High School
- Roger Bacon High School
- Walnut Hills High School
- Elder High School
- Withrow High School

It is believed that these schools are representative of the secondary schools in the greater Cincinnati area with respect to size of school, number of teachers in each school, years of professional experience of the teachers and the organization of the educational program. Schools surveyed ranged in size from an enrollment of 122 in a small vocational school to nearly three thousand in a large public comprehensive high school. Between these extremes, the private-parochial schools range from 472 in enrollment to the largest with 1049. *

The number of individuals surveyed totaled 694. This number includes superintendents, principals, assistant principals, supervisors, and teachers and represents approximately eighty per cent of all teachers in these schools included in the study. Faculty sizes ranged from ninety-eight in a large comprehensive high school to eight in the small vocational school.

Table 1 presents data on the years of experience of 533 educators whose attitudes and opinions are included in the data of the survey. Ninety-nine teachers have five years experience or less; eighty-two teachers have ten years experience or less, and 352 teachers have more than ten years in the teaching profession.

* Data relating to size of schools and number of faculty members are shown in Appendix I.

TABLE 1
YEARS OF EXPERIENCE OF ALL RESPONDENTS BY GROUPS

	Total	0-5 Years Experience	6-10 Years Experience	Over 10 Years Experience
All Respondents	533	99	82	352
Administrative Group	51	1	1	49
Principals	18	1	1	16
Supervisors	14	-	-	14
Superintendents	19	-	-	19
Teachers	482	98	81	303
Foreign Language	16	1	2	13
Business	34	6	9	19
English	68	12	9	47
Social Science	42	8	4	30
Music	13	2	3	8
2 or more subjects	142	46	34	62
Industrial Arts	43	2	7	34
Science	31	3	5	23
Home Economics	16	1	1	14
Art	15	1	5	9
Physical Education	23	7	0	16

As might be expected from the longer tenure of secondary school teachers, experience for the larger proportion of teachers in this group is ten years or more. As usual in the case of principals, supervisors, and superintendents, the years of experience tend to be greater than that of teachers. Forty-nine of fifty-one represented have more than ten years professional experience. Only one, a principal, has less than five years of experience.

Three types of Cincinnati high schools were included in this survey, viz: the comprehensive or general, college preparatory, and the

vocational. Schools of this classification are described in a Report of the Superintendent, 1946-1947, Cincinnati Public Schools. ²

The comprehensive high schools offer instruction in a wide range of subjects, including art, music, home economics, industrial arts, and business, as well as the various traditional high school subjects. In these schools pupils may prepare for college, for employment, or may seek a general education. Hughes, Western Hills and Withrow are comprehensive high schools.

The strictly college preparatory high school is Walnut Hills, the only one of this classification in Cincinnati, to which pupils are admitted on a city-wide basis subject to possession of a required level of scholastic ability. This high school offers extensive programs in the classical languages, and emphasizes training for college.

Schools classified vocational high schools offer four-year programs in skills or trades. At present there are three vocational schools and a vocational commercial division housed in Woodward High School. Central Vocational High School provides training in the aero-nautical, woodworking, automotive, electrical, and machine fields. East Vocational School provides training in clothing manufacturing, food preparation and service, and selling and related occupations. Graphic Arts and Printing provides preparation in hand and machine composition, pressroom, offset lithography, and photography.

Norwood High School and Mariemont High School, two schools in the suburbs of Cincinnati, have similar and modified comprehensive programs adapted to the needs and philosophy of the respective communities. Subjects usually found as a part of the comprehensive, college preparatory, and vocational school programs are, to some extent, offered in these schools.

Two of the public schools in Cincinnati contain grades seven through twelve, the accepted junior-senior high school organization. The other seven schools of the public systems represented are four-year high schools consisting of grades nine through twelve. Five of the high schools

² Claude V. Courter, Preparing for the Future: Annual Report of the Superintendent, p. 10. Cincinnati: Board of Education, 1946-47.

are comprehensive or modified comprehensive, and three have basically vocational education programs. Only one of these schools is primarily college preparatory.

Of the five parochial schools included, two are high schools for girls and three are for boys. The parochial schools may be considered "general" ³ high schools; that is, they include college preparatory work and general high school work for those not going to college.

To secure additional representation for the sampling, supervisors from the Cincinnati schools and selected superintendents from the entire television area were included in the distribution of questionnaires. Fifteen supervisors, representing all areas of specialized education, and twenty superintendents from the larger rural and city schools of the area were included. The wide WLW television range included affiliate stations in Columbus and Dayton, Ohio, as shown in Appendix II.

It was especially important to include the twenty superintendents, since it was believed that these administrators would soon find it necessary to make major decisions regarding the use of television in their schools. It was expected that they would be vitally concerned and that their responses would add weight to the final results of the study.

The study accounts for more than half of the secondary teachers and administrators of all Cincinnati public and parochial schools. The study, thus, may be considered a representative sampling of the opinions and attitudes of these educators regarding the educational potentialities of television. To further substantiate the statistical reliability of the

³ Letter to the writer from Rt. Rev. Msgr. Carl J. Ryan, Superintendent of Schools, Archdiocese of Cincinnati, Cincinnati, Ohio, dated April 5, 1950.

results, a test of significance has been applied to the data whenever possible. Standard errors of percentage have been computed according to the formula ⁴ $D\% = 100 \sqrt{\frac{Pq}{N}} = 100 \sqrt{\frac{P(1-P)}{N}}$ and a table showing the expected error at different percentage levels compiled.

At the time the survey was made, the set density in the WLW television area was twenty-four per cent ⁵ or approximately one set for each four families. To convey some idea of the potentialities of television in the Greater Cincinnati area, Table 2 has been included to show the population of the various communities.

TABLE 2

POPULATION OF COMMUNITIES IN
WLW TELEVISION AREA

(Figures of 1940 U. S. Census Report)

Ohio	
Cincinnati	455,610
Columbus	306,087
Dayton	210,718
Hamilton	50,592
Hamilton County	621,987
Mariemont	
Middletown	31,220
Norwood	34,010
Oxford	2,756
Springfield	70,662

⁴ Henry E. Garrett, "Sampling and Reliability," Statistics in Psychology and Education, p. 218. New York: Longmans, Green and Co., 1947.

⁵ TV Set Ownership Study. (Reporting TV Set Ownership as of January 11, 1950 in the Cincinnati, Columbus, and Dayton TV Markets). WLW Research Department, Cincinnati, Ohio.

TABLE 2 (Continued)

Kentucky

Bellevue	8,741
Campbell County	71,918
Covington	62,018
Ft. Thomas	11,034
Kenton County	93,139
Newport	30,631

Indiana

Dearborn County	23,053
Lawrenceburg	4,413
Madison	6,923
Richmond	35,147

General Procedure.-- The nature of this problem was such that the closest cooperation of superintendents, principals, and teachers was required. After the schools to be included in the study had been selected, permission was secured from the administrative heads of the several school systems to confer with both principals and teachers whenever necessary. In some cases, the superintendents wrote letters to principals giving official sanction and permission to conduct the study; while, in other cases, a phone call from the superintendent to the principal took the place of a letter.

After obtaining permission to visit the schools a letter was sent to the principals of the fourteen schools introducing the problem and the background and purpose of the research. Suggestions and comments regarding the study were also solicited. Responses from the principals to this letter were extremely favorable. All schools approached welcomed the opportunity to cooperate and expressed the desire to be included in the

survey.

During the first conference with the principals a general over-view of the procedures for making the survey was outlined. Plans for submitting to the teachers questionnaires and Education-Television Attitude Scales, then being developed, were agreed upon. It was understood at this time that television sets would possibly be provided by the Crosley Broadcasting Corporation, (free and with no installation, maintenance or other cost to the schools), to enable teachers and pupils to view education-television programs which might be developed during the period of this study. It was understood that the program development and presentation were to be based upon analysis of the questionnaires filled in by teachers. It was explained that a reasonable assurance of interest and cooperation on the part of school people would be necessary to complete arrangements for planning a "pilot" series of education-television programs.

Early and subsequent interviews with superintendents, principals, and teachers strengthened the working relationship with respect to the projected survey. During the interviews many valuable suggestions were received; ideas and suggestions from this source greatly influenced the progress of the survey.

A constant attempt was made throughout this study to keep the participants informed of developments as the study proceeded. Frequently this was accomplished by going to the schools for further conferences with principals and teachers. Sometimes it was done by telephone and occasionally by use of a follow-up letter to teachers and principals.

Preliminary analysis of the questionnaire justified the assumption that educators would be willing to assist in planning a "pilot"

education-television program series for in-school viewing and teacher evaluation. As a result of their interest, a committee of fifteen teachers and administrators from the schools and the systems surveyed was formed as an Education-Television Program Advisory Group.

Working with technical assistance of the television station and using data obtained from the questionnaire and other sources regarding types of programs considered to be most practical, this group also gave consideration to other fundamental problems connected with the presentation of a "pilot" education-television program series. These problems included the time for scheduling programs, resources and technical limitations, and amount of time to be used. In addition, the committee set up and prepared an evaluation questionnaire to appraise the presentations and to provide data for analysis and study of the trial programs.

ORGANIZATION OF THE REPORT

Chapter 1 states the problem and introduces and stresses the need for the study. The method of research and the tools to be developed and used for the survey are described in the introductory chapter. A fairly complete discussion of the sources of data and the description of the sample have also been included. Procedures followed and techniques used in gathering the data of this survey are also described in Chapter I. In addition, this chapter outlines the procedure for providing a trial series of education-television programs as a part of the study.

A summary of literature as related to television which influenced the study is presented in Chapter II. This chapter summarizes education-

television program developments in several cities. It also depicts social and educational implications which indicate some education-television trends.

Tools for making the survey, namely, the interview, the questionnaire, and the Education-Television Attitudes Scale, are described in Chapter III. Construction of the Questionnaire and the Education-Television Attitudes Scale, used early in the survey, is described in detail in this chapter. Application of the questionnaire and the scale to the faculties of the selected schools is reported in this section. Application of the Education-Television Attitudes Scale, which provided an average education-television score for the respondents as measured by the scale, is also presented.

Chapter IV describes an educator-industry program-planning project which provided a trial series of four education-television programs developed and televised for purposes of this study. Details of selecting a committee to plan the programs, steps in planning the programs, and a description of the programs tried are discussed. Provisions made for reception and evaluation of the program series are also detailed in this section.

Chapter V presents the survey results and analysis for 533 educators in respect to: (1) acceptance of television as an educational tool; (2) use of television programs by the schools; (3) use of television receiving equipment; and, (4) factors regarding television programming. This chapter presents data concerning teacher reaction to and evaluation of the programs. Teacher-television attitude changes, if any, as revealed by scores after these programs have been viewed by a selected teacher group, are shown by presentation of scale scores for the group.

Chapter VI presents the summary and conclusions of the investigation,

recommendations and applications, and a statement of further research that needs to be undertaken.

CHAPTER II

RELATED LITERATURE

Television represents a new tool, ¹ a combination of sight and sound. Since it is a comparatively new medium, not many studies related to its implications and possible educational use have been made. Much of the literature up to now has dealt with the history and technical developments and less with the educational use of television. Chief sources of information at present are newspapers, journals of the television industry, education journals and pamphlets.

In this chapter the articles and studies summarized are those which have influenced this study. No attempt to review materials or sources of a technical nature has been made, inasmuch as this is a study of a non-technical nature and applies only to the educational import of television. A brief summary of some programs developed in other communities is given, and authoritative comments relative to the implications and impact of the medium in those communities are outlined. The item of cost for providing television reception is introduced, and the interest of local school units toward installing television stations for educational purposes is discussed.

As to formal education, some fundamental questions regarding possibilities and effects on teaching procedures are discussed by Tyrell

¹ Kenneth C. Bartlett, "What Does Television Mean to Education?" Education on the Air, p. 273. Sixteenth Yearbook of the Institute for Education By Radio. Columbus, Ohio: Ohio State University, 1946.

of Columbia University: ²

There are moreover, temporarily, technical limitations on using television in the classroom. Sets with large size screens for televiewing by large audiences are still in a price range prohibitive to most schools Television does not mean the end of a teacher. It does not mean that teaching will consist of the presentation of a subject by an outstanding authority to a large number of students. It does not eliminate the individual classroom teacher any more than does the motion picture or radio. Like them, it can add to the effectiveness of teaching by presenting a more vivid and fully-rounded impression. Television is a useful supplement to teaching when it provides a window revealing the living world Television in spite of its progress and well-meaning concern for public service programs, has not begun to utilize or even to realize the educational possibilities of the medium Television's chief interest apparently is for entertainment. It also pursues the attitude that this is "what the public wants" and that anything "controversial" must be avoided.

While some producers and educators express doubt of the educational values for formal classroom programs, they recognize its merits for showing current happenings. Both the educator and the telecaster recognize the need to study the potential of television for advancing education. ³

The development of educational programs has been a slow process, since the number of television stations ^{is} are few; nevertheless, even with the limited number of localities with television stations, some worthwhile programs have been developed. Representative types are reported by Martha A. Gable of the Philadelphia School System. She describes a series of four programs developed in Philadelphia and performed by students and

² William G. Tyrell, "Television in The Social Studies," Social Education, 13 (January, 1949), 25.

³ Kenneth C. Bartlett, "What Does Television Mean to Education?" Education on the Air, p. 273. Sixteenth Yearbook of The Institute For Education by Radio. Columbus, Ohio: Ohio State University, 1946.

teachers in the Philadelphia schools. ⁴

"Young Philadelphia Presents" allows for almost any type of school activity. Agriculture, social studies units (studies of foreign countries with costumes, dances, songs, products), art, music, safety, vocational activities, home economics, health, dramatics, round table discussions - all have been included.

"Here's How" features boys and girls exhibiting their skills at making things. Commercial art, cake decorating, woodwork, various types of doll-making, sewing, model aeroplane building, scientific experiments are just a few of the subjects.

"Teletown Express" is the televised version of "Radioland Express," a regular program for elementary schools. It includes a story, a dance, a poem, and music. A member of the radio-television staff writes the script and is the central figure with five or six children. The themes permit wide variety of educational and entertaining material to be included.

"Formula for Champions" highlights the health and fitness programs. Sports, dancing, corrective exercises, and posture are featured.

Knowles ⁵ describes programs developed in other cities. St. Louis programs emphasized history of music. Cleveland presented safety programs sponsored by the American Automobile Association. Detroit colleges and high schools have utilized plays for televised productions. Baltimore designed a program series using "Clean City" as a topic. These early programs appear to use available school and community resources and seem designed for better community understanding of school activities.

An attempt at using television for instructional purposes for older students has been reported by The Office of Naval Research ⁶ which

⁴ Martha A. Gable, "Teacher, Here Comes Television!" Educational Screen, 28 (February, 1949), pp. 68-70.

⁵ William H. Knowles, "Television in Education," The School Executive, 68 (March, 1949), pp. 46-48.

⁶ "Navy Tests Television Teaching," School Management, 18 (April 1, 1949), p. 38.

describes a program of lectures originating at Sands Point, New York, using demonstration techniques of the master-teacher. This experiment showed one of the chief difficulties in presenting this type of program to be finding teachers with sufficient background and personality to project on the screen. A year's training program in television techniques for teachers was found necessary before offering this type of program.

As to the immediacy feature of television, it may soon be practical to make televised "on-the-spot materials" available to schools. Televising events such as the opening of Congress, the President's message to the nation, "the dramatic power of sight added to sound" may make television sets a modern educational necessity for every classroom, according to Knowles.⁷ Gable⁸ emphasizes that sets with large size screens for televiewing by large audiences are still in a price range prohibitive to most schools.

Tyler⁹ foresees wired television, such as the central sound system idea, as a possibility and makes this as a practical suggestion for demonstration type programs televised from a particular point such as a laboratory situation.

A practical type receiver at the moment is perhaps the medium

⁷ William H. Knowles, "Television in Education," The School Executive, 68 (March, 1949), p. 48.

⁸ Martha A. Gable, "Television," The Nation's Schools, 43 (June, 1949), p. 60.

⁹ Tracy F. Tyler, "How About Wired Television?" The Journal of the Air, 9 (February, 1949), p. 61.

sized screen for use by fairly small groups, as stated by Gable in "Audio-Visual Guide." ¹⁰ Large screens for auditoriums are expensive and seem uneconomical for regular classroom reception. While a "Captive" type of television with many local viewing screens known as Vericon is receiving consideration for educational use, other devices no doubt will be developed at lower cost. For example, a system of "repeaters" at the Dobbins Vocational-Technical School ¹¹ connects fourteen classrooms to receive telecasts on extensions. These "repeaters" are less expensive than regular receivers, operate from one receiver and are controlled from one room. At this school there is one receiver for each channel.

While a number of technical and financial problems face ^s the school which is planning more than a sporadic use of television, good reception requires that a suitable antenna system, engineered to a specific site, be installed. Reports seem to show that an inexpensive television set can be greatly improved in reception qualities if an antenna, properly engineered and installed, is used; the best of sets give poor reception if the antenna installation is not adequate.

The Director of Engineering of The Crosley Broadcasting Corporation summarizes present television reception facilities for

¹⁰ Martha A. Gable, "Teacher, Here Comes Television," Audio-Visual Guide, 15 - No. 7 (March, 1949), p. 17.

¹¹ Ibid.

school purposes as follows: ¹²

Primarily, for a class to view the output of a local television station, two methods are generally available at the present stage of television development. The first employs a standard receiving antenna located atop the school with the signal fed to a large screen projection television set. Such a unit provides a projected picture up to six feet by eight feet in size; optimum picture quality, however, is probably with a picture size of four feet by six feet. Costs put some restriction on the flexibility of this unit, the complete setup amounting to about three thousand dollars.

The second method for receiving programs in a school consists of any number of commercial receivers being used for small group viewing. RCA believes that such a system of from one to two thousand receivers best operates from the Antenaplex system. The Antenaplex system is an aerial arrangement which will feed fifty receivers and cost in the neighborhood of four thousand dollars installed.

For viewing programs originating within any one school, which is known as closed circuit viewing, several systems could be employed. The most basic system, however, is probably similar to the setup contemplated at the College of Music, Cincinnati, Ohio. A closed circuit viewing system operates similarly to closed circuit installation as known in radio.

Cost of programs and sponsorship of programs face the educator and the station. A typical reaction to advertising in the schools through televised programs is found in Baltimore's Board of Education rule concerning sports and products such as beer. ¹³

Advertisers who may want to sponsor telecasts of public school sports in Baltimore will first have to obtain the approval of the city's Board of

¹² Interview between the writer and R. J. Rockwell, Vice President and Director of Engineering, Crosley Broadcasting Corporation, at Cincinnati, March 30, 1950.

¹³ Lester J. Schloerb, Editor, Television News. Prepared by Radio Council for members of the General Superintendent's Committee For the Study of Television, Chicago Public Schools. (December 15, 1948), p. 1.

School Commissioners, in line with rules adopted by the school board on November 4, 1948. It also ruled that no station may enjoy exclusive TV or broadcasting rights. A third rule, also adopted, requires that financial arrangements between Baltimore stations and the school be approved by the Department of Education's business division.

"I can see nothing unethical in the policy of permitting commercial sponsors to telecast school sports programs, but care must be taken about the kind of sponsors involved," John R. Sherwood, a board member, declared. He added, "It is important, for example, if advertising beer and liquors was involved in any sponsorship."

Regarding pupil participation in commercially sponsored television programs, the following official notice, reported in the Journal of the Air,¹⁴ went to all schools in the Chicago system to clarify the position of the Board of Education:

It has long been the policy of the Chicago Public Schools, in accordance with the interpretation of the rules of the Board of Education, that schools and school groups may not participate in commercially sponsored radio and television programs. In several instances recently this policy has been overlooked.

All requests for school participation in radio and television programs made directly to the school should be referred to the Director of Radio and Television, George Jennings, DEarborn 2-7801, who will endeavor to clear the program and then notify the school concerned as to possible participation.

Current interest in the wider implication of using the tool is manifest in several articles recognizing the fact that television is an actuality; that educators must recognize opportunities now presented and be aware of its limitations and other factors regarding education.

The Phi Delta Kappan presents an article by Philip Lewis, an instructor in the South Shore High School of Chicago, indicative of this interest.

¹⁴ "Chicago Radio-TV Policy," Journal of the Air, 9 (February, 1950) 63.

He lists the following among things which educators may do. ¹⁵

1. Plan programs in cooperation with the local TV producer. The present is an excellent time for this type of experimentation since sufficient sponsors have not yet taken up all of the air time available, especially during the school hours. Then too, this constitutes "public service", and all stations try to devote some of their transmissions to this end
2. Develop techniques for the presentation of educational programs which avoid amateurishness. For example, settings in the classroom have been found to arouse resentment in the viewer.
3. Conduct experiments to learn in which areas television may make the best contributions. Perhaps a change in specific methodology for certain subjects may be necessary.
4. Set up situations and controls to determine the retentivity of material taught via TV, as compared to other means, and to discover the proper areas of utilization of the new medium.
5. Determine the extent and effects of such causative factors as eye fatigue, viewing angles with direct-view vs. projection receivers, contrast and brilliancy, and attention spans of the various age groups.
6. Advocate and support the formation of a national commission on the educational aspects of television, the objectives of this group to be aimed at setting up standards, specifications, and goals for school use, and to distribute information to the profession concerning the sociological, psychological, technical, managerial, and artistic characteristics of video
7. Assemble all the material written on educational TV and publish it as well as a periodic index to facilitate research and enlightenment.

Another implication having to do with teacher use of television as an added teaching tool is reflected in a recent Chicago survey. As expressed here, children are viewing programs, but the programs are not being used to supplement instruction. ¹⁶

¹⁵ Philip Lewis, "The Future of Television in Education," The Phi Delta Kappan, 30 (December, 1948), pp. 157-160.

¹⁶ Journal of Educational Research, (October, 1949), p. 156.

A mail survey of over 500 Chicago homes which had television disclosed that 94% of the children aged ten or older viewed television for more than three hours per day. 69% of the parents stated that their children devoted the same amount of time to home study as they did before television was brought into the home, while 28% said they spent less time. 3% said they spent more time. Significantly, 72% of the parents stated that their children's teachers had never recommended a television program.

While the usual response to the above implication may be that the quality of the programs is not yet suitable, the Public Affairs Committee, Inc., a non-profit educational organization, feels "that television has gotten off to a good start." As suggested in a syndicated column of the Cincinnati Enquirer: ¹⁷

"Puppet shows, cartoons and antique Westerns are harmlessly amusing and sometimes educational. But the great contributions of the new medium are in travelogues, newsreels, sports, and drama," says Josette Frank, Chairman of the Public Affairs Committee, also a member of the Child Study Association of America.

As to the impact of television upon children, a recent survey at Burdick Junior High School of Stamford, Connecticut, reported in the New York Times, ¹⁸ indicates that television is one of the most important factors in the life of the younger generation today.

Details of the study mentioned revealed that the average time spent viewing programs by these pupils was 3.86 hours. One hundred ninety-seven out of 223 said television did not interfere with their home work. Figures presented did not show interference with reading. This survey also indicated that programs were not made a part of home work. Responses showed that pupil interest in events outside of school had increased. As stated

¹⁷ Bob Considine, Syndicated Article. The Cincinnati Enquirer, (March 17, 1949), 5.

¹⁸ Jack Gould, "Stamford Survey," New York Times, (March 12, 1950), 11.

in the Times:

(1) The child who has his own set at home views television shows for an average of twenty-seven hours a week, or nearly four hours a day. This is only fifty minutes less than the Burdick pupil attends school every week. The Burdick student body ranges from 11 to 15 years in age.

(2) Children who have their own sets constitute 50 per cent of the student body. Those who look regularly at the home of neighbors -- for an average, incidentally, of eighteen hours a week -- add up to 29 per cent. Only 21 per cent of the 447 students participating in the survey were not regular viewers. This means that for 79 per cent of the school the programs on television occupy more of the children's waking hours than any other single activity except attendance in the classroom.

In reference to evidence of this type, a Dayton, Ohio, educator comments: ¹⁹

The extent of the interference of television in the lives of children seems to come from the home adapting itself to television rather than adapting television to the home.

Lewis, ²⁰ television editor of Educational Screen, draws the conclusion that parents must regulate the time children spend with television, and "educators must recognize this rapidly maturing colossus and make it serve their purpose."

Dr. Carl F. Hansen, ²¹ associate superintendent of schools, Washington, D. C., reporting a survey of 5,000 children, 546 teachers and fifty-four parents to the 37th Annual Convention of Parents and Teachers, revealed that forty-four per cent of the teachers do not believe video

¹⁹ Cincinnati Enquirer, (March 15, 1950), p. 2.

²⁰ Philip Lewis, "TV and Teen-Agers," Educational Screen, (April, 1949), p. 161.

²¹ Broadcasting Telecasting, "Video's Effect on D. C. Children," Washington, D. C., (May 15, 1950), p. 56.

to be harmful to children. Seven per cent expressed no opinion concerning the harmful aspects. Fifty-eight per cent of the teachers believe that television is contributing to educational achievement, and ten per cent said they thought television increases interest in reading.

Parents surveyed in this study registered a highly favorable reaction to video. The benefit named most frequently by parents was that television has stimulated a "keen interest in news, scientific and travel programs and has extended the interest of children."

Joseph H. McDonnell, President of N.B.C., ²² said that the television industry was "delighted to learn that video had stimulated the interest of children in outside events," and added that he was not surprised that seventy-nine per cent of the students generally, looked at programs regularly. "We are certain," he said, "that our industry will fulfill its obligation to the American public through its programs."

Considering the heightened interest in television, viewers need not fear eye damage, according to Dr. Benjamin Roncs: ²³

Eye fatigue may result from improper use of television, however. A clear image is most important in avoiding video eyestrain. Tune in only those stations that give a good image in your area.

A steady picture with little interference is also important to eye comfort. The proper type and location of antenna and lead in for your set helps here. Proper servicing helps too, because television sets just don't stay adjusted once they are installed.

Whether you are sewing, reading or looking at the television, your eyes

²² Listenables and Lookables, East Orange, New Jersey, 2 (March 15, 1950), p. 1.

²³ "Save a Life," Syndicated Article, Cincinnati Times-Star, (March 9, 1950), p. 8.

feel better if the light you see by does not contrast too greatly with the light in the room. Your eye muscles have to work harder in shifting from a bright screen to a dark room. Indirect lighting in the room is therefore desirable.

Size of the screen makes little difference. The lines on which the image forms are farther apart on big screens so the image is not so clear viewed at close range. If you must sit close to the set, a small screen is preferable. For distance viewing, a big screen is better. Some individuals can look at television for a longer time than others without tiring their eyes. If your eyes tire easily, better have them examined. Few of us have perfect vision and television demands good vision.

Television can be wearing on the emotions as well as on the eyes. Blood and thunder programs for example, create excitement which doesn't aid digestion at meal times. Many parents will find "no television at the dinner table" a rule that pays off in a better adjusted and better nourished younger generation.

Further opinion from the Philadelphia Committee for the Prevention of Blindness ²⁴ tends to be conclusive in this matter:

If looking at television hurts your eyes, perhaps there was something wrong with your eyes before you ever acquired a TV set. In other words, TV is not dangerous to vision -- this is the medical opinion of the Philadelphia Committee for the Prevention of Blindness, which considered the question as a result of the public's heightened interest in video. While the medical advisory board of the Committee has carried on no actual research project on TV, it is able to base its views on general past knowledge about the eye.

The Committee made three recommendations to the viewer to insure his full enjoyment of TV without any after effects:

1. Don't sit too close to the TV screen. Less than five or six feet from the average set is "too close".
2. Keep the room as light as possible while viewing the screen. The reason for this is that the eye becomes "dark adapted" when it is registering images in a dark room and it tries to become "light adapted" when it encounters the bright television, thus producing a conflict and maybe a temporary headache.

²⁴ "The Doctor Looks at TV," Telecasting, (July 25, 1950), p. 60.

Notes Screen Level

3. Look at the screen from a position on a level with it or from a position above it. It is natural for the eye to view objects below it, the committee explained.

This advice, which also goes for viewing movies, is advocated especially for children, who are apt to follow TV while sitting on the floor.

The worst that can happen from this position, however, is that the children will become sleepy, "and maybe parents will consider this an advantage."

In summary, the committee points out that "the eye is a remarkable instrument which adjusts to a variety of situations without harmful effect. It takes pretty good care of itself."

According to the American Optometric Association: 25

Studies recently conducted indicate that, while television does not harm normal vision, it may make you conscious of vision problems already present. It is not likely, however, to cause new difficulties.

Regarding Federal Communications Commission plans for educational television channel reservations, the following communication to Dr. Harold C. Hunt, General Superintendent of the Chicago Public Schools, from the secretary of the Commission, indicates an early interest on the part of the Chicago school system. 26

This will reply to your letter of November 16, 1948, inquiring what

25 "TV OK," Insight for Broadcasters, American Optometric Association, Pittsburgh, Pennsylvania, (March 15, 1950), p. 1.

26 Lester J. Schloerb, Television News, (December 15, 1948), p. 1.

consideration has been or will be given to educational groups desiring to operate their own television stations.

The Commission does not have under consideration any proposal to reserve any channels for the exclusive use of educational stations. Educational organizations are eligible of course, to compete with other applicants for the available commercial channels.

Plans based on local initiative relative to a television station to be owned and operated by a board of education have appeared in several newspapers and trade publications.²⁷ It is reported that the Board of Education of Jersey City, New Jersey, is prepared to spend approximately \$150,000. for a relatively simple type of installation. Program plans call for direct instruction, laboratory demonstrations, films, language lessons, art, music, and "how-to-do" type of programs. The Federal Communications Commission has as yet not "un-frozen" television allocations, nor has it announced possible ultra-high frequencies. Possibly all educational activity relating to television, such as that proposed by Jersey City, will have to await action of the Federal Communications Commission.

No evidence was located to show that any board of education had as yet actually operated its own television station. Iowa State College, however, after study of the possibilities, has been in program operation since June, 1949.²⁸ It is the first educational television station in the nation.

²⁷ Lester J. Schloerb, Television News, (December 15, 1948), p. 1.

²⁸ "Educational TV at Iowa State College," AER Journal, 9 (March, 1950), p. 73.

SUMMARY

The literature summarized here is a broad sampling of current opinions and interests relative to television as it applies to education. Prevalent educator reaction is shown to manifest itself between those educators who recognize the potential and implications of television and some who stress the technical limitations. Other reactions reported depict attempts of educators in certain communities to learn ways and means for using the medium as another tool of education.

Articles and comments reviewed in this chapter, having to do with the potential and implications of television, may be classified as follows:

- a. Effects of television upon teaching procedures
- b. Technical limitations of receiving equipment, size of television screen, program reception, etc.
- c. Financial limitations restricting educational acceptance and use
- d. Effects of television on eyes, emotions, etc.
- e. Effects upon student accomplishments, homework, etc.
- f. Relationship of television and the home; social and physical implications, etc.

Education-television achievements, interests and ways and means for further development of television as an educational tool are represented in the following subjects as revealed in the literature.

- a. Descriptions of educational uses of television through program developments tried in Philadelphia, St. Louis, Cleveland, etc.

- b. Description of lecture programs reported by
The Office of Naval Research
- c. Information concerning type and cost of necessary
installation for best television reception
- d. Educator opinions and board of education regulations
regarding pupil participation in programs and
acceptance of advertising in classrooms
- e. Television management opinions regarding obligation
of television to education
- f. Opportunities for educational institutions to own
and operate television stations through Federal
Communications Commission action

It will take more experience and a longer time to establish reliable perspective on this new dynamic and cultural force, television. Under the circumstances, the information about the subject, as reviewed in this summary, is a step in progress toward providing facts and more perspective regarding its use for education. In this respect, this related literature brings together information regarding television and education and tries to interpret the information in meaningful terms to those who may share administrative responsibility for production or use of telecast to supplement secondary education.

CHAPTER III

CONSTRUCTION AND APPLICATION OF SURVEY TOOLS

INTRODUCTION.

The primary tools used in this survey consist of the questionnaire and scale. These tools were constructed for completion by the respondent within a period of approximately one half hour. Both were intended to be completed within a single sitting. They are included in this report as Part One and Part Two and shown in Appendix III. It is the purpose of this chapter to describe the construction and application of these tools.

CONSTRUCTION AND APPLICATION OF THE EDUCATION-TELEVISION QUESTIONNAIRE

A questionnaire designed to obtain opinions of faculty, supervisors, and administrators was developed especially for this study. The questionnaire was made up to include considerations believed likely to be of concern to both educators and executives and program planners in the television industry, i.e., the things about television which would influence its acceptance or rejection as an educational tool.

The basic source of the questions and statements contained in this questionnaire was the opinions and criticisms of teachers and administrators in service, prospective teachers in training, college professors of education, and persons working in the television industry. Other questions and statements were suggested by items from newspapers, magazines, and from television and educational journals. Still others

were the result of the writer's personal experience as a teacher and school administrator. Views and opinions, either oral or written, of teachers and administrators in service, students preparing to teach, and personnel interested in television production and employed in the local television stations were used freely whenever they appeared to be pertinent to the problems involved in this survey. In addition, executives and station personnel associated with the television stations in another city were interviewed to broaden the basis of the opinions upon which the statements in the questionnaire were constructed.

The fundamental concepts constantly kept in mind in designing this questionnaire were clearness, simplicity and conciseness. The basic problem was, of course, to keep the questions sufficiently limited in number so that those asked to complete the questionnaire would consider it of reasonable length and hence be more apt to respond to all the statements included.

A practical consideration was to make the method of response as easy as possible. A block providing space for the intended responses to the questions was clearly indicated and set off from the questions. This method can easily be seen from examination of the questionnaire in Appendix III.

The design for Question 2 presented an especial problem in securing the desired response. For this question, therefore, spaces for alternatives had to be provided. A block labeled "perhaps" was set apart to provide the space for a qualifying response. This was necessary because the question attempted in a degree to measure the conviction of the respondent to the value of television as a supplementary device in several areas of instruction.

While the ease with which the items on a questionnaire can be answered tends to elicit more responses, this factor is of great importance when the responses are tabulated. Efforts to make the method of response simple and direct paid ample dividends not only in percentages of completed returns, but in time in tabulation of results.

The introductory statement on the first page of the questionnaire was especially worded to arouse the interest and cooperation of those asked to complete it. It was believed a clear-cut statement of the purpose was most essential in stimulating the desire of the cooperating educators. It was assumed in formulating the statement that educators would be sufficiently professional-minded and alert to the possibilities of television as an educational tool.

In some questionnaire surveys the respondent is permitted to remain anonymous on the assumption that a more truthful response can thus be obtained. In this study, however, all respondents were asked to state their name, position, subjects taught, the school level and their years of teaching or administrative experience. While the name of the respondent was not in itself important, it was required should it have been necessary to interview at least a sampling of respondents at a later date. The type of position, subject area, school level and years of teaching were highly essential in the analysis and classification of the data upon which the final conclusions are based.

Throughout the questionnaire, the concept of relevancy has been kept dominant; that is, the potential value of television to education in relation to educational procedures and objectives was the criterion by

which the items were accepted or rejected. Perhaps the only items where this criterion was violated may be in statements pertaining to athletics. The inclusion of statements referring to athletics is regarded relevant in this instrument, inasmuch as the question of sponsorship of telecasts of athletic contests by advertising is a vital issue. Whether advertising of any kind may be used to pay costs of telecasting athletic events or similar phases of the school program is an issue in need of clarification. Therefore, any opinion; which would shed light upon this question is of interest to both the educator and the teledaster and must be considered relevant to the use of television as an educational tool.

The questionnaire when finally completed contained seventeen questions. In order to get distinct and exact answers to some questions, several of them were divided into more than one part. These parts have been indicated a, b, c, and d. Questions 9 and 12 are of this type and deal with the method of financing the cost of educational television programs. Certain questions seemed to be of such nature that further opinion beyond the limited response ordinarily permitted might be necessary on the part of the respondent. In such questions additional space was provided under the question, to permit further comments and opinions. Question 15 referring to adjustment of the school schedule and Question 16, referring to methods for using television programs, illustrate this procedure. Question 17, "Any other suggestions or comments", was included as overall opportunity for comments concerning the questions included in the questionnaire, and to permit additional expression of opinions which the respondent might have felt could be expressed in

connection with the previous statements and questions.

When finally completed, the questionnaire was given a pre-test or "dry-run" by 137 teachers and administrators in schools and positions similar in type to those in which the survey was later made. Sixty-three college students were included also in this pre-test. A total, therefore, of two hundred teachers, administrators and students cooperated in testing the original instruments before the survey was actually begun. The students were enrolled in Teachers College, University of Cincinnati, while the teachers and administrators were staff members of the following schools:

Holmes High School, Covington, Kentucky
 John G. Carlisle School, Covington, Kentucky
 Newport Catholic (Boys), Newport, Kentucky
 Notre Dame (Girls), Covington, Kentucky
 St. Xavier (Boys), Cincinnati, Ohio

From the pilot study, a total of 154 usable questionnaires, or seventy-seven per cent, were obtained. Of the original two hundred, forty-six incomplete questionnaires were discarded. Of these, evidence of careless response eliminated twenty-three per cent.

Complete data relating to percentage of usable and non-usable returns of questionnaires and scales in the pilot study are shown in Table 3.

TABLE 3

PERCENTAGE OF USABLE AND NON-USABLE RETURNS OF
 QUESTIONNAIRES AND SCALES IN PILOT STUDY

	Number Questionnaires Sent	Number Returned Usable	Number Returned Not Usable	Percent Usable %	Percent Not Usable %
Schools	137	95	42	69	31
Teachers' College Students	63	59	4	94	6
Total	200	154	46	77	23

Analysis of the completed questionnaires, as well as of the percentage of returns, indicated that more specific directions and detailed instructions would be necessary if the questionnaires were to be successfully used in the survey. It was also evident that more emphasis should be given to the necessity of the respondents making an adequate and complete response to each item of the questionnaire.

The pre-test was especially valuable as a check on vocabulary and conceptual difficulties. Analysis of the questionnaire revealed, however, but few minor difficulties, and these were easily remedied. After the necessary corrections were made and it was considered that no additional difficulties were likely to develop, the questionnaire was mimeographed in final form and made ready for administration to the selected sample of teachers, administrators and supervisors. The questionnaires were then delivered, in person, by the investigator to the principals of the fourteen schools included in this study. A letter containing general instructions was included with the questionnaires. As indicated in the letter of introduction and instructions to principals concerning application of survey tools, (Appendix IV A), previous conversations with the principals had determined the method by which the questionnaires were to be administered and completed by faculty members. It was necessary, therefore, for the investigator to make only minor suggestions for administering these questionnaires. The letter sent to the principals (Appendix IV A) stressed accuracy and completeness in filling in the questionnaires. A typical plan of administering the questionnaires to a large school faculty is shown in Appendix IV B.

This plan produced a return of eighty-five questionnaires out of the ninety submitted to the faculty, which represents a return of ninety-four per cent. Similar methods of presenting questionnaires in other schools were almost equally effective, as is indicated by a total of eighty per cent return for all schools included in the survey. The complete tabulation of returns for these schools is shown in Appendix I.

As stated in Chapter I, the basic problem of this study is an investigation of the attitudes which teachers, administrators and supervisors have toward the use of television as an educational tool. A major portion of this study was concerned, therefore, with the construction of a scale for measuring these attitudes, the administration of this scale, and the analysis of the results.

The primary purpose of the Attitudes Scale was to obtain an individual attitudes score for each of the 533 teachers, administrators, and supervisors included in the survey. Another important value was to show a "before" and "after" attitudes score for selected teachers who viewed a trial series of television programs planned as an integral part of this investigation.

Scale construction procedures and techniques followed the technique described by Likert. His procedure is generally considered satisfactory for producing an attitudes scale which measures reliably the attitudes of an adequate sampling of individuals in a given grouping. His plan holds a slight superiority over certain other methods designed for developing attitudes scales, because of the ease and simplicity of the procedure for selecting items or statements used in the final scale.

The procedure for selecting the items by applying the criterion of internal consistency has been shown by Likert ¹ to produce reliable results. The procedure has also been endorsed by Allport. ²

Concerning the reliability and validity of items collected for the scale by use of the Likert procedure, as compared to another procedure used for the selection of items by use of the method of item analysis, the following statement may be considered authoritative: ³

As to reliability, there is no sharp difference in the methods, with the Likert method perhaps holding a slight edge. Concerning the more important question of relative validity, there is little definite evidence. Both methods have been widely used in experimental investigations of all sorts, and both methods have demonstrated their usefulness.

The Likert method of applying the criterion of internal consistency in selecting scale items eliminates laborious calculation of the coefficients of correlation necessary in using the method of item analysis. Since the criterion of internal consistency has the virtue of simplicity and yet yields essentially the same results for a final scale, its use is considered valid and reliable for the purpose of this investigation.

The essential steps which the investigator followed in the construction of the Likert type scale were:

¹ Renis Likert, "A Technique for the Measurement of Attitudes," Archives of Psychology, pp. 5-53. New York: Columbia University, 1932-1933.

² Gordon W. Allport, "Attitudes," A Handbook of Social Psychology, p. 831. Edited by Carl Murchison. Worcester: Clark University Press, 1936.

³ David Krech and Richard S. Crutchfield, "The Measurement of Beliefs and Attitudes," Theory and Problems of Social Psychology, p. 212. New York: McGraw Hill Book Company, Inc., 1948.

- (1) Collection of a large number of statements either referring directly to or considered as likely to relate to the object, subject, or idea in question;
- (2) Applying these statements to a group of subjects who indicate for each statement their reaction of strongly agree, agree, undecided, disagree, or strongly disagree;
- (3) Summation for each individual of responses to all the items by scoring the above five categories 5, 4, 3, 2, and 1 respectively;
- (4) Examination of the amount of relationship between the items and the total score;
- (5) Elimination of those items that fail to show relationship to a substantial degree with the total score, i.e., items which do not apparently measure the same thing as other items in the test.

Inasmuch as this instrument was designed in the field of education to sample ideas, opinions, attitudes and expressions of educators and those preparing to be educators, these were carefully surveyed by personal interview and requests for written statements. In addition, newspapers and periodicals were surveyed and analyzed. After various processes of refinement, these statements, opinions, and attitudes were used as basic material for constructing the 156 items contained in the original objective list of statements.

Criteria suggested by Wang ⁴ were used in developing this basic list of statements. (1) The statement should be edited with regard to sentence structure and choice of words. (2) The statement must be debatable. (3) All statements should belong to the same attitude variable. (4) The statement must be susceptible of only one interpretation. (5) Statements containing two ideas should be avoided except to show ambiguity or neutrality. (6) The statement should be short, concise, complete in denoting one attitude; clear cut and free from double infinitives and high sounding words. (7) The statement should contain only one complete thought, be free from double negatives and redundant phrases. After application of the criteria mentioned, the list of 156 items was evaluated by graduate students, teachers, and school administrators. Certain staff members in Teachers College, University of Cincinnati, carefully edited each item. Two professors assisted in re-wording and simplifying the language of the statements. Statements which might tend to be ambiguous or suggest a response were rephrased. Three statements were eliminated and the final preliminary scale was reduced to the 153 objective statements shown in Appendix V.

This list of statements, numbered from 1 to 153 inclusive, was then administered to a sample population consisting of students in Teachers College, University of Cincinnati, and teachers in service. The sample population was identical with those used in the pilot study

⁴ C. D. Wang, "Suggested Criteria for Writing Attitude Statements," Journal of Social Psychology, Vol. 3, pp. 367-73. Edited by John Dewey and Carl Murchison. Worcester: Clark University Press, 1932.

for validation of the items in the questionnaire.

For purposes of tabulation and scoring a numerical value was assigned to each of the possible alternatives for the statements. See Appendix VA for numerical values assigned to statement alternatives. The values assigned are from one to five with the value of three assigned to the undecided position on each statement. A value of "five" is assigned to the favorable extreme of the attitude continuum and the value of "one" to the least favorable extreme. When the statement is written in the negative form strong agreement necessarily indicates a negative or unfavorable attitude to the idea contained in the statement. In such cases, the statement was scored in inverse order. Thus a high score indicated a favorable attitude.

The attitude of 154 individuals in the sample was then evaluated by computing total scores for each individual. Total scores for the 153 items ranged from 632 downward to 345. Scores were arranged in rank from high to low. The ten high scores and the ten lowest were then used as basis for application of the criterion of internal consistency.

Table 4 illustrates how criterion of internal consistency can be applied to the ten high and the ten low statements of the original Education-Television Attitude Scale statements. The explanation which follows is for the purpose of clarifying the procedure in the mind of the reader.

TABLE 4
INTERNAL CONSISTENCY OF
TEN HIGH AND TEN LOW STATEMENTS

Sum Scores of High and Low Response Ratings	Identification Numbers of Statements									
	1	2	3	4	5	6	7	8	9	10
(1) Sum scores of 10 High Response Ratings	25	34	38	48	26	28	23	21	22	39
(2) Sum scores of 10 Low Response Ratings	14	15	22	28	16	14	13	22	22	25
(3) Spread of Ratings	11	19	16	20	12	14	10	-1	0	14

Figures in Line 1 refer to the ten high statement numbers in reference to all 153 statements. Line 2 refers to total scores made by the high group for each of the statements numbered one through ten. Line 3 refers to total scores made by the low group for each statement. Line 4 indicates the difference between scores for the high and low groups and is labeled "Spread." With a possible high score of 50 (5, the assigned numerical value, times ten statements) and a possible low score of 10 (1, numerical value, times ten statements), the differences in scores for each of ten statements, between the high and low scores, are indicated in the "Spread" line. The amount of difference for the ten high and ten low statements in this group is as low as minus one (-1); the greatest difference in spread is 20.

As stated by Likert,⁵ if a statement is undifferentiating,

⁵ Renis Likert, "A Technique for the Measurement of Attitudes," Archives of Psychology, p. 51. New York: Columbia University, 1932-1933.

it will not differentiate or discriminate the two extreme groups, i.e., the high group will not score appreciably higher than the low group upon that statement. As shown in Table 4, a statement showing the least spread, such as statement number 8, is considered undifferentiating, since there is a negative spread of minus one (-1). The same may be said of statement number 9; the spread of zero between the high and low score makes this statement one which fails to discriminate along the attitude continuum.

Statements showing the greatest spread between the favorable group and the unfavorable group are statements number 2 and number 4. These are, therefore, considered differentiating statements and hence usable in the scale. Therefore, on the basis of the results obtained from applying the criteria of internal consistency and with due regard for all factors concerned, twenty of the most differentiating statements were selected for the final form of the Education-Television Attitudes Scale. The statements included in the scale are shown in Part II of Appendix III.

As stated by Likert, ⁶ "the degree of inclusion required or desired will generally depend upon the function or the purpose for which the attitudes scales are being used. If a general survey type of study is being undertaken the degree of inclusion required will be less than when a more specialized aspect of attitudes is being studied." Inasmuch

⁶ Renis Likert, "A Technique for the Measurement of Attitudes," Archives of Psychology, p. 51. New York: Columbia University, 1932-1933.

as this scale was to be applied to teachers in service, it was considered practical to keep the number of items in the scale as few as possible. It is reasoned that a larger number of the items would possibly be treated lightly when used for teachers in service, and scores obtained would be less accurate and reliable. Therefore, twenty items, as shown in Table 5, were included for the survey scale.

The best statement selected had a spread of twenty-four score units, and no statement with a spread of less than nineteen score units was included in the final scale of twenty statements selected.

TABLE 5
SPREAD OF SCORES
FOR TWENTY SCALE STATEMENTS SELECTED

Sum Scores of High and Low Score Ratings	Identification Numbers of Selected Statements																			
	2	4	12	19	26	29	33	40	45	64	74	78	79	80	92	107	116	126	135	152
Sun Score of 10 High Score Ratings	34	48	46	37	43	34	38	35	43	44	47	44	47	42	44	42	47	36	44	40
Sun Score of 10 Low Score Ratings	15	28	26	17	23	15	19	16	20	24	27	24	23	20	23	23	25	16	23	18
Spread	19	20	20	20	20	19	19	19	23	20	20	20	24	22	21	19	22	20	21	22

Likert, ⁷ in his Negro Scale, compared the methods of internal consistency and item analysis. He found that the most effective statement according to the criterion of internal consistency ranked second best according to item analysis. Furthermore, he found that the statement

⁷ Renis Likert, "A Technique for the Measurement of Attitudes," Archives of Psychology, p. 51. New York: Columbia University, 1932-1933.

ranking fifteenth best (poorest statement used) according to the criterion of internal consistency likewise ranked fifteenth according to item analysis. Thus, it may be said that both methods for selecting items are practicable.

The reliability of the television-attitude scale used in this study has, therefore, been based on the "criterion of internal consistency." This criterion, according to Likert, ⁸ when applied gives reliability comparable to item analysis.

An item analysis, however, was made of two statements used in the Education-Television Attitudes Scale. This was done for the statement selected as first best and the statement selected as twentieth best according to the split-group method. The best statement was found to have a reliability coefficient of .68 with total scores to all 153 statements, and the twentieth statement used was found to have a reliability coefficient of .45. These coefficients are considered to be quite high when we remember that this correlation was made between individual statement scores and total scores on each of the 153 pilot statements, rather than between individual statements and the average of only the fifteen statements as used in the Likert scale referred to above. Since the poorest of the twenty statements used in this scale had a correlation coefficient of .45, it may be reasoned that each of the twenty statements used is an effective statement in measuring attitudes.

⁸ Renis Likert, "A Technique for the Measurement of Attitudes," Archives of Psychology, p. 51. New York: Columbia University, 1932-1933.

It is entirely possible that the twenty statements included would each correlate with the total scores considerably higher than the .12 coefficient attained in the poorest of Likert's statements.

The twenty statements chosen were, therefore, those which were most effective in differentiating between individuals with favorable and unfavorable attitudes toward television as an educational tool. If, through this selection of the more differentiating statements, statements concerning a particular aspect of the attitudes measured are eliminated, then, obviously, the final scale can only be said to measure the continuum measured by the remaining statements. Therefore, the statements finally selected and used in this scale are a continuum. These statements when used with one group can reliably provide a single score and an accurate measurement of different individuals with respect to their attitudes. This scale will distinguish between individuals satisfactorily as to difference in scores in reference to the twenty statements used.

Application of the Education-Television Attitudes Scale was made to 533 educators as a part of this investigation. Using the same scoring plan, 5, 4, 3, 2, 1, with 5 the "strongly agree," etc. (See Appendix VI for scoring key of Education-Television Attitudes Scale), the highest possible score was 100; the lowest 20; and the mid-point 60. Scores tabulated for the 533 respondents averaged 60. The administrator-supervisory group scored highest with a 64 average, while foreign language teachers scored the lowest average, 54. Scores for all respondents, administrators, supervisors, all teachers by experience groups, and teachers by subject groups are shown in Appendix VII.

Allport⁹ emphasizes that Likert has shown that the simple a priori method of scoring in arbitrary units (1 to 5) when applied to scales of this type may yield results as reliable as do the psychological scores themselves. The scores as shown for the groups are, therefore, considered reliable as reported.

The other purpose for which the scale was used in this study is to indicate a "before" and "after" score for teachers who view educational-television programs. The use of the scale for this purpose was predicated on the decision of WLW-TV management to present trial education-television programs and to place receiving sets in fourteen schools for viewing purposes, if preliminary data revealed sufficient educator intent and initiative.

For this survey the scale was submitted to the sample (533) before educational-television programs were telecast to the schools. Four months later the scale was submitted to seventy teachers in these schools, five from each school. Scores made by these individuals would indicate what attitudes changes, if any, are noted in these teachers, as measured by the television attitudes scale. To show significance of this change, the "before" and "after" attitudes change, as revealed by mean scores for this sample, is tested by applying the Guilford¹⁰ formula,

$$O_{dm} = \sqrt{\sigma^2_{M_1} + \sigma^2_{M_2} - 2r\sigma_{M_1}\sigma_{M_2}}$$

⁹ Gordon W. Allport, "Attitudes," Handbook of Social Psychology, p. 831. Worcester, Massachusetts: Clark University Press, 1935.

¹⁰ J. P. Guilford, Fundamentals of Statistics in Psychology and Education, p. 137. New York: McGraw-Hill Book Co., Inc., 1942.

SUMMARY

The seventeen questions of the questionnaire submitted to teachers, administrators, and supervisors were carefully constructed and tried out before being used in this survey. Careful editing of the questionnaire after the "pilot run" later indicated that this procedure was valuable, as reflected in the completeness of responses made and the percentage of questionnaires returned. Also, careful attention given to wording the questionnaire made it an easy instrument for respondents to answer.

By the Likert procedure of scale construction it was possible to provide an Education-Television Attitudes Scale as a practical attitudes measuring instrument. The scale statements selected by applying the Likert method gave further objectivity to the method of obtaining the reaction of educators to the use of television in the classroom. A further use of the instrument provided a means to reveal attitudes changes of educators after they had seen educational television programs planned and telecast.

CHAPTER IV

EDUCATION-TELEVISION PROGRAMMING:

PLANNING A PILOT EDUCATION-TELEVISION PROGRAM SERIES

As an integral part of this study four trial education-television programs were designed and telecast to fourteen selected high schools as a pilot-program series. The problem was to present a series of trial programs and to provide for reception and evaluation of the programs in the selected high schools.

Development and presentation of the programs provided a joint exploratory opportunity for the educator and television management to examine objectively the feasibility of television and to obtain information relating to its use as an educational tool. A pilot-program series made it possible for educators and television management, in this television area, to discover some of their immediate and individual problems in reference to planning and presenting education-television programs.

A "trial run" of four supplementary instructional type television programs required special schedule arrangements at WLWT. Making reception equipment available to the schools was a responsibility assumed by the Crosley Broadcasting Corporation. By providing receiving sets for all the schools included in this survey, the Crosley Broadcasting Corporation furnished opportunity for study and evaluation of reception and educational characteristics of television programs designed for use in the classroom.

Presentation of a trial program series also provided a situation for evaluation of the programs by the seventy selected teachers and administrators included in the "before" and "after" application of the

Education-Television Attitudes Scale.

Program evaluations obtained from these persons after they had seen the trial programs made it possible to secure more definite opinions and attitudes regarding the use of television in the classroom. Furthermore, by comparing "before" and "after" scores attained by these teachers, the change in attitudes, if any, could be noted for the group.

SELECTION OF EDUCATION-TELEVISION PROGRAM PLANNING GROUP

The practical prerequisites and conditions for producing and using education-television programs seemed to make necessary the selection of a committee composed of educators and station personnel. A joint program planning project provided opportunity for the telecaster and the educator to exchange views and develop "know-how" in regard to some possible uses of television in the high schools.

Television management offered full use of television personnel and facilities for carrying out recommendations if the group agreed to work on the problem of a trial program presentation. School superintendents in the WLW television area were receptive to the proposal of program planning and considered it an opportunity to explore television possibilities. Comments and offers of cooperation on the part of superintendents gave needed assurance of educator support and assistance. It was reasonably certain also that teachers and principals were willing to help plan programs. With the assurance of television facilities and educator interest and support for the program planning, steps were taken to organize an Education-Television Planning Group for studying possible approaches

to the presentation of programs for school use.

In the organization of a committee for program planning it was recognized that the persons selected to serve must necessarily meet after school hours. Realizing that school systems seldom provide time within school hours for teachers to serve on accepted curricular committees, the time agreed upon as most appropriate for meetings was set at three-thirty P.M., that is, after the close of the normal school day. It was also recognized that these persons selected would have other after school hours commitments, professional and otherwise.

During the previous discussions with principals it had been determined to provide representation for as many subject areas and teaching positions as possible in the selecting of teachers for the advisory planning group. With the foregoing considerations in mind with regard to obtaining committee members for a planning group, the principal of each school surveyed was asked to name one representative from his school to serve as a member of The Education-Television Program Planning Group.

Representatives from each school were named except in the case of one parochial high school. In addition, the Superintendent of Schools of the Archdiocese of Cincinnati agreed to serve as a member. A representative of the Division of Instruction, Cincinnati Board of Education, was also appointed to membership. Besides these, Miss Katherine Fox, Director of Special Broadcasting Service, WLW, and the investigator were members of the planning committee. As finally constituted, the membership of the committee totaled seventeen persons

and included eleven teachers, two principals, one superintendent, one curriculum specialist, one television program specialist and the investigator, a high school principal on leave. Members, their educational positions, and the school represented are shown in Table 6.

TABLE 6
PERSONS AND POSITIONS OF
EDUCATION-TELEVISION PLANNING GROUP
SELECTED BY PRINCIPALS

MEMBER	POSITION	SCHOOL OR SYSTEM
George Winter	Shop	Central Vocational
Helen Seel	Curriculum Division	Cincinnati Public
Msgr. Carl J. Ryan	Superintendent	Private Parochial
Mary E. Pollard	Speech	East Vocational
Fred Auburn	Printing	Graphic Arts
Aria Schawe	English	Hughes
George Redforn	Principal	Mariemont
Esther Schwack	Social Studies	Mother of Mercy
Howard Baebe	Biology	Norwood
Bro. Bernard Jansen	English	Purcell
Mary Agnes Stagge	Science (General)	Regina
Rev. A. Fox	Principal	Roger Bacon
Dorothy Levenson	Social Studies	Walnut Hills
Christine Steinmetz	Guidance	Western Hills
Harold Hager	Social Studies	Withrow

As indicated, eleven teachers and two principals were named for the committee. Subject areas represented in the planning group were fairly inclusive, as shown by the representation of such curricular areas as English, industrial arts, guidance, science and social science.

After the list of the fifteen teachers and administrators, excluding the television representative and the investigator, had been determined, a letter was sent to the persons concerned. These persons had already expressed their interest and willingness to assist in program planning. The following letter introduced to the persons the purposes of the trial-program series:

As indicated earlier in my Education-Television Study, television programs designed for school use in the Cincinnati area may and could be provided if sufficient interest in developing such programs were revealed. I am able to report to you that a preliminary analysis of the data in the survey reveals a very favorable interest and willingness on the part of most teachers, administrators, and supervisors to assist with the development of such programs.

The Crosley Broadcasting Corporation will provide facilities and personnel to work with a committee of educators to make educational telecasts available to schools. Plans have been made to place sets in certain schools in the area for actual try-out and evaluation of the programs.

You have been named as one whose interest and ability will be most helpful to give thought and direction to plans for presenting the programs. I shall appreciate your acceptance of this important educational undertaking and invite you to the first planning session at Crosley Square, Ninth and Elm Streets, 3:30 P.M., March 15.

In response to this individual letter fifteen persons were present for the first meeting of the planning group.

EDUCATION-TELEVISION PROGRAM PLANNING PROCEDURES

For the first meeting of the Education-Television Planning Group, the agenda was as follows:

A statement from Mr. J. D. Shouse, President of the Crosley Broadcasting Corporation, explaining the purpose of the survey, was read.

A preliminary analysis of survey data was presented. It was revealed that teacher interest in the supplementary features for use of television was evident; that current topics, science, arts, and social science appeared to be appropriate areas for supplementary use of television in high schools. Certain other pertinent factors revealed by the survey were made known to the committee for background. The group was informed also of possibilities for placement of sets in schools for reception and study of programs if programs were presented.

An outline of the scope of the committee was given by the Director of Special Broadcasting Services to indicate that the committee would:

- Determine time length of programs
- Determine subject areas for programs and type of programs to be presented
- Determine time for delivery of programs
- Consider provisions for making pre-program materials available to schools
- Consider evaluation of the programs to be telecast
- Consider student selection if used in programs

The Director of Special Broadcasting Services also presented the following written material as a guide to the committee:

The following statements are not meant to be definitive since we recognize they do not represent all the guides for either choosing an area for an Education-Television series or as a set of criteria for establishing the best television tool for supplementing education. We list them for your consideration in the hope that they may aid you in formulating your own standards for measurement of what is good Television-Education.

A program which may have been done on radio is not the best TV program.

For greatest acceptability for a mass communications medium TV-Education for in-school consumption should be designed so as not to preclude at-home adult and pre-school viewing.

TV-Education should supply something not now available in the classroom.

For mass viewing camera close-ups are necessary for best results. Four persons are about a maximum for a picture close-up.

Following this preliminary introduction and background the committee was enthusiastic to help plan a trial-series of programs. During the sessions which followed the initial meeting certain considerations evolved and became basic to future program planning.

The group decided that:

A trial series of four telecasts would be presented as a pilot-program series. Teachers would be asked to evaluate the programs according to criteria developed by the committee.

Public relations type programs would not be considered as part of this series. While this type of program was recognized as feasible and desirable, it was decided that its possibilities should be explored in a later program series.

Most feasible subject areas for this trial series should be programs in art appreciation, science and guidance.

The guidance program in the trial series should stress the effect of school achievement and the use of good English in securing a position. Science programs should be general in scope, preferably of the demonstration type. News programs filmed or staged were considered not practical for television presentation in this series, although their possibilities were recognized and ought to be tried later.

On-the-spot programs should be tried during this study if possible.

The location or placement of the receiving set in the school for program reception should be a matter of decision for the school principal.

It was suggested that at least thirty pupils and five teachers in each school view each program. Teachers who had previously completed the Education-Television Attitudes Scale should see all programs, in order that they might evaluate the programs and fill in an "after" expression of attitudes on the Scale.

It was agreed at one of the early sessions of the planning committee that the curricular areas to be covered by the trial-series should be confined to those subject areas considered most suitable for television according to the results revealed by the Questionnaire. Problems concerning ways of presenting programs and the most suitable time for presentations were also considered early in the planning sessions. School schedules and television station time commitments would obviously determine in great measure the time for presentation of programs. The hour was finally determined after the best school time and previous television station commitments had been thoroughly investigated.

Several planning sessions were devoted to broad exploration of the factors involved in developing programs suitable for educational presentation. At an early meeting the larger planning group was divided into smaller groups according to the subject of the programs tentatively

considered appropriate. These groups, which were formed according to interest, seemed to clarify the thinking and to promote more definite conclusions about the issues inherent in the problem.

Relatively early the group agreed on two basic program ideas. It was recognized that some programs should illustrate either "demonstration techniques" or the master teacher idea of television presentation by using a science field. Some members of the committee felt that the other concept of program presentation should illustrate the "on-the-spot" feature of television, such as a field trip or excursion; in other words, bringing environment to the school. An "on-the-spot" telecast was suggested as possible in the social science field with mobile television equipment being sent to televise some interesting and worthwhile situation, as for example, a meeting of Cincinnati City Council.

Ideas for two programs in the area of guidance were also suggested; these to be based on educational and vocational guidance. Discussion, however, revealed that for a short program series, such as these programs were to be, the topics to be included would necessarily need to be carefully selected. Further consideration and discussion of the guidance programs eventually resulted, therefore, in the presentation of one guidance program of a vocational type.

Certain members of the committee believed rather strongly that one program at least should be concerned with cultural aspects of general education. They maintained that "a resource program" to demonstrate the combined use of well known persons and cultural resources

of the locality would be especially appropriate in view of the recognized cultural reputation of Cincinnati.

As program plans became more definite it was found that more time was needed in order to select the most practical time and day for presentation of the programs. This resulted naturally in a close examination of school and station schedules. With the general plans for type programs fairly well settled, some specific presentation factors became evident. The ways and means of presenting a given program and when the programs should be presented required joint coordination of the committee and television station management. Each had definite administrative problems and policy details which needed consideration. Problems of presentation, as to how and when, were therefore thoroughly discussed at each planning session.

As previously mentioned, the use of mobile television equipment and the reasons for its use, premised on bringing "on-the-spot features" to the classroom, seemed attractive to some members of the committee. Naturally others were interested in the relative merits of the use of students versus professional actors in presentation of programs.

Throughout the series of planning meetings the members found the Director of Special Broadcasting Services of WLW-TV extremely helpful. Whenever the committee was confused because of lack of technical knowledge, the group was given detailed explanations in the fundamental steps for program planning and production by the Director of that television station.

Typical of the thorough attempt to provide the committee with a workable knowledge of problems of television program production and

related aspects is the clear statement made relative to use of mobile equipment:

Use of mobile equipment is not practical for this program series because for now the cost is prohibitive; it is further believed to be inadvisable at this point to test a technique which may serve to prove a point not feasible for regular use in the coming year.

While this appeared a limitation as to use of television facilities, in respect to demonstration of "on-the-spot" features of television, the financial limitations were understood. Instead it was suggested that a program could be so presented that the trial-program series could portray the "on-the-spot" feature of television by showing how a television station operates. It was readily seen that presentation of this type of program could serve to illustrate the potential use of mobile equipment, since the "on-the-spot" aspects would be clearly apparent. Use of professional actors for this trial series when needed was offered by the Director of Special Broadcasting Services. Her offer was based on the desire to maintain the highest quality in the presentation.

One member of the committee suggested that a program based on the combined use of films and "live" presentations might be valuable. The Director, however, explained making films of certain scenes to be included in such a program introduced some technical and production limitations which could not be overcome at the time. Among these were union jurisdictional factors which would not yet permit the station to make film for its own use.

After due consideration of the many relevant factors involved, the planning group finally agreed on type of programs, dates, and time

for presentation of the pilot-program series. The programs selected were believed by the committee to illustrate the potential values of television programs for education. It was realized that these programs as planned possessed shortcomings and limitations but, within the limits of time and available resources, the committee was of the opinion that they exemplified the fundamental principles and procedures necessary for exploratory presentations.

These programs were designed specifically to show as far as possible, and as much as possible, some probable types of programs which could supplement high school curricular offerings. The first program was intended to demonstrate "on-the-spot" features of television. The second was an exemplification of demonstration techniques via television in the subject area of science. The basic subject area for the third program was art, but designed to cut across related subject areas. The last program in the area of guidance was meant to illustrate use of the specialist in television programming.

The programs scheduled as one-half hour telecasts and dates, time, and titles of the programs were:

April 11 - 10:30 A.M.	THIS IS TELEVISION (Behind the scenes in a television station)
April 18 - 10:30 A.M.	NATURE PHOTOGRAPHY IS FUN
April 24 - 10:30 A.M.	THE ETRUSCAN WARRIOR (The culture of the Etruscans and their contemporaries as interpreted by the Director of the Cincinnati Art Museum)
April 25 - 10:30 A.M.	THE JOB IS YOURS (Career guidance)

PRESENTATION OF PILOT EDUCATION-TELEVISION PROGRAMS

As indicated in the previous paragraphs the work of the planning committee was confined to defining program areas, suggesting types of programs and locating program resources. Major responsibility for presenting programs was assumed largely by the Director of Special Broadcast Services and essential television personnel of The Crosley Broadcasting Corporation. The technical, mechanical and production procedures were, of course, highly important, but these were not within the scope of the planning committee.

Arrangements for placement of television sets in the schools and provisions for program evaluations were the concern of the investigator. While the broadcasting company furnished the sets, details of administration were assumed to be within the province of the school principal. The location of the receiving sets in the school buildings was a matter of discretion for each principal, since he knew not only the building facilities thoroughly, but also the peculiarities and characteristics of his daily program and members of the staff.

In the preliminary discussions with the school administrators they were informed of the purpose of the pilot programs. Principals were now asked to select a suitable room in which sets were to be placed for viewing these programs and to name five teachers, who had previously responded to a questionnaire and the Education-Television Attitudes Scale, to evaluate the telecasts and complete an "after" form of the Scale.

A letter (Appendix VIII) sent to the principals with a form (Appendix VIIIA) requesting the location of the set within the building

and the names of the teachers brought a courteous and prompt response from them. The information regarding the selected tentative location of the sets was given to the television station management for their use. Six different trade name television sets were placed in the fourteen schools. These were furnished by selected television distributors in the Cincinnati area. Screen sizes of the sets ranged from twelve to sixteen inches. In most schools the sets were placed in classrooms for pupil and teacher viewing.

A letter was sent to the teachers selected which detailed the approach to the program evaluations as shown in Appendix IX. The evaluators were asked to:

Consider the programs in respect to the immediacy feature of television also, that the programs are intended to illustrate possible ways for development of another teaching tool.

The teachers were asked to evaluate each program separately, complete the Education-Television Attitudes Scale and send the four evaluations to the principal at the end of the trial program series.

Instructions for obtaining the best possible viewing conditions were prepared by the television station for distribution to the schools.

These suggestions were then sent to the principals:

Each TV viewer will be able to determine the exact distance at which he will be most comfortable in relation to the receiver. Some people will prefer to sit within a few feet of the screen while others will find it necessary to sit ten or twelve feet away.

It is therefore obvious that the room in which the TV receiver is to be placed could be more efficient for multiple viewing if the seats are not stationary.

Television should never be viewed in a darkened room. If natural light is available use it. If not, it is important that some artificial light be used.

The selection of teachers to view programs for the purpose of evaluation necessitated careful consideration of the school schedule by the principal. Since the programs were telecast at ten thirty in the morning it was obvious that only carefully selected faculty members could be available for viewing and evaluation at the time of the telecast. For the most part, therefore, teachers were selected on the basis of availability, interest and willingness to cooperate. When all details were completed by the principals of the fourteen schools there were approximately seventy teachers who were available and who had agreed to view and evaluate the programs.

In all schools varying numbers of pupils were permitted to view these programs. While the pupils were not asked for direct evaluations, it is believed that their reactions are reflected in the evaluations of the teachers, inasmuch as most teachers undoubtedly discussed the programs with them before and after the telecasts.

During the planning sessions the committee considered various means of evaluating the programs. Their deliberations resulted in the Education-Television Evaluation Form shown in Appendix X. This form developed out of consideration of criteria deemed valid for a limited evaluation of the trial programs. It was felt that the evaluation should be considered both with respect to reception qualities and educational potentialities. For these purposes each program was viewed and evaluated

separately. It was the opinion of the planning group that data derived from the use of this form would reveal errors and indicate strong points as regards these features in each program. The committee believed that information secured from the evaluations would serve to eliminate the similar errors in the case of future planning program groups and perhaps point out some other desirable procedures to be followed.

As previously indicated, the planning committee was aware of the difficulty of coordinating both school and station schedules. Length of class periods, lunch periods, and dismissal times for the various schools had to be considered in reference to time selected for the presentations. For the television station there were numerous special program details equally important to adjust. Considering, however, both school and station commitments, Tuesdays at ten-thirty A. M. were found most suitable and usable for presentation of these programs. WLW-TV, the telecasting station cooperating in the trial programs, began its regular daily program at eleven A. M. each day. Ten-thirty, therefore, was an especially convenient time, since no program commitment had been made by the station before eleven o'clock. The half hour beginning at ten-thirty was, thus, available for the trial programs. Fortunately, this time was also very convenient for the schools. A period earlier in the day would have interfered with the class schedule; a period later than eleven o'clock would have conflicted with lunch period in most high schools.

There was one exception to the predetermined schedule. Due to certain rating reports, peculiar to the television industry, it was necessary to change the scheduled time for the guidance program from Tuesday

at ten-thirty A. M. to Monday at the same hour. This change of time, however, was known by all concerned sufficiently in advance and did not, therefore, result in any inconvenience to the school personnel or serious schedule complications or production problems for the television station.

During the committee discussions of procedures and possible ways of program presentations, there was rather general concern about the persons to be selected to participate in the actual production of the programs. Members felt that, in at least one program, a person with actual high school teaching experience and background should be the main character. It was the rather general opinion that such a person would better understand the approach to be made to a group composed of high school students. Accordingly, a high school teacher was selected to present the science program.

Another interesting observation of the committee related to the use of film in programs. It was suggested that many films might possibly be presented for educational use by means of television. The possibility of a "film bureau" to serve a large area was emphasized by several members of the planning group who were representatives of smaller school systems. A fundamental premise of this committee reiterated from time to time aimed at keeping programs general rather than specific. The group in all deliberations considered the function of television as supplementing those educational resources already available to the schools.

Making descriptive materials concerning the programs available to the schools was considered essential by the committee. This belief

was the basis for the "instructions for viewing" formulated by the Director of Special Broadcast Services; instructions which were sent to the schools together with brief descriptions of the programs (Appendix IXA and Appendix IX).

DESCRIPTION OF PROGRAMS

Viewing the trial programs was a unique educational experience, since they were the first television programs designed specifically for educational purposes in the Cincinnati area. It is not likely that the persons who saw these programs will easily forget their content. For the reader who did not have this unusual opportunity a brief description of each program follows.

Program One - This is Television.-- This program was intended to illustrate the "on-the-spot" feature of television. It is best described as a "television tour" of Station WLW-TV, Cincinnati, Ohio. Two high school students were taken on a complete tour of Station WLW-TV, accompanied by an announcer and followed by cameras. Brief descriptions of each part of television operations were given by the announcer and the students were permitted to ask questions as they proceeded. A minimum of electronic workings was described. The over-all setup in television staging and operations was emphasized in this tour.

This program as presented allowed little preliminary rehearsal for the announcer or other participants. Some still pictures of the television tower and persons were used to tie in television operations.

Program Two - Nature Photography is Fun.--- It was the purpose of this program to illustrate television demonstration possibilities by explaining how to use a camera. A high school science teacher presented different type cameras and explained major differences between simple and more complex cameras. Also, simple rules of camera operation concerning clean lens, steady camera, release shutter, focus lens, and shutter speed selection were explained and demonstrated. Another part of this presentation had to do with rules of picture composition demonstrated by showing several pictures.

To tie in the use of the camera for a study of nature, several nature photographs were shown by means of slides and by the use of cards on an easel. Techniques for obtaining different nature shots were illustrated by:

- a. Use of remote control
- b. Stalking
- c. Use of various types of blinds
- d. Use of telephoto lens

The setup for this demonstration consisted of a table set against a plain flat on which the teacher placed his cameras and other equipment. A blackboard in the rear was used as part of the background. To one side the teacher had his blinds and on the other side the easel was placed for showing nature pictures. The setup perhaps approached a lecture situation with little dressing up of the background for the demonstration.

Program Three - The Etruscan Warrior.--- This program was designed to point out the use of local cultural resources as a supplementary

educational device for which television may be used. The program was based on a small figure of an Etruscan warrior 2500 years old and one of the prize possessions of the Cincinnati Art Museum. Dramatic introduction of the warrior figure was used as a springboard for discussion of the Etruscans, their way of life and their importance as a historical force. Other Etruscan art objects were displayed and analyzed by the Director of the Cincinnati Art Museum.

This program was introduced by the station narrator as cameras covered the Etruscan warrior with certain desirable camera maneuvers.

The narrator's introduction was:

Today WLW-TV and the Cincinnati Art Museum present the third in a special series of programs for schools. Today we go back through the centuries--back long before the American revolution

Several conferences between the person making this telecast and the Director of Special Broadcast Services were necessary to gather details for this presentation. It was obvious also that some rehearsal was necessary for this presentation and this time was provided with use of cameras in the studio. Cameramen were specifically directed to try for close-up shots to give detail to pictures. Also for this program cameramen and directors were given more detailed overview of the program. In addition this presentation was rehearsed for several hours.

Program Four - The Job is Yours.-- A personnel director of a large company was used in this program. The program was intended to indicate use of personal community resources such as the specialist in a particular field. This was a type program which served to illustrate possibilities for other subject areas.

A boy applicant for a job was interviewed by the personnel director. The interview situation was made real by questions from the director and answers by the boy (Joe). A "voice" used as background for helping the boy establish himself with the interviewer prompted the boy to indicate his reasons and aptitudes for job consideration. School academic records and aptitude tests were explained as they were shown during the telecast. The personnel director attempted to show relationships between school records and success in industry.

Summary.-- Development and presentation of the pilot-program series as described in this chapter inaugurated a unique experiment in education - industry planning and action. Persons selected to help plan the programs gained insight and experience not often afforded the educator by commercial interest. As a result of the complete provision made to present the "Look Learning" program series, much was learned by both educator and industry through planning experiences, evaluations, and appraisal of television programming.

CHAPTER V

ANALYSIS AND INTERPRETATION

The previous chapters have described in detail the purposes of this investigation, the literature related to television as an educational tool, the construction and application of the survey tools and the procedures involved in planning, developing, presenting, and appraising the trial programs. It is the purpose of this chapter to analyze and interpret the mass of statements and opinions, both written and oral, and the expressed attitudes of educators as obtained from the Education-Television Attitudes Scale and from conversations with educators, television technicians and laymen. This analysis and interpretation will obviously be affected by the experiential background acquired during the course of the investigation.

For clarity and readability the chapter is organized into three major sections, each treating in detail the specific areas discussed in the preceding chapters, namely the questionnaire, the Education-Television Attitudes Scale and planning, developing, presenting, and appraising the trial programs. No one of these areas has been analyzed and interpreted in a similar manner; analysis and interpretation vary in accordance with the nature of the data derived from each tool and procedure.

Analysis and Interpretation of the Data Obtained from the Questionnaire

The questionnaire (Appendix III) was designed specifically to secure opinions regarding three general areas involving problems associated

with the use of television for education. These general areas are (1) acceptance of television as an educational tool, (2) use of television by schools, and (3) factors regarding television programming.

The basic data analyzed and interpreted in this section may be found in Appendix XI (XI A - XI R inclusive). The data in this appendix show in complete detail the response to the questions and statements by separate classifications; namely, administrators, teachers of specific subject areas, all respondents, and teachers classified according to years of teaching experience. No attempt has been made to classify teachers and administrators according to years of training, since it was assumed that in the metropolitan area of Cincinnati all secondary teachers and administrators had met at least the basic requirement of four years of college work.

In all tables in Appendix XI, the responses have been expressed in terms of per cent. These percentage figures have been carefully checked to insure accuracy and represent per cent of "Yes," "No" and "Perhaps" or "No Answer" or "No Opinion." In order to provide definite understanding of the percentages a table of significance at the ninety-five per cent level was constructed and is presented in Table 6.

This table shows the range of error (plus or minus) within which the answers obtained can be expected to fall, nineteen times out of twenty (95% level). For example, if eighty per cent of the 533 respondents answered "Yes" to a given question, the odds are nineteen to one that the answer would not change by more than 3.4 percentage points if one were to question every individual in similar samples in the parameter. Or, for

example, if fifty per cent of the administrative group answered "Yes," the odds are that the answer of fifty per cent is within 13.9 percentage points of the true answer.

TABLE 6

NINETY-FIVE PER CENT SIGNIFICANCE LEVEL FOR PERCENTAGES OF RESPONSES OF DIFFERENT SIZES AND SAMPLE CLASSIFICATIONS

Sample	When Answer Is			
	95% or 5%	80% or 20%	60% or 40%	50%
533 (All Respondents)	1.9	3.4	4.2	4.2
482 (All Teachers)	1.9	3.6	4.4	4.5
51 (Administrative)	6.0	11.1	13.6	13.9

This table may thus be used to show the range of expected error in responses for the 533 respondents, the 482 teachers and the fifty-one administrator-supervisors; that is, the three major groupings of the main sample. By interpolation the table may also be used to show error for percentages falling between the round figures of 50%, 60%, 80% and 95% respectively.

Acceptance of television as an education tool for classroom use.--

The percentage of educators favoring and not favoring use of special education-television programs was calculated for the question: "Do you feel that there is any place in the educational program for television programs designed for school use?" Percentage of persons favoring and

not favoring use of programs, as well as percentage not responding is shown in Appendix XI A. Observed percentages for all 533 respondents is ninety-two per cent favoring the use of television for educational purposes. For the administrative-supervisory group the percentage in favor, ninety-four per cent, is even higher. Superintendents were one hundred per cent in favor of use of television. These percentages are statistically significant at the ninety-five per cent level. As may be seen by referring to Table 6 the variance in per cent when the percentage is ninety-five would not be more than plus or minus 1.9. It is apparent, therefore, that the percentage of respondents shown favoring use of television programs is conclusive, since the obtained percentage, ninety-two per cent favorable replies, would vary little if the question were asked of a similar sample.

Reactions concerning subject areas considered to be suitable for supplementary education-television programs are shown in Appendix XI B. Percentages computed indicate that current events topics of national significance (74%) are the most acceptable for programming. Such topics are followed closely by those related to plays (72%) and current events of local interest (69%). In the areas of music (65%), science (65%) and social science (64%) there was little difference relative to their acceptability as suitable areas of program development. The same is true of art (57%), speech (57%), health and physical education (55%), and English (55%). The areas of human relationship (51%), guidance (48%) and the extra curricular program (45%) likewise may be classified as a group of approximately equal acceptability. There was little difference in reaction regarding the feasibility of business

subjects and foreign language as possible program areas. Mathematics (18%), however, was the lowest of all. One may wonder at the difference between home economics (60%) and industrial arts (49%). These two subjects are usually considered to be of almost equal value in a program of general education. One might draw a number of interesting inferences from the data in Appendix XI B, but perhaps the most interesting observation appears to be the consistently higher percentages expressed for the more traditional subjects in the curriculum. The only exceptions to this observation are foreign language and mathematics.

In the modern school, public relations as conceived in its broader aspects is receiving increasing attention from educators. For this reason the question "Should there be special television programs directed to the taxpayer to promote a better understanding of what is being done in our schools?" was included in the questionnaire. Percentage of opinions expressed regarding use of education-television programs directed to parents and taxpayers for the purpose of promoting better school-community relations is shown in Appendix XI C. The percentage favoring use for this purpose for teachers as a group and for all respondents was eighty-four per cent. Contrasted with the percentage is one of ninety per cent for the administrative-supervisory group. While this difference may not be statistically significant, it is certainly of interest. It may indicate the greater awareness on the part of administrators and supervisors regarding the utilization of all possible media for promoting better school and community relations.

Televising athletic events.--- The athletic program is to many citizens the most objective part of the school program; that is, it

consists of activities which can be readily seen and quickly evaluated by them. It might be said that here is a phase of the school program with which a large group of individuals tend to identify themselves because of prior experience and active participation. Most secondary school administrators know that a substantial portion of their administrative time must be devoted to the management of the athletic program, inasmuch as the public support of the school is dependent to a considerable extent upon its success or failure. For this reason three questions regarding the relationship which might exist between athletic events and television were included in the questionnaire. These questions dealt in particular with problems relating to the televising of athletic contests.

Data pertaining to the basic question, "Should high schools allow their athletic events (such as football games) to be televised?" are presented in Appendix XI D. In general two-thirds of all respondents thought that such contests should be televised, while about twenty per cent believed that they should not be made available to the public in this manner. Approximately ten per cent did not express an opinion on this question. It is significant that there was little deviation in opinion between the various groups. One would expect the teachers of physical education to be in favor of televising contests, but they appear not to be significantly more enthusiastic than the social science teachers. Rather startling is the point of view expressed by the ninety-eight teachers with less than five years of experience. In this group only seven per cent were in favor of televising athletic contests, while seventy-

one per cent were opposed. One may wonder at the reasons for this unexpected opposition and, no doubt, such reasons are as numerous as they are obscure. A guess may, however, be ventured. It may be that the educational philosophy of the younger teachers is somewhat different from that of the more experienced. These young teachers, exposed to a changing psychology of learning and a broader philosophy of the function of the secondary school, probably realize that participation in athletics and physical education activities is the right of all students and not for a favored few star performers trained for the purpose of publicizing the school by means of athletic performances. They may, therefore, be opposed to televising athletic contests, because they believe that such action would lead to still greater emphasis on this aspect of the secondary school program.

The cost of maintaining an athletic program is relatively high in most secondary schools. Costs must be met, in general, by gate receipts. Although the available evidence is inconclusive, some educators believe that televising athletic contests may result in a loss in revenue. For this reason the question, "If high school athletic events are televised, should the High School Athletic Association receive compensation for this privilege?" was asked. Reactions to this question are presented in Appendix XI E. Slightly more than fifty per cent answered "Yes" to this conditional question. Approximately thirty per cent answered "No," while about twenty per cent did not respond. Again the physical education teachers (seventy-four per cent) were most highly in favor. There was apparently rather general agreement among the groups except for the

relatively low percentage in favor by such minority groups as music, foreign language, and home economics teachers.

Question 12, "If your athletic events are televised, which of the following best expresses your opinion as to how the costs of these telecasts should be met:

- a. No advertising should be permitted
- b. Advertising permitted by organizations offering recognized services
- c. Advertising permitted by acceptable products - sports equipment
- d. Advertising that meets station requirements is acceptable."

This is also a conditional question based upon the supposition that athletic contests may be televised. Data relating to this question have been assembled in Appendix XI F. In this question the educators were, in effect, confronted with the issue: "Should advertising be used to support the televising of athletic contests, and, if so, by what kinds?" Twenty-five per cent of all respondents were definitely opposed to any kind of advertising as a means of supporting telecasts of athletic contests; sixty-three per cent favored some kind of advertising, while twelve per cent did not answer. Eleven per cent of the sixty-three per cent thought advertising might be accepted from concerns such as insurance companies and banks, which offered recognized services. Thirty-eight per cent, or more than half of those who favored some kind of advertising, believed that sponsorship by firms selling recognized products would be quite satisfactory. Recognized products were considered to be such items as food, communication equipment, automobiles, and sporting goods. Fourteen

per cent or about one-fourth of those in favor of advertising were of the opinion that the selection of the sponsor should be left to the discretion of the station. The physical education teachers were the most enthusiastic group in favor of advertising. Eighty-six per cent were in favor of some kind of sponsorship, with the majority favoring sponsorship by firms with acceptable products.

Possible Educational Uses of Television

Traditionally, the American secondary school has been dominated by the textbook. Only recently has there been a disposition to use such supplementary aids as the phonograph, wire recorder, radio, slides, film strips and films. Educators have been hesitant in adopting these aids, perhaps because of lack of knowledge regarding their potentialities and inexperience in their use. Rapidly growing knowledge of the techniques and methodology of these devices, however, may pave the way for a readier acceptance of television, which is basically a combination of both the audio and the visual. To ascertain in some degree the possible acceptance of television as an instructional aid, five specific questions were included in the questionnaire. All of these dealt with possible educational uses of television.

The percentage of respondents by categories who expressed opinions as to whether or not television will be more widely used than radio as an educational tool in the secondary school is shown in Appendix XI G. Sixty per cent of the respondents said "Yes." Opinions of the remaining forty per cent were divided, twenty-one per cent "No," eighteen per cent "No Opinion," with one per cent not replying to the question.

Throughout the various categories there was rather general unanimity of opinion regarding the potential educational value of television as compared with radio. The administrative group was perhaps the most conservative, since slightly less than half answered "Yes" to the question. Sixty-one per cent of the teachers believed that television would likely be more widely used, with the teachers of less than ten years experience being somewhat more enthusiastic than those with more experience. Among the specialists in subject areas teachers of art, business subjects, and physical education were more than seventy per cent in favor. Teachers of English were the least enthusiastic, for only forty-three per cent were in favor, while thirty-four per cent were opposed. It is difficult to interpret the differences between groups as set forth in Appendix XI G. Perhaps the administrative group with greater responsibility as regards cost, organization of the school and evaluation of instructional results would naturally tend to be more conservative. This point of view is substantiated to some extent by comparative conservatism of the teachers with more than ten years experience, 56.4 per cent. Insofar as the relatively small percentage of English teachers who express an opinion in favor of television, one may venture an opinion. It is generally known that English teachers, especially teachers of literature, tend toward emphasis upon the printed page as an instructional method. For this reason they may have not given sufficient thought to the possibilities inherent in other media.

Closely related to the question concerning potentialities of television as contrasted with radio was a similar question designed to

secure opinions comparing television with film projection (Appendix XI H). The twenty per cent who thought television would be more widely used than films projection is smaller than one would suppose. Sixty-one per cent answered "No" and seventeen per cent gave no opinion. Administrators as a group were more than seventy-three per cent not in favor as compared with sixty per cent of the teachers who saw few, if any, possibilities in television as compared with films. Teachers in special subject areas were on the whole rather consistently negative from one area to another. Most significant within this group are the music teachers who were eight per cent in favor and sixty-two negative. The reasons for these percentages are not difficult to interpret when one remembers that the phonograph and the radio, both auditory aids, are more suited to the music field than visual devices.

Question 15, "Assuming that there are suitable and appropriate educational-television programs offered, are you in favor of necessary changes in class schedules to take advantage of these programs?" was premised on the assumption that the school and the television station would cooperate in making available worthwhile educational programs at convenient times. Naturally such cooperation implies adjustment in both station and school schedules. Seventy-four per cent of all groups were uniformly in favor of adjustment of class schedules to take advantage of the programs, with fourteen per cent giving a negative response and twelve per cent venturing no opinion (Appendix XI I).

In early days of radio much was said by both educators and station executives about the potential educational values of radio. That the schools did not accept radio in meeting these expectations has been

a matter of concern to both groups, particularly radio executives. The reasons for the lack of exploitation of radio programs by the schools are varied, but one may certainly point out that much waste of time, money, and educational opportunity resulted because each proceeded without consulting the other. Independent action naturally resulted in misunderstanding and frustration, with radio and schools tending to "write off" the efforts of the other as being of little value. In exploiting the educational potentialities of television, a similar mistake must not be made. The term, "suitable and appropriate educational television programs," means that the closest cooperation between the television industry and the schools must be practiced. Coordination is certainly an absolute essential not only for scheduled programs, but more especially in the case of "on-the-spot" programs which in many cases will be of the greatest educational significance.

Question 6, "Assuming that there will be educational television programs designed for school use - would a television set in every school be desirable?" and Question 7, "Again assuming that there will be education-television programs designed for school use - do you think that the cost of television sets for the schools, and the installation and service charges, etc., should be covered by the instructional (visual-aid) budget?" are closely related; one is the natural corollary of the other. There is little difference in the responses to these questions (Appendix XI J and XI K). One may say that for all groups the percentage in favor is approximately eighty per cent. This percentage, no doubt, represents a realization on the part of all groups that the educational values of television will not be fully realized unless adequate equipment is made

available from the instructional budget. The educational potentialities of television should not be hampered by the limited equipment and short-sighted economy which characterized the introduction of the phonograph, the radio, and the film and slide projection as visual and auditory instructional aids.

Programming

Development and presentation of "suitable and appropriate" programs will undoubtedly confront both educators and station executives with numerous issues and problems. The school program is no longer a rigid and inflexible arrangement of subject matter to be learned. Schedules of learning activities are not planned in detail in advance, although the program is organized in terms of subject areas. More and more within the secondary school program wide flexibility in content and organization is permitted within the subject fields. Television programs, therefore, designed to deal with specific topics and presented on rigid and inflexible schedule for a given period of time are not likely to correlate closely with the class activities in the several schools.

To obtain some orientation regarding this and similar problems, a series of questions dealing with factors related to programming was included in the questionnaire. Tabulations pertaining to these questions are presented in Appendix XI L - XI R inclusive.

In the questionnaire respondents were asked whether or not they favored a daily detailed instruction type television program. Only twenty-one per cent (Appendix XI L) favored a daily instruction type program, while sixty-nine per cent were opposed to such programs. These

percentages were relatively consistent from group to group, although thirty-eight per cent of the home economics teachers and thirty-five per cent of the industrial arts teachers were more optimistic about the daily instructional program. It may be that learning activities within these subjects lend themselves more readily to the demonstration type program and hence these teachers saw greater possibilities for television in these fields. Furthermore, television stations have for some time presented home economics demonstration programs. Undoubtedly these programs have been viewed by teachers of home and practical arts. Likewise certain hobby type programs have shown how flexible the television camera can be in bringing out instructional detail. These factors, no doubt, account at least in part for the higher percentage in the case of these teachers.

With the exception of the home economics, industrial arts, and physical education teachers, subject area teachers were strongly negative in their attitude toward daily detailed programs. This was especially true of all the foreign language teachers and eighty-seven per cent of the art and mathematics teachers, although teachers of such subject areas as business, English, music and social science likewise saw few, if any, possibilities in the daily type program.

To further check teachers' preferences regarding detailed programs Question 16 b, "What do you think of a weekly detailed instruction type of television program?" was included. Forty-two per cent of the respondents favored this type program and fifty-seven per cent were opposed (Appendix XI M). The percentage in favor is interesting when one remembers that the percentage in favor is exactly double that indicated for the daily detailed program. Again it is the home economics teachers with thirty-eight

per cent and industrial art teachers with forty per cent who see more possibilities in the weekly detailed program. Teachers of other subjects, however, such as business, mathematics, music, physical education, and science tend to favor this type program to a greater degree than the daily detailed program. Art teachers, English teachers, and foreign language teachers apparently have not altered their opinion of detailed programs, since the percentage in favor of the weekly detailed program does not vary greatly from that expressed in relation to the daily type program.

The third question relative to programs was phrased to secure opinion concerning the weekly supplementary presentation. Reaction to the question was overwhelmingly in favor (Appendix XI N). Eighty-four per cent of all respondents believed that weekly supplementary instructional programs would be of value. Only eight per cent were of the negative opinion. Percentages were consistently in favor between all groups, although art and music teachers were more highly in favor of supplementary programs than other subject area teachers. Apparently subject area teachers see values in the weekly supplementary type program as a means of enriching their class work. Obviously there are numerous resources in the community which could be brought to the school by the presentation of well designed television programs, programs which utilize resources of all types, personalities, cultural, industrial, civic, historical and geographical. Such programs should undoubtedly be of the type which would cut across narrow subject matter areas and be developed around broad concepts, themes, and generalizations.

Aside from the instructional emphasis which this report has given to opinions regarding instructional type programs, Appendices XI L,

XI M, and XI N prove conclusively that the fewer the years of experience the more the teacher tends to see the potentialities of television. This is evident by contrasting the percentage of younger teachers in favor of instructional type program with that of teachers of more experience. It might be said that younger teachers have greater flexibility in methodology, but it is also obvious that the instruction in the use and methodology of audio-visual aids in the teacher training programs has affected the educational thinking of these teachers.

Question 8, as stated in the questionnaire, is "How much time should television stations allot to educational programs for school use?" Responses (Appendix XI O) to this question show wide variation; hence they are difficult to interpret. The most striking characteristic of the Appendix is that thirty-four per cent of the educators did not answer the question. One might say that these respondents did not understand the question, but more likely, they did not actually know how much time should be allotted to television programs. This result was not unexpected, since it is well known that, whenever a new technique is introduced into the field of education, it takes time and experience before definite opinions regarding its usefulness are formed. It is evident from this response that more emphasis must be given to instructing teachers, both in training and in service, regarding the instructional potentialities of television.

That teachers were confused and uncertain about the educational implications of this question is further evidenced by inconsistencies in the responses pertaining to the number of minutes per day to be devoted to television programs. Nearly forty per cent, thirty-nine to be exact,

avored sixty minutes or more per day, yet practical administrators and teachers know that such allotment of time is certainly not feasible unless the present high school subject programs are radically changed. In the daily program of the average secondary school, class periods range in length from forty to sixty minutes. The most practical length for the television program should, therefore, be not less than thirty nor more than forty-five minutes in length. A program with this time allotment would permit the teacher and class to view the program and discuss it in relation to the learning activities currently being experienced by the group. In spite of this obvious principle of administration and organization, only twenty-one per cent of the respondents gave sufficient thought to the implications of the question to indicate that they favored an allotment of thirty to forty-five minutes per day.

Use of Television by Schools

If television programs are to be made available for instructional purposes, cost of production and presentation will certainly be a problem for both educators and station operators. Radio has shown a way to finance programs through advertising sponsors. It is only natural because of this experience to look toward advertising sponsorship for appropriate educational television programs. To ascertain how educators felt regarding certain types of advertiser sponsorship, Questions 14 and 9 were included in the questionnaire.

Question 14 was designed to discover what types of advertisers would be proper in the estimation of the educators. From the results (Appendix XI P), it is apparent that advertising from firms and companies

offering recognized services and products would be considered fitting and appropriate. There is divided opinion regarding sponsorship by soft drink concerns, and strong opposition to advertising by tobacco manufacturers, brewers and distillers. While the percentages vary somewhat regarding types of sponsorship for educational programs and athletic events, the pattern is substantially the same. As regards types of sponsorship, the percentage of educators who did not answer the question is of some significance. It can be reasoned that no answer implies uncertainty. Approximately one-fourth of the teachers were, therefore, uncertain about sponsorship of educational programs by concerns manufacturing sports equipment, soft drinks, cigarettes, and beer. Pursuing a similar line of reasoning, it is clear that greater uncertainty exists regarding sponsorship of athletic events telecasts, since the percentage of "No Answer" is greater for all classifications except sports equipment.

In connection with Question 14, it should be pointed out that no attempt was made to include concerns representing all types of services and products. The general classifications listed, however, are considered to be sufficiently inclusive so that inferences regarding specific firms and businesses may be drawn.

Question 9 relates to specific ways by which the programs may be financed. From Appendix XI Q it is clearly apparent, by the fifty-eight per cent response, that the majority of educators favor some type of restricted sponsorship. While restricted sponsorship is not defined, it may be assumed that it means sponsorship by firms and businesses offering recognized services and products as discussed in the preceding

paragraphs. Only ten per cent thought that unlimited sponsorship would be desirable as a means of financing, while twenty-six per cent apparently believed that the station should assume the cost as a public service.

As tentatively planned this study included a series of trial programs. The nature of these programs has already been explained. The programs would not have been a reality, however, if teachers and administrators had not expressed a willingness to assist in the planning. To secure an estimate of the willingness to cooperate, a specific question, Question 5, was submitted as a part of the questionnaire. Responses (Appendix XI R) to this question were highly in favor of cooperative planning. Sixty per cent of all respondents indicated a willingness to assist. More than three-fourths of the administrative group welcomed the opportunity. Among the classroom teachers, those with fewer years of experience were more enthusiastic than those who had spent a longer period in the classroom.

As a result of the favorable response it was decided to proceed with the trial programs and the representative planning committee, the operations of which have been previously explained, was appointed.

Evaluation of the Trial Programs

The trial programs, the "Look-Learning" Series, have been described in detail in Chapter IV. Provision for viewing these programs varied according to the individual school situations. Schools permitted varying numbers of pupils to view them. Compilation of the estimates of school principals show three thousand or more in the fourteen schools viewed the four programs. The seventy teachers selected as evaluators of the programs as well as other interested teachers also viewed each telecast.

In most schools the viewing situation was a classroom or a modified classroom, such as a laboratory or visual-aids room. In one school it was necessary to make the lunchroom available. In another school a large shop was considered most usable and in this situation one hundred twenty pupils viewed the programs. Another school employed a small auditorium ordinarily used for music classes.

The telecasting of the four trial programs provided another means of securing the opinions of educators regarding the use of television as an instructional device. As a result of these telecasts program evaluations were secured from sixty-eight representative teachers in the schools surveyed. A special evaluation sheet (Appendix X) was designed for this purpose. Data derived from the evaluations for the four trial programs are set forth in detail in Appendices XII, XIII, XIV, and XV. Details revealed by comments of the educators in respect to the unique appeal and handicaps of each type program are listed according to frequencies of particular comments. Further analysis and details of teacher evaluations of program reception are presented in Tables 7, 8, and 9.

Comments listed in the appendices mentioned indicate typical comments for each of the four trial programs relative to unique appeal and handicaps noted by the evaluators. The 223 comments tabulated for the unique appeal and the 238 handicaps noted for these programs are shown in Table 7.

TABLE 7

ACCUMULATED FREQUENCIES OF COMMENTS CONCERNING UNIQUE APPEAL AND
HANDICAPS LISTED BY EVALUATORS OF "LOOK-LEARNING" PROGRAMS*

Number	Title of Program in Order of Presentation	Number of Comments Concerning Unique Appeal	Number of Comments Concerning Handicaps
1	A Tour of a Television Station	59	62
2	Nature Photography is Fun	28	79
3	The Etruscan Warrior	68	39
4	The Job is Yours	68	58
	Total Comments	223	238

* All evaluators did not comment concerning each program.

While the total number of comments concerning unique appeal and handicaps of the program series is approximately equal, there are some differences to be noted in respect to the number of comments for the separate programs. Programs 1, 3, and 4 each received more comments regarding unique appeal than Program 2. More handicaps were listed for Programs 1 and 2 than for the others in the series; the least number for Program 3. Program 1 received about an equal number of comments relative to unique appeal and handicaps; fifty-nine and sixty-two respectively. The same is true for Program 4 with a ratio of sixty-eight to fifty-eight.

Immediacy and novelty aspects were regarded as the dominant values of Program 1, "A Tour of a Television Station." Most of the handicaps noted were technical limitations. As shown by details listed in Appendix XII A, such factors as screen size, small detail, lack of rehearsal, and use of still pictures appeared as handicaps to this type of presentation.

Appraisals and comments made for "Nature Photography is Fun" indicated that this program had unique appeal for large numbers. It is noted, however, that fewer items of unique appeal are listed for this program as compared to the number of unique appeal items appearing for other programs. Some of the handicaps most frequently mentioned for this presentation were: covered too much, limited to certain interests, technical limitations, lack of production techniques, color and screen size. The comment that this type of presentation gave no opportunity for questions indicated predominance of the lecture method, a procedure which appeared inadequate to the topic. Additional comments concerning the unique appeal and handicaps of this presentation are shown in Appendix XII B.

"The Etruscan Warrior" Program received the largest number of evaluator comments concerning unique appeal. Most frequent evaluations, as shown in Appendix XII C, appear in the following order: expert in field, use of community resources, stimulates interest, and program correlated with many subjects. Other comments stress the desirable introduction given to this program. Technical limitations appear as the chief handicap for this program.

For the guidance program, "The Job is Yours," the most typical comments of the evaluators concerning the appeal of the presentation emphasized the use of an authority or the expert, appeal to large numbers, varied interest, and utilization of a community resource. Other features noted are immediacy and novelty aspects. Technical limitations appeared to detract from this program as did poor use of charts. Too much lecture, program too static, no chance for questions, and evident lack of rehearsal appeared as limitations to this presentation.

Although it was not possible to evaluate all the educational aspects of the "Look-Learning" Programs, certain general areas were considered of sufficient value to be included in the evaluation form. These areas concerned varying degrees of interest, group guidance, relation of the program to the curriculum, and whether or not pre-program materials would have been helpful. Reactions of the evaluators to these classifications are presented in Table 8.

Ninety-two per cent of the evaluators considered "A Tour of a Television Station" highest in general interest. "Nature Photography is Fun" ranked second in general interest. "The Etruscan Warrior" presentation was rated third and the guidance program, "The Job is Yours," fourth.

"The Etruscan Warrior" and "The Job is Yours" apparently maintained and sustained the most interest as evidenced by percentages reported. Falling off in interest was also less for these two programs. Little or no interest was indicated to a slight degree for one program, "Nature Photography is Fun."

TABLE 8

PERCENTAGE OF EVALUATIONS INDICATING CERTAIN EDUCATIONAL ASPECTS
CONCERNING "LOOK-LEARNING" PROGRAMS

Program	1	2	3	4
General Interest	92	76	71	65
High or Sustained Interest	50	58	83	71
Interest Fell Off	50	37	17	29
Little or No Interest	0	5	0	0
Group Guidance	8	21	16	82
Related to Curriculum	32	54	71	29
Pre-program Material Needed	Yes 92 No 8	Yes 79 No 21	Yes 89 No 11	Yes 69 No 31

"The Etruscan Warrior" Program cutting across many subject areas was rated highest of the four tried presentations in relationship to the curriculum. Less than one-third of the evaluations indicated that "A Tour of a Television Station" or "The Job is Yours" were related to the curriculum. More than fifty per cent saw some relationship in the program concerning "Nature Photography is Fun."

As regards the group guidance aspect, Program 4, "The Job is Yours" was rated high by eighty-two per cent of the respondents. This

result was, of course, to be expected, since the program was especially designed for guidance purposes. All other programs rated low with comparatively little difference between them.

Most significant is the reaction of the evaluators to the lack of pre-program material. In respect to all programs a large per cent believed that materials should have been made available. While lack of these materials should not be construed as negligence on the part of those responsible for the presentations, the evidence substantiates what has long been known; namely, that audio-visual programs must be preceded by adequate preparation and orientation. It is also known that such programs must be followed by sufficient discussion to relate the presentation to the educational experiences of the group.

Program Reception

Percentages of evaluations indicating certain reception qualities of "Look-Learning" Programs are shown in Table 9 according to ratings of good, fair and poor, or yes, majority and few, as the case may be.

Appraisal of the "Look-Learning" Program Series, as made by the selected teachers and administrators, indicated that reception qualities of the programs presented were good. There is an indication that each presentation increased in the qualities of picture, voice, and provisions made for viewing and hearing the programs.

An increase of almost twenty-five per cent in the "Good" rating shown for picture reception of Programs 3 and 4 may be noted, as contrasted with reception rating for Programs 1 and 2. "Good" voice rating was given for all programs by eighty per cent of the evaluators except for the

first program presented, "A Tour of a Television Station." Provisions for hearing and viewing the programs seemed adequate, since most of the evaluators checked affirmation to this part of the program evaluation form.

Only two per cent of the evaluators of the first program, two of the second, none of the third, and one of the fourth program implied that few could see and hear the program. This is indicated by "Few" in category 3 of Table 9.

TABLE 9
PERCENTAGE OF EVALUATIONS INDICATING CERTAIN
RECEPTION QUALITIES OF "LOOK-LEARNING" PROGRAMS

Program	Reception Qualities								
	Picture			Voice			All Saw And Heard		
	% Good	% Fair	% Poor	% Good	% Fair	% Poor	% Yes	% Majority	% Few
1	40	50	10	45	47	8	70	28	2
2	43	45	12	82	16	2	75	23	2
3	64	33	3	84	16	0	78	22	0
4	78	19	3	88	12	0	84	15	1

Cost of "Look Learning" Television Programs

The cost of producing the four television programs of the "Look-Learning" Series presented for this investigation is difficult to

determine. Time given to planning and presenting the programs by directors, station personnel, and participants cannot be counted in a cost analysis of the series or for any one of the separate programs, inasmuch as number of hours for which employees were paid and salary rates are not known. In addition, facilities provided by WLW-TV, and valuable properties and special specimens furnished by some of the participants, make it impossible to complete a cost estimate for these programs.

It is obvious, however, that the factors of cost in producing some type programs in this series were more than for others. Conceivably a program such as "The Etruscan Warrior" was more costly to present than some others in the series. More lighting for this program required more time for the light technician; more rehearsals for this program required more producer and cameraman time; and more art work on settings was necessary for a program of this type.

By estimate, the program in the series which cost less to produce was "Nature Photography is Fun." In presenting this program the resources of the expert and demonstration of his equipment did not add to the constant factors of television production cost, because fewer cameramen, technicians and less producer time were necessary. When paid actors were used to supplement parts of the program, as was done in the guidance program, the cost of production, of course, was more. Also, the program which required use of more than the customary one or two cameras for the telecast, such as was necessary for presenting "This is Television," added to production cost.

The cost of presenting these programs, therefore, varied according to the amount of engineering, production direction, and other related factors. At commercial selling rates, if an advertiser were to purchase the time given to the "Look-Learning" Series of four programs, the cost would be eight hundred eighty-four dollars or an average of two hundred twenty-one dollars for each one-half hour program.¹

Education-Television Attitudes Scores

Application of the Education-Television Attitudes Scale to 533 educators provides additional data for interpretation of educator opinion regarding the instructional potentialities of television. As previously explained in Chapter III, a high score on the scale indicated a favorable attitude and lower scores indicated less favorable attitudes.

The average attitudes scale score, as shown in Appendix VII, for all respondents is sixty or the mid-point between a possible high score of one hundred and the low possible score of twenty.

The average score for the administrator-supervisor group is sixty-four, somewhat higher than the sample average, inasmuch as superintendents averaged sixty-six and supervisors sixty-five on the scale. Principals included in this group made the average score of sixty.

An average attitudes score of sixty is revealed for the 482 teachers, the same as the average for all respondents. As measured by the scale, there is little difference shown in attitudes scores between teachers of greater or less experience. Likewise teachers with five or

¹ Letter to the writer from Lin Mason, program director WLW-TV, Cincinnati, Ohio, dated June 21, 1950.

less years experience do not manifest any appreciable difference in attitude when compared with the teachers of ten or more years teaching experience.

In the subject fields surveyed physical education teachers with an average score of sixty-five score highest according to the scale continuum. Scores for other subject classifications are followed closely by scores noted for teachers of music, art, teachers of two or more subjects, home economics, social science, industrial arts and business subject teachers, each at or above the average score of sixty.

Four subject teacher groups scored less than sixty or average on the items of the scale. As shown in the table of average scores, the teachers of English, mathematics, science, and foreign languages made scores of 59, 56, 55, and 54 respectively. Foreign language teachers scored lowest for all subject groups.

The foregoing paragraphs and analysis of Appendix VII show that attitudes of educators regarding the instructional use of television tend to be consistent from group to group and from subject area to subject area. The fact that the average score made by all groups is approximately the same as the theoretical average indicates, no doubt, that educators incline toward conservatism as regards the educational possibilities of television. This apparently substantiates previous indications that further education of teachers regarding the potential educational uses of television is necessary before this audio-visual aid will be widely accepted.

TABLE 10

EDUCATION-TELEVISION ATTITUDES SCORES SHOWING POSITIVE CHANGE,
NEGATIVE CHANGE, AND MEAN SCORE FOR THE GROUP OF SIXTY-EIGHT TEACHERS
"BEFORE" AND "AFTER" VIEWING "LOOK-LEARNING" PROGRAMS

Teacher	Scores			Teacher	Scores		
	Before	After	Change		Before	After	Change
1.	63	69	/ 6	35.	64	72	/ 8
2.	66	45	- 21	36.	60	64	/ 4
3.	59	58	- 1	37.	50	44	- 6
4.	60	68	/ 8	38.	66	48	- 18
5.	78	77	- 1	39.	61	48	- 13
6.	51	61	/ 10	40.	58	63	/ 5
7.	65	69	/ 4	41.	71	74	/ 3
8.	62	44	- 18	42.	66	56	- 10
9.	43	55	/ 12	43.	51	52	/ 1
10.	60	46	- 14	44.	59	49	- 10
11.	64	68	/ 4	45.	63	57	- 6
12.	63	60	- 3	46.	59	55	- 4
13.	49	54	/ 5	47.	61	65	/ 4
14.	54	47	- 7	48.	69	58	- 11
15.	65	67	/ 2	49.	46	57	/ 11
16.	66	63	- 3	50.	60	61	/ 1
17.	57	61	/ 4	51.	68	79	/ 11
18.	74	51	- 23	52.	63	67	/ 4
19.	54	45	- 9	53.	63	62	- 1
20.	46	60	/ 14	54.	50	49	- 1
21.	47	48	/ 1	55.	74	57	- 17
22.	56	66	/ 10	56.	68	76	/ 8
23.	54	64	/ 10	57.	61	61	0
24.	38	39	/ 1	58.	52	53	/ 1
25.	81	71	- 10	59.	68	73	/ 5
26.	83	54	- 29	60.	72	73	/ 1
27.	71	57	- 14	61.	55	50	- 5
28.	50	45	- 5	62.	65	60	- 5
29.	54	55	/ 1	63.	63	59	- 4
30.	53	73	/ 20	64.	61	50	- 11
31.	63	75	/ 12	65.	60	57	- 3
32.	72	75	/ 3	66.	62	60	- 2
33.	68	51	- 17	67.	54	56	/ 2
34.	36	47	/ 11	68.	48	43	- 5
				Σ	4096	3996	- 100
				Mean	60.2	58.8	-1.4

"Before" and "After" Program Viewing
Education-Television Attitudes Scores

Additional objective data concerning educator attitudes were obtained from the sixty-eight teachers from whom "before" and "after" scores on the Education-Television Attitudes Scale were secured. The numerical score change for these teachers, plus or minus, is shown in Table 10.

Marked differences in attitudes may be noted in Table 10 for individuals, as revealed by the Education-Television Scale scores. Exactly thirty-four individual attitudes scores increased and thirty-four scores decreased. This change in individual scores in both directions is further revealed by the correlation of .49 between the pre-program and post-program scores of those sixty-eight individuals, computed by the Guilford ² formula. *

The highest positive change is twenty score units and the greatest negative change twenty-three score units. For only one person did the scores indicate no change. In summary the attitudes revealed by scores made before and after programming showed individual change in both directions, but the average attitude indicated by the average score remained about the same.

The average scale score of the sixty-eight teachers before they had seen the programs is 60.2. The average score of these same persons

² J. P. Guilford, Fundamental Statistics in Psychology and Education, p. 202. New York: McGraw-Hill, 1942.

$$* r_{xy} = \frac{\sum xy}{N \sigma_x \sigma_y}$$

after they had seen the trial programs is 58.8. This is a negative difference of 1.4 score units as shown in Table 11.

TABLE 11
 AVERAGE "BEFORE" AND "AFTER" PROGRAM VIEWING
 EDUCATION-TELEVISION ATTITUDES SCORES
 OF SIXTY-EIGHT RESPONDENTS

Respondents	Before Score	After Score	Change in Score Units	Standard Error
68	60.2	58.8	- 1.4	1.18

The standard error of the "before" and "after" means has been computed as 1.18,* which is not a significant error. A difference or error of this magnitude could be expected approximately two out of three times due to chance in a similar sample. Therefore, the changes in the average scores, "before" and "after," are not considered significant. One may assume from these results further evidence of the conservative tendencies of educators toward television as an audio-visual aid.

Summary

This survey of opinions and attitudes of secondary school educators in the Greater Cincinnati television area, regarding the use of television as a supplementary educational tool, revealed in general open-minded acceptance. They subscribed to the belief that education-television

* Formula used $\sigma_{dM} = \sqrt{\sigma^2_{M_1} + \sigma^2_{M_2} - 2r\sigma_{M_1}\sigma_{M_2}}$

programs could be planned to enhance high school offerings in the areas of current events and other subject areas. They felt, however, that mathematics, business subjects and foreign languages were less suitable areas for use of television to aid the educational process.

Both teachers and administrators favored the use of television as a public relations medium. Administrators were more favorably inclined to this phase of its application to educational purposes.

Generally the educators favor televising athletic events for their public relations value. Should this be done, about one-half favor compensation to the schools. Approximately one-fourth of the respondents would permit no advertising to be telecast if athletic events are televised.

Three of every five educators believe that television will be used more than radio by the schools as an educational tool. Evidence presented for the less experienced teacher groups reflected even greater enthusiasm for the use of television. Three out of five respondents think television will not be used more than films, which is the reverse of the thinking regarding radio.

The evidence revealed that teachers and administrators are definitely willing to adjust the daily school schedule to secure the potential educational values of television.

The need for sets for reception was clearly indicated by eighty-two per cent of the educators. About the same percentage think that the payment for sets should be an item in the instructional budget. Superintendents were not as favorable to this cost item being included in the budget as were other groups.

In considering how often and what programs should be provided for the schools, weekly supplementary programs are preferred by the educators.

More than half the educators in this area favor restricted sponsorship for paying cost of programming. About one-third of the superintendents indicated that the television station should pay all cost of programming. Acceptable sponsors to pay cost of programming were found to be book publishers, insurance companies, television manufacturers, foods distributors, and sports equipment manufacturers. Programs advertising cigarettes and beer are not acceptable to the school people to pay cost of television programming for educational purposes or telecasts to the school rooms.

Educators were inconclusive in their opinion as to how much time the station should allot to educational programming for school use. The evidence revealed considerable indecision with about equal numbers favoring thirty and sixty minutes daily as an average commitment.

About three-fifths of the teachers, administrators, and supervisors expressed willingness to help with the development of education-television programming as an educational tool. Teachers of art, home economics and physical education were more willing to help than other subject teachers.

Program reception qualities were considered to be good and to improve with each presentation. While certain technical limitations are pointed out by the evaluators, it appeared that much was learned with each successive presentation in the program series by the producers and cameramen.

"The Etruscan Warrior," a community resource program, and "The Job Is Yours," a guidance program, maintained and sustained the most pupil-teacher interest. The "on-the-spot" program, "A Tour of a Television Station," was high in the general interest of the viewers.

While the cost of producing the "Look-Learning" Series was not determined, the time provided for the programs could have been sold for eight hundred eighty-four dollars.

The Education-Television Attitudes Scale in a "before" and "after" application did not reveal any marked change in the average attitudes scores of the teachers.

CHAPTER VI

SUMMARY AND CONSLUSIONS

The Problem

The primary purpose of the study was to reveal the interest and attitudes of secondary school educators in the Greater Cincinnati television area toward the use of television programs in relation to the high school. A secondary purpose was to provide an exploratory opportunity for education and industry to plan and develop programs for study and evaluation.

The Cincinnati investigation undertook the task of securing data from a broad sampling of teachers, principals, supervisors and superintendents in the local school and television area to answer the following questions of importance in planning for the educational use of television:

1. What is the attitude of the educator toward acceptance of television as an educational tool?
2. What is the opinion of the educator as to curricular and other areas in which television may supplement the high school program?
3. What are the educator reactions to use of television programs for public relations purposes?
4. What are the opinions of the educators as to ways for the industry to meet cost of providing education-television programs?
5. What are the education-television attitudes of teachers in regard to education-television after they have seen a trial series of education-television programs?

The study described in detail the characteristics of the fourteen parochial and public high schools within the WLW television area which served as the sample. These schools were typical in respect to curricular and extra-curricular offerings, enrollment, faculty size, and teaching experience of the faculties. The sample of educators included superintendents, principals, and supervisors of this television area, as well as classroom teachers.

In the investigation of opinions and attitudes of 533 educators of Greater Cincinnati regarding television as an educational tool, the normative survey methods of research were utilized. The survey employed the interview technique, combined with application of the questionnaire-scale.

Summary

Acceptance of television as an educational tool.-- The evidence in the study indicated that educators have a generally favorable attitude toward the use of television as an educational tool. They believed, however, that programs dealing with current topics would be of the greatest value as a supplementary instructional aid.

The fact that only approximately thirty-five per cent of the respondents believed that business and foreign language subjects could be supplemented by television indicates that these subject areas are likely to be affected little by television at present. Inasmuch as only eighteen per cent of the educators thought mathematics teaching could profit by television techniques, this subject is the least likely to be affected by television development at this time.

Television as a public relationstool.-- There is agreement among educators that television will receive high acceptance as a medium for public relations. It is apparent that school people see in television programs an opportunity for a closer relationship with the taxpaying public who pay the cost of education. In this respect about two-thirds of the educators are willing that the schools allow certain school activities, chiefly athletic events, to be televised.

While a majority of the educators are willing to permit certain activities to be televised for public relationsbenefit, there is some indication that schools want compensation for the privilege of televising athletic events. About one out of two respondents favored payment for such privilege.

Advertising to pay cost of public relations programs.-- The data revealed that advertising to pay for cost of televising athletic events was not as objectionable as had been previously thought. Only one out of four respondents registered "No" to the question of permitting advertising to pay cost of telecasting athletic events. One out of three persons favor~~s~~ payment of telecast cost through advertising of accepted services and products. Advertising beer and tobacco products is not in general considered as acceptable to educators. Fourteen per cent of the respondents would not restrict any advertising in any way.

Use of Television Programs

Television compared to radio as an educational tool.-- The educators believed that television would eventually be more widely used in the high school than radio as an educational tool. The evidence, however, points to less agreement amongst administrators, English teachers, and teachers of ten or more years experience. The administrator opinion

is, no doubt, influenced by cost factors. As for the English teachers it may be that the medium does not have sufficient technical development at this time to be of broad use in English instruction. As between older and younger teachers the younger teachers tend to adjust more rapidly to new procedures; a factor which has, no doubt, caused them to be more favorable in attitude. It is logical also that the more concrete or demonstrable subject areas such as physical education, business, science, and industrial arts lend themselves more to the medium of television than does radio.

Television compared to use of films as an educational tool.--

The data in the survey reflected the opinion that television would not be more widely used than films projection as an educational tool. The common response and comment from the respondents indicated that films have greater flexibility in use, inasmuch as they could be scheduled as needed.

An indication that the immediacy or "on-the-spot" aspect of television lent favor in preference to film is noted for teachers of business, home economics, industrial arts and art.

Willingness to change class schedules for program reception.--

Educators were found to be generally agreeable to change in the class schedule in order to use television programs. Teachers of music, social science, science, physical education and business subjects were most agreeable to the change, while mathematics and English teachers were least amenable to schedule changing.

Placement of television sets in schools.-- One of the highest favorable reactions to all aspects of the survey refers to the favorableness on the part of the educator in regard to placement of television sets in schools. The high degree of acceptance seems to indicate a readiness on the part of the educator to use television. Assuming that teachers attain skill in using television as an instructional aid and that the factors of financing have been solved, ninety-two per cent of the administrators expressed favorable reaction to the placement of sets in schools.

Cost of equipment and school budgets.-- The majority of the educators expressed themselves favorably toward including cost of television receiving equipment as a part of cost of instruction. While less favorableness is indicated by superintendents toward the inclusion of this cost item, even about two-thirds of those who are charged with responsibility of providing the revenue and balancing the budget in school operation are favorably inclined toward this item of instructional cost.

Factors of Programming

Types of education-television programs.-- A substantial percentage, eighty-four per cent, of the educators favor provisions for weekly supplementary type programs. Evidence is clear that the educators see little value for daily instruction or daily review via television.

Notwithstanding the emphasis on subject matter in the high school, instruction tends to be individualized for the student and unique as regards the personality of the teacher and the class. Clearly, as indicated in this survey, the reaction against daily instruction or review as a part of the teaching procedure at this level indicates teachers do

not wish interference with the flexibility of the daily class activities. It may be that daily instructional programs would be valuable at other instructional levels, such as training programs and adult education classes.

Meeting cost of education-television programs.-- From the evidence produced in this survey, educators are inclined to be cautious concerning unrestricted advertising of services or products to meet cost of televising education-television programs. Not so much caution is noted in regard to telecast beamed to the parent for public relations purposes. There is a tendency, however, on the part of more than one-half of the respondents to be conservative regarding the type of advertising telecast to the classroom. Thirty-five per cent of the superintendents favor the telecaster paying all education-television program cost.

Acceptable and non-acceptable types of advertising in classrooms.-- Manufacturing, production and services, that is, basic consumer items and services for everybody, are considered acceptable by almost one out of every two respondents to pay cost of education television production. There is doubt concerning the favor of the educators in this television area toward meeting cost of education-television programs in the classrooms through advertisement of soft drinks, cigarettes, and beer.

Acceptable and non-acceptable types of advertising for athletic telecast.-- Almost the same reactions to advertising were received from the educators, concerning types of acceptable goods and services to pay cost of televising athletic events, as were received for televising educational programs. Sports equipment is the most acceptable; beer and

cigarettes the least acceptable for athletic telecast. A tendency on the part of the respondents, not to reply to this question may perhaps reflect some reluctance to grant any privilege to televise athletic events.

Amount of time station should allot to education-television.--

There was wide opinion expressed by educators as to the amount of time to be allotted to educational programs by the television station. Since about one-third of the respondents did not reply to this question, the evidence presented is not very conclusive and needs further investigation and analysis. Approximately thirty-five per cent of the respondents judged thirty to sixty minutes as the average amount of television time to be allotted to the schools.

Educator willingness to help plan programs.-- On the basis of

evidence regarding willingness of educators to help plan television programs for school use, a committee for developing the trial programs was established. While the majority of teachers expressed a willingness to help, the expressed willingness decreased for older teachers and teachers of mathematics, science, and foreign language.

Program Planning

Educator-telecaster cooperative planning.-- Another part of

this investigation reported planning, presentation, and evaluation of the trial education-television program series. The educator interest and effort in this education-television project are noteworthy, as evidenced by the regular attendance and participation of the teachers and administrators in the program planning sessions, which were held after school hours. Equally noteworthy is the effort of the Crosley Broadcasting

Corporation in providing personnel, television station, and reception facilities for planning and presentation of the "Look-Learning" Program Series.

The program planning project emphasizes the need for more planning, cooperative effort and mutual understanding on the part of both educator and telecaster; thus each may learn and gather more information and understanding to the end that television may realize its full potential as an instructional aid. The opportunity for discussion of feasible programs and the exchange of knowledge concerning unique features and limitations of various type presentations may be considered a local accomplishment in education-industry planning. This effort to discover probable ways to supplement the high school program, and to adjust school and station time commitments for reception of appropriate educational television programs, is indicative of the desire for mutual understanding.

Program evaluations.-- Teachers and administrators were helpful in offering appraisal of the four trial programs presented in this study. While their evaluations and comparisons were likely made in the light of the present perfection of the motion picture, their opinions emphasize multiplicity of production problems faced by the telecaster in the presentation of educational programs. At this time, it appears that technical limitations and lack of production technique will continue to influence the use of television in the high schools. Until production technique comparable to the best technique used in presenting entertainment programs is learned and used for presentation of educational programs, there is certain to be limited acceptance of television by the schools for classroom supplementation.

General interest presentations hold student interest more than those which are specific. Data derived from this survey, while indicating several suitable subject areas for programs, stress the need for planning programs which cut across several subject areas. Further trial programs demonstrated that knowledge of subject and mastery^{of} demonstration techniques / 5 are not sufficient to insure acceptance of the program; a "telegenic" personality is an absolute essential.

Another implication from the evaluations of programs presented emphasizes the unique appeal of the "on-the-spot" or immediacy type of programs. This is illustrated by "A Tour of a Television Station," the first program planned and presented in the trial series. It is reasonably certain that the immediacy value of television provides one of the best areas for television programming. Presenting events as they happen or reasonably close to the time and locale via television may tend to bridge some of the real and the unreal in certain curricular areas at the secondary school level.

Finally, the data revealed that the attitudes of secondary school educators concerning television did not change much after they had seen planned supplementary education-television programs. Since the average attitudes did not change to any marked degree in either direction of favorableness or disfavor, as measured by the scale, it can be assumed that educators may need more opportunity to see further program developments before a definite favorableness or disfavor can be ascertained for the group. The evidence is clear that teachers and administrators have not yet fully made up their minds concerning the educational potential

of television. The fact that this condition exists appears to be wholesome for both education and the television industry.

Recommendations

The evidence disclosed in this survey points to certain recommendations that should be effected in order that the fuller educational potential of television may be realized. There is no doubt that television will have a tremendous effect on education. Professional school people and others who determine the curricular pattern do not minimize the significance of this area of experience for children. There is manifestly a desire on the part of both educators and industry to learn more and better ways of using the medium to provide supplementary material for educational purposes. In order to obtain and capitalize upon the professional interest and to motivate the educator, it is recommended that program development be based on broad content which will cut across subject categories. Programs should be planned with the purpose of bringing to the classroom skilled or important personalities (immediacy) who can present materials, information, and processes which ordinarily are not available or easily accessible to pupils.

In the modern secondary school there is a noticeable shift from emphasis on memorization and drill to thoughtful experiencing on the part of the learner. This trend should make it clear to the educator and to television management that broad general experiences as fundamental educational goals will require patience, wisdom, and careful planning by those responsible for the best possible uses of television as a supplementary educational tool.

Information programs for classroom presentation must be planned in detail. The flexibility of the television camera in providing alternate close up and long shot views makes television a powerful teaching device for giving particulars and actuality to the subject or situation. This implies the necessity for careful and detailed rehearsals before telecasting for classrooms.

Obviously a long period of experimentation will be required before television will become a vital factor in educational methodology. At the present level of technical development programming appears to more nearly fit adult needs. Programs tend to be specific and directed to such areas as entertainment and sports. Programs for secondary schools should be such as to develop broad generalizations which can be applied to the wide interests of the adolescent.

The elementary school may be the appropriate place to experiment with education-television programming. In most elementary schools there is less subject emphasis and a more pupil-centered curriculum. Therefore, programs developed around the known interest and maturity level of the elementary school pupil may tend to influence program development "to cut across many subject or interest areas." Emphasis upon this concept and at this starting point may more nearly approach a meaningful and functional development of education-television.

Such experimentation will be time consuming and costly. Granting, however, that it will be expensive from the standpoint of time and money, it must be emphasized that a good education for future citizens cannot be secured cheaply. Textbooks are expensive educational tools, the result

of a long period of careful development; we cannot expect to pay less for the development of television as an educational tool.

It is recommended that consideration be given by the educational profession and the television industry to further exploration of education-television possibilities. Critical analysis of television programs by a group qualified to evaluate, such as the group of educators who evaluated the trial programs, is essential. Such analysis should not be super-critical, but must be for the purpose of revealing "How Can It Be Done Better?" The objectivity of an approach of this character will yield substantial benefits in mutual understanding and cooperation in improving education-television programs. It is hoped that the understanding and technical knowledge gained by local educators and television personnel through the experience of planning and presenting the trial programs will not be lost.

Cincinnati Education-Television Council.-- It is recommended that an education-television council be formed consisting of teachers, pupils, parents and representatives of the television industry to study the chief educational needs of children and schools that can best be supplied by television. Inclusion of pupils and parents in the council is harmonious with democratic planning procedures and representative of sound educational practice. A Cincinnati-Education-Television Council should reflect the best thinking for making the most effective use of television for all educational purposes. Pupil planning and participation should be encouraged. Television clubs within schools should be sponsored

as an integral part of the plans for further study of television in the schools.

Parents' viewpoints about television should be welcomed and their assistance solicited in development of television to its educational maximum. Parents, if given the opportunity, have something to contribute to educational content and procedures. The parents' chief stake in education, the child, and what they desire for their children should be recognized. By inviting parents to participate in the planning of education-television programs both education and industry will gain an immeasurable amount of direction, understanding, and support for this medium as an educational tool.

Classroom use of television.-- Evidence in this study has indicated that educators tend to be conservative in their reactions toward the educational use of television. It is recommended, therefore, that efforts to acquaint teachers with the possibilities of the medium be continued. It is suggested that educators and others responsible for teacher training recognize and study the implications and use of television as an audio-visual aid. Steps to acquaint teachers and prospective teachers with the potentialities of television should be taken by colleges, universities, and school systems as soon as practicable.

Television as an adjunct to other methods of teaching places a growing responsibility upon the teacher and administrator. Good teachers will be able to do an even better job of teaching when they utilize all available aids. Wherever possible workshops arranged by the schools and the television stations will prove of considerable value for acquainting

teachers and administrators with the educational use of television. Lack of first hand contact with television and not knowing how to operate and use a television set have certainly influenced its acceptance as another educational tool. Instruction in the mechanical manipulation of sets, and showing teachers how to get best viewing results at different distances for various size screens, will familiarize teachers with television's possibilities. This implication is important, since it is well known that other auditory-visual materials are used more by those teachers who know how to use them effectively in their teaching.

Films and education-television.-- It is also recommended that study should be given to the use of films in order to make television more flexible in its educational use. The use of films for flexibility will overcome in some measure the handicaps of adjustments between school and station schedules. Such procedure will also permit editing which in some situations may make the presentation better adapted to the curricular activities. Editing would also make easier the provision of pre-program materials to the classroom teacher in advance for fuller and more effective use of the subject presented by the film.

It is further recommended that a "film pool" containing films, agreed upon as appropriate to recognized educational aims and purposes, be established and that the television station present these films according to a suitable schedule for supplementary educational purposes to the schools. By pooling and telecasting the already existing educational films a wider use of some good supplementary materials will be made available to more schools. This method of telecasting should receive

enthusiastic support by the smaller school systems. It is obvious that this action would avoid much duplication of handling and cost of films not only for the smaller school units but for the larger systems as well.

Cost of education-television.--- American broadcasting, unlike that of other countries, is traditionally financed by commercial sponsorship and also the present television program costs have been supported in the same manner. This investigation has found that educators consider basic consumer items, commodities and services as acceptable when advertising is sold to pay cost of television programming for educational purposes. It should be pointed out, however, that educators are not unanimous in agreeing that advertisers should pay the cost of television programming. Neither are they overwhelmingly adverse to the traditional system of meeting communications cost.

This seems to indicate that educators are cognizant of the fact that some one must pay the bill for television programming. Educators are not quite certain, however, as to the character of the advertising which would be beamed to the classrooms. They are hesitant, perhaps, about that kind of advertising which "urges" one to buy or to try. It should be emphasized that educators and industry place different interpretations upon what is advertising and what is not.

It is recommended that a program of research be undertaken for the purpose of establishing criteria which could be applied as an objective instrument in rating the suitability of various types of advertising for financing educational programs. This research should consider the feasibility of other types of financing, such as support by local, state and national

taxing units, or by interested private individuals and national foundations.

Problems for Further Investigation

Certain problems suggested by the conclusions and recommendations of this investigation should be a focus for further study. Study is needed as to the most effective uses which can be made of television for school-community relations. The value of the medium for actual viewing of school activities needs the same attention which has been given to use of newspapers, radio, and the motion picture as a means of selling education to the public. Hitherto the schools have derived their support from a few interested citizens who have informed themselves regarding the school and its objectives. Television possesses great potentialities in interesting larger groups by informing them through telecasts of what activities are being carried on in the schools and what education hopes to accomplish by these activities.

The broader field of adult education offers a fertile extension for television programming. Further study of program resources and techniques to enhance community social, recreational, economic and civic needs seems fundamental to establish the worth of television in adult education. Extension of the educational values of television programs to the adult sphere offers fertile ground for program balance between entertainment and recreation on one hand and cultural development and informed citizenship on the other.

Since public policy for television is now being made, and the Federal Communications Commission has under consideration more assignments of new television channels, some study of regional channels reserved for

educational television is essential. The long range requirements of educational television should be analyzed, so that recommendations may be made to the Federal Communications Commission regarding a fair distribution of the television spectrum for uses of education. Reservation of television channels for educational purposes may in the future be as important to education as have been the large tracts of the public domain once reserved for educational purposes.

B I B L I O G R A P H Y

BIBLIOGRAPHY

- Allport, Gordon W. "Attitudes," A Handbook of Social Psychology, pp. 798-845. Edited by C. Murchison. Worcester: Clark University Press, 1935.
- A Report to Educators on Teaching Films Survey, A Cooperative Investigation of Several Book Companies, 1948, Pp. 117.
- Atkinson, Carrol. Development of Radio Education Policies in American Public School Systems. Edinboro, Pennsylvania: Edinboro Educational Press, 1939. Pp. v / 279.
- Bartlett, Kenneth C. "What Does Television Mean to Education?" Education on the Air, p. 273. Sixteenth Yearbook of the Institute for Education By Radio. Columbus, Ohio: Ohio State University, 1946.
- Better Teaching Through Audio-Visual Materials, Reprinted from The North Central Association Quarterly, 23, No. 2 (October, 1948), 196-226.
- Beauchamp, W. L. "Education and Television," School Review, 57 (March, 1949), 127-129.
- Bogardus, Emory S. Introduction to Social Research. New York: Suttonhouse Ltd., 1936. Pp. vii / 212.
- Braun, Everett C., and Stanley, F. J. Let's Broadcast. Minneapolis: The Northwestern Press, 1948. Pp. 249.
- Cantril, Hadley. Gauging Public Opinion. Princeton, New Jersey: Princeton University Press, 1944. Pp. vi / 318.
- Cincinnati Enquirer, news item, Cincinnati, Ohio: (March 15, 1950), 2.
- Clark, C. C. "Television in Education," School and Society, 48 (October 1, 1938), 431-432.
- Considine, Bob. Syndicated Article. The Cincinnati Enquirer, (March 17, 1949), 5.
- Corbett, Thomas E. "Television for Educational Institutions," The Educational Record, 31 (April, 1950), 177.
- Corey, Stephen M., and Others. Audio Visual Materials of Instruction, Forty-eighth Yearbook of the National Society for the Study of Education, Part I. Chicago: University of Chicago Press, 1949. Pp. x / 320.
- Courter, Claude W. "Preparing for the Future," Annual Report of the Superintendent, p. 10. Cincinnati: Board of Education, 1947.

- Coy, Wayne. "Look Out For Television," The Rotarian, (March, 1949), 8-11.
- Dale, Edgar. Audio-Visual Methods in Teaching. New York: The Dryden Press, 1948. Pp. vii / 546.
- Dupuy, Judy. Television Show Business. Schenectady: General Electric Co., 1945. Pp. 246.
- Eddy, William G. Television The Eyes of Tomorrow. New York: Prentice-Hall, Inc., 1945. Pp. vii / 330.
- "Educational TV at Iowa State College," AER Journal, 9 (March, 1950), 73.
- Elicker, Paul E., Editor. "Life Adjustment in the Secondary-School Curriculum," The Bulletin of the National Association of Secondary-School Principals, 34 (May, 1950), Pp. 248.
- Exton, E. "New Development in Education, Radio, and Television," American School Board Journal, 115 (April, 1949), 53-54.
- Fisher, Sterling. "NBC's Plan for Television in Education," Audio-Visual Guide, 15 (April, 1949), 21.
- Frank, Josette. Comics, Radio, Movies - And Children. New York: Public Affairs Committee Inc., 1949. Pp. 32.
- Flory, J. "Challenge of Television," Educational Screen, 23 (September, 1944), 284-285.
- Gable, Martha A. "Teacher: Here Comes Television!" Educational Screen, 28 (February, 1949), 68-70.
- Gable, Martha A. "Television," The Nations Schools, (June, 1949), 60.
- Garrett, Henry E. "Sampling and Reliability," Statistics in Psychology and Education, pp. 226-227. New York: Longmans Green and Co., 1939.
- Gould, Jack. "Stamford Survey," New York Times, (March 12, 1950), 11.
- Guilford, J. P. Fundamental Statistics in Psychology and Education, p. 127, 137. New York: McGraw, Hill, 1942.
- Hubbell, Richard. Television Programming and Production. New York: Murray Hill Books, Inc., 1938. Pp. x / 165.
- Interview between the writer and R. J. Rockwell, vice president and director of engineering, Crosley Broadcasting Corporation at Cincinnati, March 30, 1950.

- Journal of Educational Research, (October, 1949), 156.
- Journal of the Air, The Association of Education By Radio, 9 (February, 1950), 63.
- Kersta, N. E. "Television in Defense Education," Secondary Education, 10 (May, 1942), 341-343.
- Knowles, William H. "Television in Education," The School Executive, 68 (March, 1949), 46-48.
- Krech, David, and Crutchfield, Richard S. Theory and Problems of Social Psychology. New York: McGraw-Hill, Inc., 1948. Pp. vii / 639.
- Lazarsfeld, Paul F., and Field, Harry. The People Look at Radio. Chapel Hill, North Carolina: The University of North Carolina Press, 1946. Pp. v / 158.
- Lee, Robert E. Television. New York: J. J. Little and Ives Company, 1944. Pp. v / 230.
- Letter to the writer from Lin Mason, program director WLW-T, Cincinnati, Ohio, dated June 21, 1950.
- Letter to the writer, "The Use of Television in Education," from E. Arthur Hungerford, Jr., director of research and development, Special Devices Center, Office of Naval Research, Fort Washington, New York, dated December 7, 1949.
- Letter to the writer from Rt. Rev. Msgr. Carl J. Ryan, Superintendent of Schools, Archdiocese of Cincinnati, Ohio, dated April 5, 1950.
- Lewis, Philip. "The Future of Television in Education," The Phi Delta Kappan, 30 (December, 1948), 157-160.
- Lewis, Philip. "T-V and Teen-Agers," Educational Screen, (April, 1949), 161.
- Likert, Renis. A Technique for the Measurement of Attitudes, (Archives of Psychology), 22 (June, 1932), 5-55. Edited by R. S. Woodworth, New York: Columbia University.
- Listenables and Lookables, East Orange, New Jersey, 2 (March 15, 1950), 1.
- McFadden, D. L. "Television Comes to Our Children," Parents Magazine, 36 (January, 1949), 26-27.
- Miner, W. "Television as an Educational Force," School and Society, 60 (August 19, 1944), 115-116.

- Mowery, Paul B. "What About Television?" Bulletin of the National Association of Secondary-School Principals, 144 (February, 1947), 87-97.
- "Navy Tests Television Teaching," "as quoted in" School Management, 18 (April 1, 1949), p. 38.
- "Need for an Educational TV Frequency," "as quoted in" Education Summary, (March 5, 1950), 6.
- Olsen, Edward G. School and Community. New York: Prentice-Hall, Inc., 1945. Pp. v / 422.
- Olson, O. Joe, Editor. Eighteenth Yearbook of the Institute for Education by Radio. Columbus, Ohio: Ohio State University, 1948. Pp. v / 478.
- Practical Equipment Layouts for Television Stations, RCA Reprint from Broadcast News, 52 (December, 1948), Pp. 28.
- Reiche, B. "Television is the Navy's School Teachers," Popular Mechanics, 90 (November, 1948), 125-127.
- "Save a Life," syndicated article, Cincinnati Times Star, Cincinnati, Ohio: (March 9, 1950), 8.
- Schloerb, Lester J., Editor. Television News. Prepared by the Radio Council for Members of the General Superintendents' Committee for the Study of Television, Chicago Public Schools. (December 15, 1948), 1.
- Seldes, G. "Television in Education," Education, 60 (June, 1940), 653-655.
- Shouse, James D. "What's Ahead in Television," An address by the president and chairman of the board, Crosley Broadcasting Company, at the 10th Annual Fall Meeting of the National Editorial Association, Edgewater Beach Hotel, Chicago, November 21, 1948.
- Siepmann, Charles A. The Radio Listener's Bill of Rights, 1948, Pp. 52.
- Sinclair, Thomas J. Business - Sponsored Teaching Aids. Dansville, New York: F. A. Owen Publishing Co., 1949. Pp. v / 113.
- Smith, Bernard B. "Television: There Ought to be a Law," Harper's Magazine, (September, 1948), 34-42.
- Stasheff, E. "Television and High School Dramatics," Quarterly Journal of Speech, 31 (December, 1945), 479-483.
- Stone, C. Walter. "Needed: TV Program Guides, Not Syllabi," Adult Education Journal, 8 (April, 1949), 141-143.

- "Television and Education," A Symposium by Educational Screen's Editorial Board. Educational Screen, 8 (March, 1949), 107-111.
- "Television Antenaplex System," Television Equipment, A Folder Describing RCA Television Receiving Equipment and Installation. Camden, New Jersey: Radio Corporation of America, 1950.
- "The Doctor Looks at TV," Telecasting, (July 25, 1950), 60.
- "TV - Ally or Rival of Printing?" Witness, (March 15, 1950), 2-3.
- "TV OK," Insight for Broadcasters, American Optometric Association, Pittsburgh: (March 15, 1950), 1.
- TV Ownership Study, (Reporting TV Set Ownership as of January 11, 1950 in the Cincinnati, Columbus, and Dayton TV Markets), WLW Research Department. Cincinnati, Ohio. Pp. 4.
- Tyler, I. Keith; Dasher; Mason, Nancy, Editors. Sixteenth Yearbook of the Institute for Education by Radio. Columbus, Ohio: Ohio State University, 1948. Pp. v / 624.
- Tyler, Tracy F. "Don't Sell Education Short," AER Journal, 9 (September, 1949), 1.
- Tyler, Tracy F. "How About Wired Television?" The Journal of the Air, 8 (February, 1949), 61.
- Tyler, Tracy F. "The Challenge of Radio and TV," The Journal of the Air, 9 (February, 1950), 61-64; 68.
- Tyrell, William G. "Television in the Social Studies," Social Education, 13 (January, 1949), 25.
- Vandermeer, A. S. "From Textbook to Movie to Television," Elementary School Journal, 48 (January, 1948), 276-279.
- "Video's Effect on D. C. Children," Broadcasting Telecasting, Washington, D. C., (May 15, 1950), 56.
- "What You Should Know About Television," Liberty, (August, 1949), 51-66.

A P P E N D I X

APPENDIX I

MAIN SAMPLE, SHOWING
SCHOOL ENROLLMENT, FACULTY SIZE, AND RESPONSE TO QUESTIONNAIRE-SCALE

	Pupil Enroll- ment	Number Faculty Members	Questionnaire-Scale							
			Responses Received			Usable Responses		Unusable Responses		
			Number	%	Number	%	Number	%	Number	%
			+	-						
Central Vocational	1179	56	47	9	84	43	91	4	9	
East Vocational	433	31	27	4	87	19	70	8	30	
Elder	842	32	22	10	69	22	100	0	0	
Graphic Arts & Ptg.	120	8	7	1	88	7	100	0	0	
Hughes	2457	98	65	33	66	60	92	5	8	
Mariemont (1)	425	19	19	0	100	19	100	0	0	
Mother of Mercy	585	22	18	4	82	18	100	0	0	
Norwood	936	50	36	14	72	35	97	1	3	
Purcell	1049	40	37	3	93	37	100	0	0	
Regina	472	26	26	0	100	26	100	0	0	
Roger Bacon	761	32	26	6	81	26	100	0	0	
Walnut Hills	1630	60	40	20	67	39	97	1	3	
Western Hills (1)	2449	90	85	5	94	80	94	5	6	
Withrow (1)	2962	95	73	22	77	69	95	4	5	
Total - (Includ- ing Teachers, Principals, and Asst. Principals)		659	528	131	80	500	95	28	5	
Supervisors (2)		15	14	1	93	14	100	0	0	
Superintendents(2)		20	19	1	95	19	100	0	0	
Total - (All Respondents)		694	561	133	80	533	95	28	5	

- Key: (1) 6-3-3 organization. Others 8-4 plan.
 (2) Included in Administrator-Supervisory group
 in presenting data. Group of 51 includes
 18 principals from schools surveyed.
 (+) Received
 (-) Not received

WLW-TELEVISION COVERAGE AREAS

WLW-T

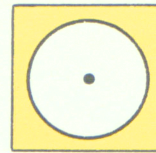
CHANNEL 4
CINCINNATI

WLW-D

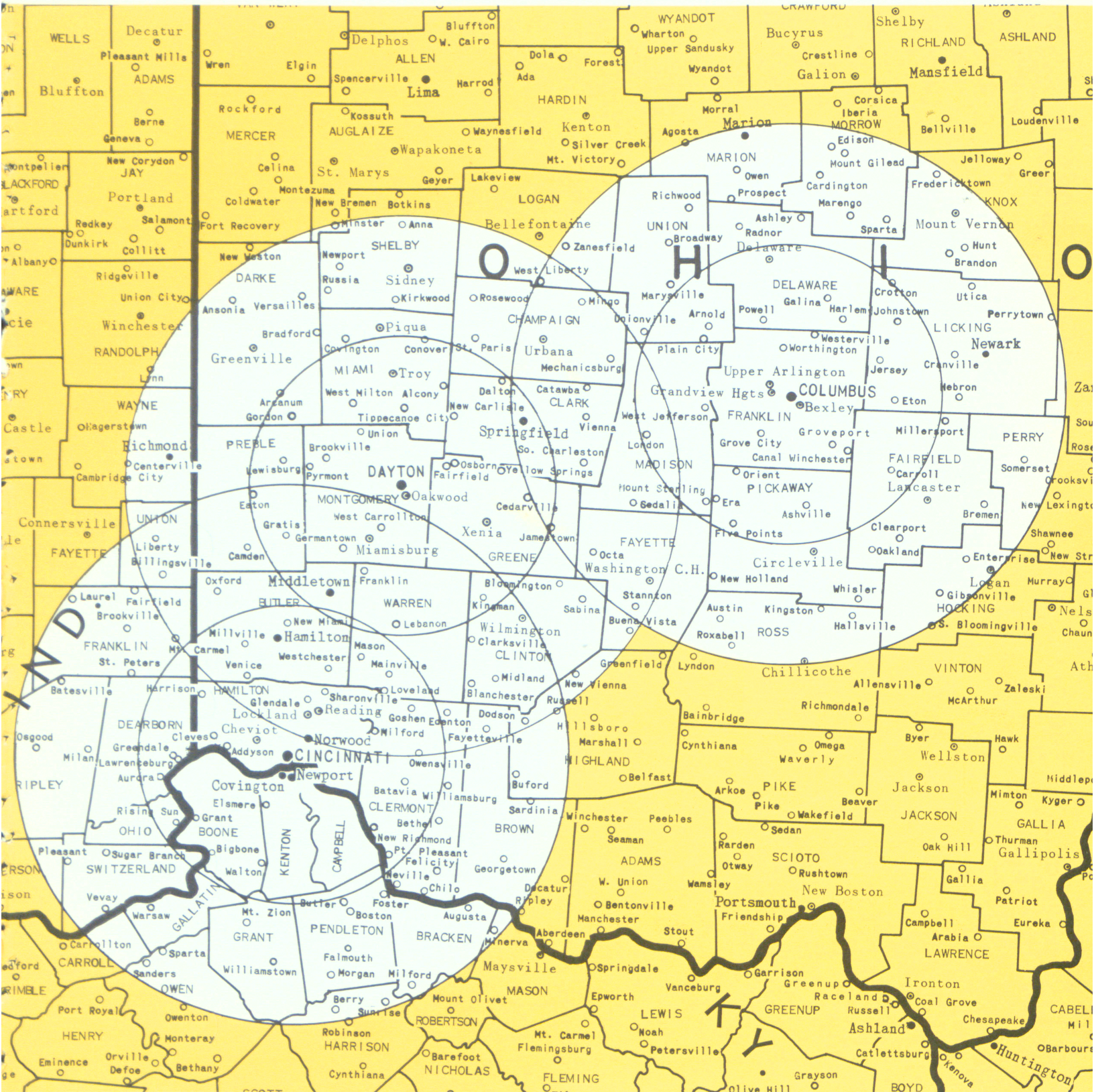
CHANNEL 5
DAYTON

WLW-C

CHANNEL 3
COLUMBUS



COVERAGE AREA
(Without same-channel transmission within the area) 45 mile radius.



Crosley Broadcasting Corporation

140 WEST NINTH STREET • CINCINNATI 2, OHIO

MARKET DATA • WLW-TELEVISION AREA

	WLW-T 45-mile Area		WLW-D 45-mile Area		WLW-C 45-mile Area		WLW-Television (3 station) Area	
Population.....	1,402,400		1,222,200		1,023,100		3,016,600	
No. of Families.....	433,800		368,400		308,600		919,600	
No. Persons Per Family...	3.23		3.32		3.32		3.28	
Families By Rural-Urban Residence								
Urban.....	292,800	67.5%	208,500	56.6%	191,300	62.0%	591,300	64.3%
Over 25,000.....	250,300	57.7%	156,900	42.6%	181,100	58.7%	526,900	57.3%
Under 25,000.....	42,500	9.8%	51,600	14.0%	10,200	3.3%	64,400	7.0%
Rural.....	141,000	32.5%	159,900	43.4%	117,300	38.0%	328,300	35.7%
Non-farm.....	75,000	17.3%	85,100	23.1%	58,600	19.0%	172,900	18.8%
Farm.....	65,900	15.2%	74,800	20.3%	58,600	19.0%	155,400	16.9%
Total.....	433,800	100%	368,400	100%	308,600	100%	919,600	100%
Retail Sales (000).....	\$1,167,710		\$974,830		\$869,148		\$2,520,419	
Retail Food Sales (000)...	\$308,486		\$242,989		\$206,308		\$630,194	
Retail Gen. Mdse. Sales (000).....	\$140,015		\$123,384		\$108,847		\$313,919	
Retail Drug Sales (000)...	\$31,973		\$25,348		\$22,070		\$67,015	
Retail Furniture, House- hold, Radio Sales (000)...	\$55,934		\$47,228		\$45,468		\$125,361	
Net Buying Income (000)...	\$1,969,755		\$1,579,120		\$1,307,193		\$4,028,687	
Net Buying Income Per Family.....	\$4,541		\$4,286		\$4,236		\$4,381	

Sources: Rural-Urban Residence based on percentages from the 1940 Census, adjusted to current population data. All other data from Sales Management, 1950.

EDUCATION-TELEVISION QUESTIONNAIRE

Part I, Page 1

EDUCATION - TELEVISION STUDY

Modern education received a great impetus from the invention of the printing press. Now we have television which may have a similar revolutionary effect upon educational procedures.

The educational uses of television will depend in a large measure upon the attitudes of class room teachers. As a teacher today, in 1950, you are "in on the ground floor," in considering this new medium as an educational tool. The information that you provide may determine the direction and application of television in the modern school program.

It is the purpose of this questionnaire to determine the attitude of educators regarding the ways in which television can be most effectively used. You can be instrumental in charting the future educational course of television by the answers which you give as you react to these questions.

The information which you provide will be included in the data of a study on television and education which I am making on a fellowship grant under the auspices of the Teachers College, University of Cincinnati.

Russell E. Helmick
Principal, Holmes High School
Covington, Kentucky
(on leave)

Your Name (Last name first) _____

POSITION	SUBJECTS TAUGHT	GRADE
<input type="checkbox"/> Teacher	_____	_____
<input type="checkbox"/> Principal	_____	_____
<input type="checkbox"/> Supervisor (or Special Teacher)	_____	_____
<input type="checkbox"/> Superintendent	_____	_____
	_____	_____

___ Total years experience (teaching, administrative, supervisory)

1. Do you feel that there is any place in the educational program for television programs designed for school use?

- Yes
- No

2. Do you believe that television programs should be planned to supplement instruction in

- | | | | |
|----------------------------------|------------------------------|-----------------------------|----------------------------------|
| a. Science | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| b. Mathematics | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| c. English | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| d. Speech | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| e. Social Science | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| f. Health and Physical Education | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| g. Guidance (Life-Adjustment) | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| h. Home Economics | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| i. Industrial Arts | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| j. The Extra-curricular Program | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| k. Human Relationships | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| l. Current Events (Local) | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| m. Current Events (National) | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| n. Business Subjects | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| o. Music | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| p. Art | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| q. Plays | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| r. Foreign Language | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| s. _____ | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| t. _____ | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |
| u. _____ | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Perhaps |

3. Do you think that television will be more widely used than radio as an educational tool?
 Yes
 No
 No Opinion
4. Do you think that television will be more widely used than film projection as an educational tool?
 Yes
 No
 No Opinion
5. Would you be willing to assist in the planning of television programs for school use, if given the opportunity?
 Yes
 No
6. Assuming that there will be educational television programs designed for school use -- would a television set in every school be desirable?
 Yes
 No
7. Again assuming that there will be educational television programs designed for school use -- do you think that the cost of television sets for the schools, and the installation and service charges, etc., should be covered by the instructional (visual aids) budget?
 Yes
 No If No, how would you propose to cover this expense?
-
8. How much time should television stations allot to educational programs for school use?
_____ minutes per day (on the average)
9. Please check the one statement below that best expresses your attitude toward how the cost of broadcasting educational television programs should be met.
 The television stations should foot the bill - no sponsors or advertising should be allowed.
 The television stations should be allowed to "sell" the advertising time to any sponsor.
 The programs should be sponsored, but the kind of sponsors acceptable should be restricted. For example, perhaps you would not object to sponsorship by a textbook publishing company, but would object to sponsorship by a brewery.
10. Should there be special television programs directed to the parent and tax-payer to promote a better understanding of what is being done in our schools?
 Yes
 No
 No Opinion
11. Should high schools allow their athletic events (such as football games) to be televised?
 Yes
 No

12. If your athletic events are televised, which of the following best expresses your opinion as to how the cost of these tele-casts should be met:
 If the stations want to televise these events, they should do so without sponsorship - no advertising allowed.

The type of advertising checked below would, in my opinion, be permissible:

- Advertising by an organization offering recognized services, such as a life insurance company.
 A manufacturer advertising an acceptable product, such as sports equipment.
 Any advertising that meets the station's requirements is acceptable.

13. If high school athletic events are televised, should the High School Athletic Associations receive compensation for this privilege?
 Yes
 No

14. Assuming that the cost of education-television may be met by advertising -- are the following organizations acceptable for sponsorship of

...Educational Programs?

...Athletic Events?

Yes	No		Yes	No
<input type="checkbox"/>	<input type="checkbox"/>	Insurance	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Book Publishers	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Automobiles	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Television Manufacturing	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Foods	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Sports Equipment	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Soft Drinks	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Cigarettes	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Beer	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Others:	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>

15. Assuming that there are suitable and appropriate educational television programs offered, are you in favor of necessary changes in class schedules to take advantage of these programs?
 Yes
 No

Comments: _____

16. What do you think of each of the following types of educational television programs:

- a. A good instructor talks via television as one talks to his class. He uses a blackboard or charts. The program lasts for about 30 minutes daily. The complete course (be it Freshman English, First Semester Algebra, Etc.) is covered in a series of daily (Monday through Friday) telecasts.

Like the idea

Don't like it.

Please make a brief statement of reason for this answer.

- b. A weekly summary review by television of all essential points in a given subject to serve as a review of the week's work, as covered during the preceding four days by the class instructor.

Like the idea

Don't like it

Please make a brief statement of reason for this answer.

- c. Supplementary feature once a week, not covering all essential details of the course, but taking advantage of unique television possibilities to demonstrate material directly related to the subject. (For example, a film could be shown, in connection with Civics, showing Congress in session, and explaining the organization of the federal government.)

Like the idea

Don't like it

Please make a brief statement of reason for this answer.

- d. Comments regarding any other types of education television programs:

17. Any other suggestions or comments about television as an educational medium:

EDUCATION-TELEVISION ATTITUDES SCALE Page 1

PART II

Name _____

Introduction: Please rate each of the following statements as to whether you Strongly Agree, Agree, are Undecided, Disagree, or Strongly Disagree. Answer according to your own opinion. Draw a circle around the answer which best describes your attitude.

"As an instrument of education, television

1. ...is indispensable to an effective program of education.
Strongly Agree Agree Undecided Disagree Strongly Disagree
2. ...is impractical for school use.
Strongly Agree Agree Undecided Disagree Strongly Disagree
3. ...can develop better teaching.
Strongly Agree Agree Undecided Disagree Strongly Disagree
4. ...has more limitations than motion picture projection.
Strongly Agree Agree Undecided Disagree Strongly Disagree
5. ...is an especially good tool of learning on the high school level.
Strongly Agree Agree Undecided Disagree Strongly Disagree
6. ...costs so much that it will have limited acceptance in schools.
Strongly Agree Agree Undecided Disagree Strongly Disagree
7. ...offers few programs that are worthwhile for the schoolroom.
Strongly Agree Agree Undecided Disagree Strongly Disagree
8. ...is a powerful teaching tool to be used in the schools.
Strongly Agree Agree Undecided Disagree Strongly Disagree
9. ...has more advantages than disadvantages.
Strongly Agree Agree Undecided Disagree Strongly Disagree
10. ...has a very uncertain future in the classroom.
Strongly Agree Agree Undecided Disagree Strongly Disagree

Part II, Page 2

"As an instrument of education, television

11. ...is not needed in the classroom.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
12. ...is difficult to use as a supplementary device in relation to the various school subjects.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
13. ...is certain to be regarded as entertainment rather than education.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
14. ...is a vital resource to teaching.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
15. ...is a powerful visual educational aid.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
16. ...is more adaptable for class use than movies.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
17. ...has great possibilities for mass instruction.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
18. ...is feasible for use in almost all subject areas.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
19. ...is a powerful force for good in schools.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
20. ...is more practical than motion picture projection.
 Strongly Agree Agree Undecided Disagree Strongly Disagree

TABULATING SHEET

_____ No. of Questionnaires

- | | |
|---|---|
| Group:
<input type="checkbox"/> Teacher
<input type="checkbox"/> Principal
<input type="checkbox"/> Supervisor
<input type="checkbox"/> Superintendent
<input type="checkbox"/> Others _____ | Years Experience
<input type="checkbox"/> up to 5
<input type="checkbox"/> 6 to 10
<input type="checkbox"/> 11 or more |
|---|---|

(If Teacher) Subject (s) Taught _____

		Totals
1.	Yes	
	No	
	No Answer	
2a.	Yes	
	No	
	Perhaps	
	No Answer	
b.	Yes	
	No	
	Perhaps	
	No Answer	
c.	Yes	
	No	
	Perhaps	
	No Answer	
d.	Yes	
	No	
	Perhaps	
	No Answer	
e.	Yes	
	No	
	Perhaps	
	No Answer	
f.	Yes	
	No	
	Perhaps	
	No Answer	
g.	Yes	
	No	
	Perhaps	
	No Answer	
h.	Yes	
	No	
	Perhaps	
	No Answer	

2i. Yes
No
Perhaps
No Answer

j. Yes
No
Perhaps
No Answer

k. Yes
No
Perhaps
No Answer

l. Yes
No
Perhaps
No Answer

m. Yes
No
Perhaps
No Answer

n. Yes
No
Perhaps
No Answer

o. Yes
No
Perhaps
No Answer

p. Yes
No
Perhaps
No Answer

q. Yes
No
Perhaps
No Answer

r. Yes
No
Perhaps
No Answer

s. Other (write in)
Yes
No
Perhaps

t.	Other (write in):		
	Yes		
	No		
	Perhaps		
u.	Other (write in):		
	Yes		
	No		
	Perhaps		
3.	Yes		
	No		
	No Opinion		
	No Answer		
4.	Yes		
	No		
	No Opinion		
	No Answer		
5.	Yes		
	No		
	No Answer		
6.	Yes		
	No		
	No Answer		
7.	Yes		
	No		
	No Answer		
8.	None		
	Up to 22 minutes		
	23 to 37 minutes		
	38 to 52 minutes		
	53 to 67 minutes		
	over 67 minutes		
	No Answer		
9.	a.		
	b.		
	c.		
	No Answer		
10.	Yes		
	No		
	No Opinion		
	No Answer		
11.	Yes		
	No		
	No Answer		

12.	a.		
	b.		
	c.		
	d.		
13.	Yes		
	No		
	No Answer		
14.	<u>Educational Programs</u>		
	<u>Insurance</u>		
	Yes		
	No		
	No Answer		
	<u>Book Publishers</u>		
	Yes		
	No		
	No Answer		
	<u>Automobiles</u>		
	Yes		
	No		
	No Answer		
	<u>Television Manufacturing</u>		
	Yes		
	No		
	No Answer		
	<u>Foods</u>		
	Yes		
	No		
	No Answer		
	<u>Sports Equipment</u>		
	Yes		
	No		
	No Answer		
	<u>Soft Drinks</u>		
	Yes		
	No		
	No Answer		
	<u>Cigarettes</u>		
	Yes		
	No		
	No Answer		
	<u>Beer</u>		
	Yes		
	No		
	No Answer		

14. Educational Programs

Others (write in):		
Yes		
No		
Others (write in):		
Yes		
No		
Others (write in):		
Yes		
No		
Others (write in):		
Yes		
No		

14. Athletic Events

<u>Insurance</u>		
Yes		
No		
No Answer		
<u>Book Publishers</u>		
Yes		
No		
No Answer		
<u>Automobiles</u>		
Yes		
No		
No Answer		
<u>Television Manufacturing</u>		
Yes		
No		
No Answer		
<u>Foods</u>		
Yes		
No		
No Answer		
<u>Sports Equipment</u>		
Yes		
No		
No Answer		
<u>Soft Drinks</u>		
Yes		
No		
No Answer		

14. Athletic Events

<u>Cigarettes</u>		
Yes		
No		
No Answer		
<u>Beer</u>		
Yes		
No		
No Answer		
<u>Others (write in):</u>		
Yes		
No		
<u>Others (write in):</u>		
Yes		
No		
<u>Others (write in):</u>		
Yes		
No		
<u>Others (write in):</u>		
Yes		
No		
<u>Others (write in):</u>		
Yes		
No		
15. Yes		
No		
No Answer		
16a. Like the idea		
Don't like it		
No Answer		
b. Like the idea		
Don't like it		
No Answer		
c. Like the idea		
Don't like it		
No Answer		

TAPULATION OF COMMENTS

On the appropriate sheets attached write down the comments appearing on the questionnaires.

Instructions for Scoring Scale - Part II

- A. Place the overlap on page according to page number 1 and page number 2. Add the circled figures and write the total score for all 20 statements in right corner of page 2.
- B. List below the total scores for Part II. Check to see that you have as many scores as questionnaires. Add these scores to get a grand total. Write the grand total in the right corner.
- C. If someone failed to answer all statements make a note of it below (on this sheet), and place that questionnaire at the top of your pile.

APPENDIX IV

INTRODUCTION AND INSTRUCTIONS TO PRINCIPALS
CONCERNING APPLICATION OF SURVEY TOOLS

January 18, 1950

Dear _____:

Before getting to the main point of this letter may I review briefly the purpose of the Education-Television study being made by me with the cooperation of Teachers College, University of Cincinnati.

In our previous talks, you will remember, it was indicated that the purpose of the study is to reveal the interest and opinions of secondary school educators toward the utilization of television programs in relationship to education. You will recall that we discussed the application of the questionnaire and scale to your faculty.

The questionnaire and scales designed for the Education-Television survey are now ready. They are being placed in your hands today. It is my hope that they may be filled in by you and your staff this week so that I may call for them Monday, January 23.

The data gathered through the use of the questionnaire and scale will be most helpful if the respondents will:

1. Be sure that page one is complete. (Name, position, subject taught, (grade 7 or 8) and total years experience.)
2. Make a response to each item.
3. Make statements for question 16, page 5.
4. Draw a circle for the reaction to items of part 2.

It is encouraging to tell you that I have received most favorable cooperation from the principals and superintendents in regard to this study. The results of the survey will be made available in my final report and a summary given to you and to the faculty members if requested.

Sincerely yours,

Russell E. Helmick, Principal
Holmes High School
Covington, Kentucky
(on leave)

APPENDIX IV A

AN EXAMPLE OF A SCHOOL PLAN OF PRESENTING EDUCATION-TELEVISION
QUESTIONNAIRE SCALE TO THE FACULTY

TO:

FROM:

SUBJECT: Education-Television Study

Station WLW is conducting a study of the educational possibilities of Television. They plan to lend to a few cooperating high schools some television sets and to "pipe" educational programs to these schools. They ask each teacher in these cooperating schools to answer the attached questionnaire. The information obtained from this questionnaire will be employed in determining the types of programs to be prepared and the methods of using them in these schools. After a period of experimentation, the Station will ask us to give an evaluation of the programs.

We have expressed our interest in this experiment, our feeling of pride in having the opportunity to participate in such a unique study, and our willingness to cooperate as far as possible. Will you please assist by answering this questionnaire? Please observe the following points:

1. Be sure that page one is complete. (Name, position, subject taught, (grade 7 or 8) and total years experience.)
2. Make a response to each item.
3. Make statements for question 16, page 5.
4. Draw a circle for the reaction to items of part 2.

We are assured that all information given will be treated in confidence. May we have this returned by the close of school on Friday, January 20?

ONE HUNDRED FIFTY-THREE PRELIMINARY EDUCATION-TELEVISION Page 1
STATEMENTS COLLECTED FOR THE CONSTRUCTION OF THE ATTITUDES SCALE

PART II

Introduction: Please rate each of the following statements as to whether you Strongly Agree, Agree, are Undecided, Disagree, or Strongly Disagree. Answer according to your own opinion. Draw a circle around the answer which best describes your attitude.

"As an instrument of education, television

1. ...means as much as the invention of printing.
Strongly Agree Agree Undecided Disagree Strongly Disagree
2. ...is indispensable to an effective program of education.
Strongly Agree Agree Undecided Disagree Strongly Disagree
3. ...is hard on the eyes.
Strongly Agree Agree Undecided Disagree Strongly Disagree
4. ...is impractical for school use.
Strongly Agree Agree Undecided Disagree Strongly Disagree
5. ...will replace motion picture projection.
Strongly Agree Agree Undecided Disagree Strongly Disagree
6. ...will be a substitute for a teacher in some classrooms.
Strongly Agree Agree Undecided Disagree Strongly Disagree
7. ...is adequate for teaching mechanical skills.
Strongly Agree Agree Undecided Disagree Strongly Disagree
8. ...is adequate for teaching golf.
Strongly Agree Agree Undecided Disagree Strongly Disagree
9. ...is adequate for teaching tennis.
Strongly Agree Agree Undecided Disagree Strongly Disagree
10. ...can be more effectively used than radio.
Strongly Agree Agree Undecided Disagree Strongly Disagree
11. ...can be more widely used in school than is radio.
Strongly Agree Agree Undecided Disagree Strongly Disagree

"As an instrument of education, television

12. ...can develop better teaching.
Strongly Agree Agree Undecided Disagree Strongly Disagree
13. ...can improve the quality of teaching.
Strongly Agree Agree Undecided Disagree Strongly Disagree
14. ...can make for better teaching.
Strongly Agree Agree Undecided Disagree Strongly Disagree
15. ...can aid in developing better teaching.
Strongly Agree Agree Undecided Disagree Strongly Disagree
16. ...lends itself to demonstration teaching.
Strongly Agree Agree Undecided Disagree Strongly Disagree
17. ...decreases the need for teaching reading.
Strongly Agree Agree Undecided Disagree Strongly Disagree
18. ...has the same limitations as motion picture projection.
Strongly Agree Agree Undecided Disagree Strongly Disagree
19. ...has more limitations than motion picture projection.
Strongly Agree Agree Undecided Disagree Strongly Disagree
20. ...has less limitations than motion picture projection.
Strongly Agree Agree Undecided Disagree Strongly Disagree
21. ...eliminates the need for field trips.
Strongly Agree Agree Undecided Disagree Strongly Disagree
22. ...is too expensive to be practical for schools.
Strongly Agree Agree Undecided Disagree Strongly Disagree
23. ...is an important medium for superior music teaching.
Strongly Agree Agree Undecided Disagree Strongly Disagree
24. ...is an important medium for superior art teaching.
Strongly Agree Agree Undecided Disagree

"As an instrument of education, television

25. ...is an important medium for superior science teaching.
Strongly Agree Agree Undecided Disagree Strongly Disagree
26. ...is an especially good tool of learning on the high school level.
Strongly Agree Agree Undecided Disagree Strongly Disagree
27. ...is an especially good tool of learning on the elementary school level.
Strongly Agree Agree Undecided Disagree Strongly Disagree
28. ...costs so much that it will have limited acceptance in schools.
Strongly Agree Agree Undecided Disagree Strongly Disagree
29. ...is worthwhile for news and current events.
Strongly Agree Agree Undecided Disagree Strongly Disagree
30. ...might be all right if teachers produced the programs.
Strongly Agree Agree Undecided Disagree Strongly Disagree
31. ...is impractical for individual instruction.
Strongly Agree Agree Undecided Disagree Strongly Disagree
32. ...is impractical for meeting individual needs.
Strongly Agree Agree Undecided Disagree Strongly Disagree
33. ...offers few programs that are worthwhile for the schoolroom.
Strongly Agree Agree Undecided Disagree Strongly Disagree
34. ...may be used as a teaching aid.
Strongly Agree Agree Undecided Disagree Strongly Disagree
35. ...will bring no radical change in teaching methods.
Strongly Agree Agree Undecided Disagree Strongly Disagree
36. ...will bring radical change in teaching methods.
Strongly Agree Agree Undecided Disagree Strongly Disagree
37. ...must use programs produced especially for schools.
Strongly Agree Agree Undecided Disagree Strongly Disagree

"As an instrument of education, television....."

38. ...will find its usefulness limited by the school schedule.
Strongly Agree Agree Undecided Disagree Strongly Disagree
39. ...presents advertising that interrupts the educational process.
Strongly Agree Agree Undecided Disagree Strongly Disagree
40. ...presents advertising that is questionable for classroom situations.
Strongly Agree Agree Undecided Disagree Strongly Disagree
41. ...annoys teachers by its advertising.
Strongly Agree Agree Undecided Disagree Strongly Disagree
42. ...annoys the learner by its advertising.
Strongly Agree Agree Undecided Disagree Strongly Disagree
43. ...is more practical than motion picture projection.
Strongly Agree Agree Undecided Disagree Strongly Disagree
44. ...is helpful for the teaching of current events.
Strongly Agree Agree Undecided Disagree Strongly Disagree
45. ...is a powerful teaching tool to be used in the schools.
Strongly Agree Agree Undecided Disagree Strongly Disagree
46. ...can not compete with text books.
Strongly Agree Agree Undecided Disagree Strongly Disagree
47. ...is too likely to be used as a propaganda medium.
Strongly Agree Agree Undecided Disagree Strongly Disagree
48. ...is too commercialized for the good of the schools.
Strongly Agree Agree Undecided Disagree Strongly Disagree
49. ...will in time influence education more and more.
Strongly Agree Agree Undecided Disagree Strongly Disagree
50. ...is fundamentally unsound.
Strongly Agree Agree Undecided Disagree Strongly Disagree

"As an instrument of education, television...

51. ...is deviating from its educational possibilities.
Strongly Agree Agree Undecided Disagree Strongly Disagree
52. ...has potentialities for unscrupulous use by selfish individuals and groups.
Strongly Agree Agree Undecided Disagree Strongly Disagree
53. ...can eventually be a helpful tool.
Strongly Agree Agree Undecided Disagree Strongly Disagree
54. ...tends to channel thinking.
Strongly Agree Agree Undecided Disagree Strongly Disagree
55. ...can increase in its value to mankind.
Strongly Agree Agree Undecided Disagree Strongly Disagree
56. ...is in the process of growth.
Strongly Agree Agree Undecided Disagree Strongly Disagree
57. ...will present disadvantages similar to present radio programs.
Strongly Agree Agree Undecided Disagree Strongly Disagree
58. ...is fundamentally sound.
Strongly Agree Agree Undecided Disagree Strongly Disagree
59. ...has positively no value.
Strongly Agree Agree Undecided Disagree Strongly Disagree
60. ...is entirely unnecessary.
Strongly Agree Agree Undecided Disagree Strongly Disagree
61. ...appeals to almost all children.
Strongly Agree Agree Undecided Disagree Strongly Disagree
62. ...should be considered as an educational tool.
Strongly Agree Agree Undecided Disagree Strongly Disagree
63. ...is difficult to coordinate with various school subjects.
Strongly Agree Agree Undecided Disagree Strongly Disagree

"As an instrument of education, television....."

64. ...is a powerful force for good in schools.
Strongly Agree Agree Undecided Disagree Strongly Disagree
65. ...is a powerful force for evil in schools.
Strongly Agree Agree Undecided Disagree Strongly Disagree
66. ...can be an effective method in developing good citizenship.
Strongly Agree Agree Undecided Disagree Strongly Disagree
67. ...can be an effective method for teaching character education.
Strongly Agree Agree Undecided Disagree Strongly Disagree
68. ...is too commercially controlled to offer schools appropriate program time.
Strongly Agree Agree Undecided Disagree Strongly Disagree
69. ...tends to regiment thinking.
Strongly Agree Agree Undecided Disagree Strongly Disagree
70. ...is of doubtful value in as much as it may result in undesirable indoctrination.
Strongly Agree Agree Undecided Disagree Strongly Disagree
71. ...may result in better understanding of world problems.
Strongly Agree Agree Undecided Disagree Strongly Disagree
72. ...is too competitive to recognize adequately educational obligations and school needs.
Strongly Agree Agree Undecided Disagree Strongly Disagree
73. ...would be of greater benefit to education if supported by government instead of by advertising.
Strongly Agree Agree Undecided Disagree Strongly Disagree
74. ...has more advantages than disadvantages.
Strongly Agree Agree Undecided Disagree Strongly Disagree
75. ...appeals in general to the average person.
Strongly Agree Agree Undecided Disagree Strongly Disagree

"As an instrument of education, television

76. ...appeals for the most part only to the most intelligent.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
77. ...has no future in the classroom.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
78. ...has a very uncertain future in the classroom.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
79. ...is not needed in the classroom.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
80. ...is difficult to use as a supplementary device in relation to the
 various school subjects.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
81. ...is profiting from mistakes of radio programming.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
82. ...has greater appeal than radio.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
83. ...aids the individual in the worthy use of leisure time.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
84. ...has tremendous possibilities but will not be used because of ed-
 ucational inertia.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
85. ...makes the learning experience more pleasant.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
86. ...has great possibilities for mass education.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
87. ...has unlimited possibilities for teaching moral values.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
88. ...is as essential to teaching technique as is supervised study.
 Strongly Agree Agree Undecided Disagree Strongly Disagree

"As an instrument of education, television

89. ...is basically unsound as a teaching technique.
Strongly Agree Agree Undecided Disagree Strongly Disagree
90. ...is a waste of time.
Strongly Agree Agree Undecided Disagree Strongly Disagree
91. ...should be classified as "a fad and frill".
Strongly Agree Agree Undecided Disagree Strongly Disagree
92. ...is certain to be regarded as entertainment rather than education.
Strongly Agree Agree Undecided Disagree Strongly Disagree
93. ...has a wholesome emotional effect upon the child.
Strongly Agree Agree Undecided Disagree Strongly Disagree
94. ...is more appropriate for a broad program of adult education than
for specific classroom use.
Strongly Agree Agree Undecided Disagree Strongly Disagree
95. ...has a wholesome psychological effect upon the child.
Strongly Agree Agree Undecided Disagree Strongly Disagree
96. ...is detrimental to those children who are far-sighted.
Strongly Agree Agree Undecided Disagree Strongly Disagree
97. ...is unlikely to achieve its fullest educational possibilities.
Strongly Agree Agree Undecided Disagree Strongly Disagree
98. ...stimulates home study.
Strongly Agree Agree Undecided Disagree Strongly Disagree
99. ...contributes to the art of living.
Strongly Agree Agree Undecided Disagree Strongly Disagree
100. ...has more to offer than I realized at first.
Strongly Agree Agree Undecided Disagree Strongly Disagree
101. ...frightens me as to what it may become.
Strongly Agree Agree Undecided Disagree Strongly Disagree
102. ...will be better than motion pictures.
Strongly Agree Agree Undecided Disagree Strongly Disagree

103. ...will be more influential than radio in molding opinion.
Strongly Agree Agree Undecided Disagree Strongly Disagree
104. ...will be more important than motion pictures in molding opinion.
Strongly Agree Agree Undecided Disagree Strongly Disagree
105. ...has excellent possibilities for English instruction.
Strongly Agree Agree Undecided Disagree Strongly Disagree
106. ...stimulates greater interest among students in world events.
Strongly Agree Agree Undecided Disagree Strongly Disagree
107. ...is a vital resource to teaching.
Strongly Agree Agree Undecided Disagree Strongly Disagree
108. ...relieves the shortage of teachers.
Strongly Agree Agree Undecided Disagree Strongly Disagree
109. ...is difficult to tie in with various school subjects.
Strongly Agree Agree Undecided Disagree Strongly Disagree
110. ...is not applicable with present types of programs.
Strongly Agree Agree Undecided Disagree Strongly Disagree
111. ...should prove very successful in the classroom.
Strongly Agree Agree Undecided Disagree Strongly Disagree
112. ...does not have a hopeful outlook for school use.
Strongly Agree Agree Undecided Disagree Strongly Disagree
113. ...does have a hopeful outlook for school use.
Strongly Agree Agree Undecided Disagree Strongly Disagree
114. ...can be used as a supplementary device in some subjects but not all.
Strongly Agree Agree Undecided Disagree Strongly Disagree
115. ...could be used to replace textbooks in some subjects.
Strongly Agree Agree Undecided Disagree Strongly Disagree
116. ...is a powerful visual educational aid.
Strongly Agree Agree Undecided Disagree Strongly Disagree

"As an instrument of education, television

117. ...captures the interest of most children.
Strongly Agree Agree Undecided Disagree Strongly Disagree
118. ...distracts from basic school study.
Strongly Agree Agree Undecided Disagree Strongly Disagree
119. ...tends to cause children to demand exciting experiences.
Strongly Agree Agree Undecided Disagree Strongly Disagree
120. ...is of such significant values that schools will hasten to use it.
Strongly Agree Agree Undecided Disagree Strongly Disagree
121. ...adds to the teachers' loads by requiring more careful lesson plans.
Strongly Agree Agree Undecided Disagree Strongly Disagree
122. ...is most helpful in the elementary grades.
Strongly Agree Agree Undecided Disagree Strongly Disagree
123. ...is feasible for use in only a few subject areas.
Strongly Agree Agree Undecided Disagree Strongly Disagree
124. ...is feasible for use in all subject areas.
Strongly Agree Agree Undecided Disagree Strongly Disagree
125. ...has the wrong kind of advertisements for children to see.
Strongly Agree Agree Undecided Disagree Strongly Disagree
126. ...is more adaptable for class use than movies.
Strongly Agree Agree Undecided Disagree Strongly Disagree
127. ...may lighten the load of teachers.
Strongly Agree Agree Undecided Disagree Strongly Disagree
128. ...makes the study of current events more interesting.
Strongly Agree Agree Undecided Disagree Strongly Disagree
129. ...needs further technical development.
Strongly Agree Agree Undecided Disagree Strongly Disagree
130. ...interferes with home study habits.
Strongly Agree Agree Undecided Disagree Strongly Disagree

"As an instrument of education, television

131. ...relaxes the viewer!
 Strongly Agree Agree Undecided Disagree Strongly Disagree
132. ...interferes with the completion of home work.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
133. ...is practically limitless in its effect on learning.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
134. ...makes school use of motion picture films obsolete.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
135. ...has great possibilities for mass instruction.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
136. ...is feasible for use in teaching geometry.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
137. ...has few possibilities.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
138. ...lessens educational cost.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
139. ...has the advantage of motion pictures without their annoying administrative and operative problems.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
140. ...is interesting now because it is new.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
141. ...has disadvantage of high initial cost.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
142. ...is handicapped by overemphasis on programs designed for entertainment purposes.
 Strongly Agree Agree Undecided Disagree Strongly Disagree

"As an instrument of education, television

143. ...makes learning purposeful.
Strongly Agree Agree Undecided Disagree Strongly Disagree
144. ...develops greater appreciation for music.
Strongly Agree Agree Undecided Disagree Strongly Disagree
145. ...is not a substitute for regular instructional procedures.
Strongly Agree Agree Undecided Disagree Strongly Disagree
146. ...may send more young people to the oculist.
Strongly Agree Agree Undecided Disagree Strongly Disagree
147. ...makes facts more interesting and alive.
Strongly Agree Agree Undecided Disagree Strongly Disagree
148. ...makes learning a leisure activity.
Strongly Agree Agree Undecided Disagree Strongly Disagree
149. ...tends to develop lazy and passive learning attitudes.
Strong Agree Agree Undecided Disagree Strongly Disagree
150. ...has same limitations as radio.
Strongly Agree Agree Undecided Disagree Strongly Disagree
151. ...has more appeal than textbooks.
Strongly Agree Agree Undecided Disagree Strongly Disagree
152. ...is feasible for use in almost all subject areas.
Strongly Agree Agree Undecided Disagree Strongly Disagree
153. ...is positively dangerous because it interferes with a sound program.
Strongly Agree Agree Undecided Disagree Strongly Disagree

APPENDIX V A, V B, V C

A-PRIORI VALUES FOR ONE HUNDRED FIFTY-THREE
SCALE STATEMENTS

APPENDIX V A

LETTER TO TEACHERS COLLEGE PROFESSORS AND
SCHOOL SUPERINTENDENTS REQUESTING JUDGMENT
OF STATEMENTS FOR ATTITUDES SCALE

APPENDIX V B

DIRECTIONS FOR JUDGING STATEMENTS FOR
ATTITUDES SCALE

APPENDIX V C

A-PRIORI VALUES FOR
ONE HUNDRED FIFTY-THREE SCALE STATEMENTS

State- ment						State- ment						State- ment					
1	5	4	3	2	1	52	1	2	3	4	5	103	5	4	3	2	1
2	5	4	3	2	1	53	5	4	3	2	1	104	5	4	3	2	1
3	1	2	3	4	5	54	1	2	3	4	5	105	5	4	3	2	1
4	1	2	3	4	5	55	5	4	3	2	1	106	5	4	3	2	1
5	5	4	3	2	1	56	5	4	3	2	1	107	5	4	3	2	1
6	5	4	3	2	1	57	1	2	3	4	5	108	5	4	3	2	1
7	5	4	3	2	1	58	5	4	3	2	1	109	1	2	3	4	5
8	5	4	3	2	1	59	1	2	3	4	5	110	5	4	3	2	1
9	5	4	3	2	1	60	1	2	3	4	5	111	5	4	3	2	1
10	5	4	3	2	1	61	5	4	3	2	1	112	1	2	3	4	5
11	5	4	3	2	1	62	5	4	3	2	1	113	5	4	3	2	1
12	5	4	3	2	1	63	5	4	3	2	1	114	5	4	3	2	1
13	5	4	3	2	1	64	5	4	3	2	1	115	1	2	3	4	5
14	5	4	3	2	1	65	1	2	3	4	5	116	5	4	3	2	1
15	5	4	3	2	1	66	5	4	3	2	1	117	5	4	3	2	1
16	5	4	3	2	1	67	5	4	3	2	1	118	1	2	3	4	5
17	5	4	3	2	1	68	1	2	3	4	5	119	1	2	3	4	5
18	1	2	3	4	5	69	1	2	3	4	5	120	5	4	3	2	1
19	1	2	3	4	5	70	1	2	3	4	5	121	1	2	3	4	5
20	5	4	3	2	1	71	5	4	3	2	1	122	1	2	3	4	5
21	5	4	3	2	1	72	1	2	3	4	5	123	1	2	3	4	5
22	1	2	3	4	5	73	1	2	3	4	5	124	5	4	3	2	1
23	5	4	3	2	1	74	5	4	3	2	1	125	1	2	3	4	5
24	5	4	3	2	1	75	5	4	3	2	1	126	5	4	3	2	1
25	5	4	3	2	1	76	1	2	3	4	5	127	1	2	3	4	5
26	5	4	3	2	1	77	1	2	3	4	5	128	5	4	3	2	1
27	5	4	3	2	1	78	1	2	3	4	5	129	5	4	3	2	1
28	1	2	3	4	5	79	1	2	3	4	5	130	1	2	3	4	5
29	5	4	3	2	1	80	1	2	3	4	5	131	5	4	3	2	1
30	5	4	3	2	1	81	5	4	3	2	1	132	1	2	3	4	5
31	1	2	3	4	5	82	5	4	3	2	1	133	5	4	3	2	1
32	1	2	3	4	5	83	5	4	3	2	1	134	5	4	3	2	1
33	1	2	3	4	5	84	1	2	3	4	5	135	5	4	3	2	1
34	5	4	3	2	1	85	5	4	3	2	1	136	5	4	3	2	1
35	1	2	3	4	5	86	5	4	3	2	1	137	1	2	3	4	5
36	5	4	3	2	1	87	5	4	3	2	1	138	5	4	3	2	1
37	5	4	3	2	1	88	5	4	3	2	1	139	5	4	3	2	1
38	1	2	3	4	5	89	1	2	3	4	5	140	5	4	3	2	1
39	1	2	3	4	5	90	1	2	3	4	5	141	1	2	3	4	5
40	1	2	3	4	5	91	1	2	3	4	5	142	1	2	3	4	5
41	1	2	3	4	5	92	1	2	3	4	5	143	5	4	3	2	1
42	1	2	3	4	5	93	5	4	3	2	1	144	5	4	3	2	1
43	5	4	3	2	1	94	1	2	3	4	5	145	1	2	3	4	5
44	5	4	3	2	1	95	5	4	3	2	1	146	1	2	3	4	5
45	5	4	3	2	1	96	1	2	3	4	5	147	5	4	3	2	1
46	1	2	3	4	5	97	5	4	3	2	1	148	1	2	3	4	5
47	1	2	3	4	5	98	5	4	3	2	1	149	1	2	3	4	5
48	1	2	3	4	5	99	5	4	3	2	1	150	1	2	3	4	5
49	5	4	3	2	1	100	5	4	3	2	1	151	5	4	3	2	1
50	1	2	3	4	5	101	5	4	3	2	1	152	5	4	3	2	1
51	1	2	3	4	5	102	5	4	3	2	1	153	1	2	3	4	5

APPENDIX V B

November 7, 1949

LETTER TO TEACHERS COLLEGE PROFESSORS AND SCHOOL SUPERINTENDENTS

I am attempting to make an instrument to measure what secondary teachers think about the use of television as an educational tool.

At this time I need the judgments of a number of experts in the various educational areas. I should like to ask you to help me by serving as one of the judges.

The directions for checking are on a separate sheet attached to items which will comprise the scale. I shall be glad to give you a copy of the final form of the scale if you instruct me to do so.

I shall see you within a few days and hope to have your opinions and judgment concerning these items at that time.

Sincerely yours

Russell E. Helmick

REH:dk

APPENDIX V C

DIRECTIONS FOR THE JUDGES

1. There are more items in the scale at present than will be wanted in the finished form; so if you think that:
 - a. A statement is of little or no value, mark that statement with a cross - X.
 - b. A statement is ambiguous, mark that statement with a question mark - ?.
 - c. The wording could be improved, please write in changes.
 - d. Areas are omitted or slighted, please list such areas.

2. I should also appreciate your judgment as to the following:
Please check your opinion below:
 - a. The language will be understood by most secondary teachers and administrators.
YES..... NO.....

3. Finally, if you have any suggestions for further improvement of these items, I shall greatly appreciate them.

APPENDIX VI
SCORING KEY
FOR
EDUCATION-TELEVISION ATTITUDES SCALE

Statement

1	5	4	3	2	1
2	1	2	3	4	5
3	5	4	3	2	1
4	1	2	3	4	5
5	5	4	3	2	1
6	1	2	3	4	5
7	1	2	3	4	5
8	5	4	3	2	1
9	5	4	3	2	1
10	1	2	3	4	5
11	1	2	3	4	5
12	1	2	3	4	5
13	1	2	3	4	5
14	5	4	3	2	1
15	5	4	3	2	1
16	5	4	3	2	1
17	5	4	3	2	1
18	5	4	3	2	1
19	5	4	3	2	1
20	5	4	3	2	1

APPENDIX VII

EDUCATION-TELEVISION ATTITUDES
 SCORE AVERAGES OF 533 TEACHERS,
 ADMINISTRATORS AND SUPERVISORS
 BY GROUP CLASSIFICATION

All Respondents (Average)	60
Administrator-Supervisory Group	64
Superintendents	66
Principals	60
Supervisors	65
All Teachers	60
0 - 5 Years Experience	62
6 - 10 Years Experience	60
11 or more Years Experience	60
Teachers By Subjects	
Physical Education	65
Music	63
Art	62
2 or more subjects	62
Home Economics	62
Social Science	60
Industrial Arts	61
Business	60
English	59
Mathematics	56
Science	55
Foreign Language	54

APPENDIX VIII
LETTER TO PRINCIPALS CONVEYING PROGRESS OF STUDY
AND REQUESTING NAMES OF PROGRAM EVALUATORS

169

March 10, 1950

This letter is intended to indicate to you and the faculty of your high school, my appreciation for the interest shown toward the Education-Television study being made by me. The response from the teachers, administrators and supervisors of the several schools taking part in this study has been most helpful.

I can report to you that analysis of preliminary data reveals a definite interest in the part of more than 500 educators toward the use of television as a teaching tool. Also the evidence indicates that a high percentage of teachers are interested in giving assistance and direction to the development of television programs as a supplement to the educational program.

You will remember we discussed the placement of a television set at your school in order that groups of students and faculty members could view programs for the purpose of evaluating them. Just as soon as the educational programs are ready and the time of the telecast can be announced I shall make it known to you so that you can make your plans for placement of the set according to your own best situation.

In order that I can present the opinions of teachers after they have seen the television programs I shall need five or more faculty members from your school to give opinions about the programs. This simply entails the teacher making a response to a scale of 20 items by encircling an appropriate answer.

This follow-up is an important and final part of the survey. Will you please select and send me the names of five teachers who are willing to make this check. The teachers agreeing to do this must have filled in the questionnaire-scale used earlier in the survey. A blank for this list is enclosed.

I am sure that our joint efforts in completing this study will result in a worthwhile contribution toward the educational use of television.

Will you please call me at CHerry-1822, Special Broadcast Services, WLF, if you have questions regarding these details.

With best professional regards, I am

Very truly yours,

Russell E. Holmick
Principal Holmes High School
Covington, Kentucky
(on leave)

REH:sk
Enclosure

EDUCATION-TELEVISION SURVEY

TO THE PRINCIPAL:

Please select 5 teachers who previously filled in the TV-Attitude Scale, to view education-television programs for purposes of evaluating the programs. List the names in block A. Also please fill in block B and return this blank to me.

Thank you

Russell E. Helmick

A

TEACHER	POSITION OR SUBJECT TAUGHT
1.	
2.	
3.	
4.	
5.	

B

WHERE SHOULD THE TELEVISION SET BE PLACED?

School

Principal

LETTER OF INFORMATION AND INSTRUCTIONS SENT TO PROGRAM EVALUATORS

Several weeks ago I asked your principal to indicate five teachers at your school who would cooperate in evaluating four Education-Television programs which were to be telecast as a trial series for in-school use. You were named as one from your school and I am appreciative of the professional spirit which prompts you to accept responsibilities for participation in this important part of the Education-Television Survey, nearing completion, to determine some possible uses of television by schools. As you know, the purpose of telecasting these programs is to explore program design and possibilities for making the best future use of television to supplement the educational program of the school and community. Also, these programs may provide an opportunity to objectively determine attitudes toward the use of television as a supplementary or added teaching tool.

A committee of sixteen local teachers and administrators have contributed to the design and suggested ways of presenting these trial programs. This group has been given technical and professional assistance of the WLW Television staff. The committee determined that presentation which cut across the larger areas of guidance, science, and arts would serve better to illustrate typical ways in which television may be used at the present, and for this brief demonstration.

The programs may be considered in respect to the immediacy features of television - the field trip idea of bringing additional resources to the school. In all respects the programs are planned as a supplement to the school program and are intended only to illustrate possible ways for development of another teaching tool.

The programs selected for the demonstration, the dates and time of the telecasts are:

- April 11 - 10:30 - A Tour of a Television Station (Bringing outside environmental features to the school)
- April 18 - 10:30 - Science Demonstration (Show How)
- April 24 - 10:30 - Art Appreciation (Well Known Person in The Field)
- April 25 - 10:30 - Vocational Guidance (Specialist Resource)

As your part in this I am asking that you do three things in respect to the evaluation of these programs:

1. Fill in an evaluation sheet for each program.
2. Fill in the Education-Television ATTITUDES SCALE.
3. Return four completed evaluation sheets (enclosed) and the completed scale to your principal April 26.

With sincere appreciation of your splendid cooperation, I am

Very truly yours,

Russell E. Helmick
Principal, Holmes High School
Covington, Kentucky (on leave)

APPENDIX X

EDUCATION-TELEVISION PROGRAM
Evaluation Form

Prepared by Education-Television Committee to secure "teacher-pupil" reaction to four in-school telecasts.

SCHOOL, _____ TEACHER, _____
 DATE, _____ POSITION, _____

RECEPTION EVALUATION

- A. 1. Program Title _____
 2. Picture, Good _____ Fair _____ Poor _____
 3. Voice and Sound, Good _____ Fair _____ Poor _____
 4. Program Received in: Classroom _____ Auditorium (or)? _____
 5. How many pupils viewed this program? _____ Grade _____ (9) _____ (10) _____ (11) _____ (12) _____
 6. Could all see and hear? _____ Majority _____ Few _____
 7. Comments: _____

EDUCATIONAL EVALUATION

- A. Does this program provide for: (Check one or more which apply and add others which may apply)
 1. General Interest _____
 2. Group Guidance _____
 3. Relationship to subject (a) in curriculum _____
- B. Did this program maintain or indicate: (Check one)
 1. High and sustained interest _____
 2. Falling off of interest _____
 3. Little or no interest _____
- C. Would pre-program material be helpful? Yes _____ No _____
- D. Based on your judgement and experience as a teacher will you comment briefly on television as a medium for the topic of this program.
 1. What is the unique appeal? _____

 2. What are the handicaps? _____

 3. Other Comments? _____

REPORT FROM: _____
 Signature of one making this report

PERCENTAGE OF RESPONDENTS, BY CATEGORIES,
FAVORING, NOT FAVORING, AND THOSE NOT ANSWERING WITH REGARD TO
THE USE OF TELEVISION IN THE EDUCATIONAL PROGRAM OF
THE SECONDARY SCHOOL

Based on Answers to
Question 1: "Do you feel that there is any place in the
educational program for television programs
designed for school use?"

Categories	Percentage of Response		
	Yes %	No %	No Answer %
All Respondents (533)	92	3	5
Administrative Group (51)	94	0	6
Superintendents (19)	100	0	0
Principals (18)	94	0	6
Supervisors (14)	86	0	14
Teachers (482)	92	4	4
0-5 yrs. experience (98)	100	0	0
6-10 yrs. experience (81)	95	4	1
Over 10 yrs. experience (303)	89	5	6
Teachers of ...			
Art (15)	87	7	6
Business (34)	100	0	0
English (68)	87	7	0
Foreign Languages (16)	81	13	6
Home Economics (16)	88	0	12
Industrial Arts (43)	88	7	5
Mathematics (39)	95	5	0
Music (13)	100	0	0
Physical Education (23)	87	0	13
Science (31)	90	6	4
Social Science (42)	93	2	5
2 or more subjects (142)	96	2	2

Numbers in () indicate total respondents in each group

PERCENTAGE OF RESPONDENTS
WHO REACTED FAVORABLY, INDECISIVELY, NEGATIVELY, OR NOT AT ALL
TO THE IDEA OF SUPPLEMENTATION OF SUBJECT MATTER BY TELEVISION
IN SELECTED CURRICULAR AREAS OF THE SECONDARY SCHOOL

Based on Answers to
Question 2: "Do you believe that television programs
should be planned to supplement instruction
in

Areas	Percentage of Response			
	Yes %	Perhaps %	No %	No Answer %
Current Events (National)	74	9	2	15
Plays	72	10	2	16
Current Events (Local)	69	12	3	16
Music	65	13	5	17
Science	65	15	4	16
Social Science	64	15	3	18
Home Economics	60	16	4	20
Art	57	19	6	18
Speech	57	19	5	19
Health & Physical Education	55	21	6	18
English	55	21	6	18
Human Relationship	51	25	5	19
Industrial Arts	49	23	7	21
Guidance (Life-Adjustment)	48	25	7	20
The Extra-Curricular Program	45	25	8	22
Business Subjects	35	31	11	23
Foreign Language	32	32	14	22
Mathematics	18	35	24	23

PERCENTAGE OF RESPONDENTS, BY CATEGORIES,
WHO EXPRESSED OPINIONS FAVORABLE, OR UNFAVORABLE, TO
THE USE OF TELEVISION FOR BETTER SCHOOL-COMMUNITY RELATIONSHIPS

Based on Answers to

Question 10: "Should there be special television programs
directed to the parent and tax-payer, to promote
a better understanding of what is being done
in our schools?"

Categories	Percentage of Response			
	Yes %	No %	No Opinion %	No Answer %
All Respondents (533)	84	3	10	3
Administrative Group (51)	90	8	0	2
Superintendents (19)	89	0	11	0
Principals (18)	83	0	11	6
Supervisors (14)	100	0	0	0
Teachers (482)	84	3	10	3
0-5 yrs. experience (98)	87	1	12	0
6-10 yrs. experience (81)	80	6	14	0
Over 10 yrs. experience (303)	84	3	9	4
Teachers of ...				
Art (15)	87	7	6	0
Business (34)	91	0	9	0
English (68)	75	6	12	7
Foreign Languages (16)	75	6	19	0
Home Economics (16)	94	0	6	0
Industrial Arts (43)	91	7	2	0
Mathematics (39)	92	3	5	0
Music (13)	77	0	8	15
Physical Education (23)	91	4	5	0
Science (31)	81	0	13	6
Social Science (42)	86	5	9	0
2 or more subjects (142)	81	3	14	2

Numbers in () indicate total Respondents in each group

PERCENTAGE OF RESPONDENTS, BY CATEGORIES,
WHO EXPRESSED OPINIONS FAVORABLE, OR UNFAVORABLE, TO
TELEVISIONING ATHLETIC EVENTS

Based on Answers to
Question 11: "Should high schools allow their athletic
events (such as football games) to be
televised?"

Categories	Percentage of Response		
	Yes %	No %	No Answer %
All Respondents (533)	65	24	11
Administrative Group (51)	67	22	11
Superintendents (19)	68	21	11
Principals (18)	67	22	11
Supervisors (14)	64	21	15
Teachers (482)	64	25	11
0-5 yrs. experience (98)	7	71	22
6-10 yrs. experience (81)	63	32	5
Over 10 yrs. experience (303)	64	21	15
Teachers of ...			
Art (15)	67	33	0
Business (34)	65	21	14
English (68)	54	32	14
Foreign Languages (16)	69	25	6
Home Economics (16)	56	31	13
Industrial Arts (43)	79	14	7
Mathematics (39)	56	33	11
Music (13)	46	15	39
Physical Education (23)	74	17	9
Science (31)	52	35	13
Social Science (42)	69	24	7
2 or more subjects (142)	68	20	12

Numbers in () indicate total respondents in each group

PERCENTAGE OF RESPONDENTS, BY CATEGORIES,
EXPRESSING OPINIONS WITH REGARD TO COMPENSATION TO SCHOOL
FOR TELEVISIONING ATHLETIC EVENTS

Based on Answers to
Question 13: "If high school athletic events are televised,
should the High School Athletic Association
receive compensation for this privilege?"

Categories	Percentage of Response		
	Yes %	No %	No Answer %
All Respondents (533)	53	29	18
Administrative Groups (51)	53	29	18
Superintendents (19)	68	11	21
Principals (18)	56	28	16
Supervisors (14)	29	57	14
Teachers (482)	53	29	18
0-5 yrs. experience (98)	68	20	12
6-10 yrs. experience (81)	56	27	17
Over 10 yrs. experience (303)	47	33	20
Teachers of ...			
Art (15)	40	60	0
Business (34)	47	29	24
English (68)	59	15	26
Foreign Languages (16)	38	44	18
Home Economics (16)	25	38	37
Industrial Arts (43)	47	40	13
Mathematics (39)	51	33	16
Music (13)	38	38	24
Physical Education (23)	74	22	4
Science (31)	45	32	23
Social Science (42)	52	31	17
2 or more subjects (142)	59	26	15

Numbers in () indicate total respondents in each group

PERCENTAGE OF RESPONDENTS, BY CATEGORIES,
EXPRESSING OPINIONS WITH REGARD TO TELEVISIONING ATHLETIC EVENTS
SUPPORTED, OR NOT SUPPORTED, BY CERTAIN CLASSIFICATIONS OF ADVERTISING

Based on Answers to

Question 12: "For televising athletic events,

- a. No advertising should be permitted
- b. Advertising should be permitted by organizations offering recognized services
- c. Advertising permitted by acceptable products - Sports Equipment
- d. Advertising that meets station requirements is acceptable

Categories	Percentage of Response				
	To a. %	To b. %	To c. %	To d. %	No Answer %
All Respondents (533)	25	11	38	14	12
Administrative Group (51)	31	6	49	4	10
Superintendents (19)	16	11	58	0	15
Principals (18)	33	0	50	6	11
Supervisors (14)	50	7	36	0	7
Teachers (482)	24	12	37	15	12
0-5 yrs. experience (98)	12	16	47	17	8
6-10 yrs experience (81)	22	6	38	17	17
Over 10 yrs. experience (303)	28	12	33	15	12
Teachers of ...					
Art (15)	40	13	33	14	0
Business (34)	9	12	44	18	17
English (68)	21	12	37	7	23
Foreign Languages (16)	13	13	31	31	12
Home Economics (16)	31	0	31	38	0
Industrial Arts (43)	35	5	35	14	11
Mathematics (39)	26	13	31	18	12
Music (13)	31	8	38	15	8
Physical Education (23)	9	26	43	17	5
Science (31)	32	19	29	10	10*
Social Science (42)	31	12	36	17	4
2 or more subjects (142)	22	12	39	15	12

Numbers in () represent total respondents in each group

PERCENTAGE OF RESPONDENTS BY CATEGORIES
AS TO WHETHER OR NOT TELEVISION WILL BE MORE WIDELY USED THAN RADIO
AS AN EDUCATIONAL TOOL IN THE SECONDARY SCHOOL

Based on Answers to

Question 3: "Do you think that television will be more widely used
than radio as an educational tool?"

Categories	Percentage of Response			
	Yes %	No %	No Opinion %	No Answer %
All Respondents (533)	60	21	18	1
Administrative Group (51)	47	27	20	6
Superintendents (19)	47	26	27	0
Principals (18)	39	33	22	6
Supervisors (14)	57	21	7	15
Teachers (482)	61	19.9	17.4	1.7
0-5 Yrs. experience (98)	69	15	16	0
6-10 Yrs. experience (81)	68	20	11	1
Over 10 Yrs. experience (303)	56.4	21.5	19.8	2.3
Teachers of ...				
Art (15)	80	20	0	0
Business (34)	76	12	12	0
English (68)	43	34	22	1
Foreign Lanugages (16)	56	13	31	0
Home Economics (16)	63	19	13	5
Industrial Arts (43)	67	16	14	3
Mathematics (39)	56	18	26	0
Music (13)	54	15	28	8
Physical Education (23)	70	17	13	0
Science (31)	61	16	16	7
Social Science (42)	60	17	21	2
2 or more subjects (142)	65	19	15	1

Numbers in () indicate total respondents in each group

PERCENTAGE OF RESPONDENTS BY CATEGORIES
AS TO WHETHER OR NOT USE OF TELEVISION WILL EXCEED USE OF FILMS
AS AN EDUCATIONAL TOOL IN THE SECONDARY SCHOOL

Based on Answers to

Question 4: "Do you think that television will be more widely
used than film projection as an educational tool?"

Categories	Percentage of Response			
	Yes %	No %	No Opinion %	No Answer %
All Respondents (533)	20	61	17	2
Administrative Group (51)	8	73	18	1
Superintendents (19)	16	74	10	0
Principals (18)	6	72	22	0
Supervisors (14)	0	71	21	8
Teachers (482)	21	60	17	2
0-5 yrs. experience (98)	19	67	14	0
6-10 yrs. experience (81)	21	65	14	0
Over 10 yrs. experience (303)	22	56	19	3
Teachers of ...				
Art (15)	27	67	6	0
Business (34)	38	56	6	0
English (68)	19	56	22	3
Foreign Languages (16)	13	59	39	0
Home Economics (16)	38	50	12	0
Industrial Arts (43)	28	56	14	2
Mathematics (39)	21	62	15	2
Music (13)	8	62	30	0
Physical Education (23)	22	48	26	4
Science (31)	19	71	6	4
Social Science (42)	14	69	14	3
2 or more subjects (142)	24	58	17	1

Numbers in () indicate total respondents in each group

PERCENTAGE OF RESPONDENTS BY CATEGORIES
EXPRESSING AGREEMENT, NON-AGREEMENT, AND THOSE NOT ANSWERING
IN REGARD TO CHANGE OF CLASS SCHEDULE
FOR USING EDUCATION-TELEVISION PROGRAMS

Based on Answers to

Question 15: "Assuming that there are suitable and appropriate educational-television programs offered, are you in favor of necessary changes in class schedules to take advantage of these programs?"

Categories	Percentage of Response		
	Yes %	No %	No Answer %
All Respondents (533)	74	14	12
Administrative Group (51)	75	18	7
Superintendents (19)	68	26	6
Principals (18)	83	17	0
Supervisors (14)	71	7	22
Teachers (482)	74	13	13
0-5 Yrs. experience (98)	82	11	7
6-10 Yrs. experience (81)	74	12	14
Over 10 Yrs. experience (303)	71	14	15
Teachers of ...			
Art (15)	73	20	7
Business (34)	74	15	11
English (68)	63	21	16
Foreign Languages (16)	69	25	6
Home Economics (16)	81	0	19
Industrial Arts (43)	70	21	9
Mathematics (39)	64	21	15
Music (13)	100	0	0
Physical Education (23)	74	4	22
Science (31)	74	26	0
Social Science (42)	81	14	5
2 or more subjects (142)	77	8	15

Numbers in () indicate total respondents in each group

PERCENTAGE OF RESPONDENTS BY CATEGORIES
EXPRESSING AGREEMENT, NON-AGREEMENT, AND THOSE NOT ANSWERING
IN REGARD TO PLACEMENT OF TELEVISION RECEIVING EQUIPMENT
IN THE SCHOOL

Based on Answers to
Question 6: "Assuming that there will be educational-
television programs designed for school use -
would a television set in every school be desirable?"

Categories	Percentage of Response		
	Yes	No	No
	%	%	Answer
All Respondents (533)	82	13	5
Administrative Group (51)	92	4	4
Superintendents (19)	89	5	6
Principals (18)	94	0	6
Supervisors (14)	93	7	0
Teachers (482)	81	13	6
0-5 yrs. experience (98)	86	10	4
6-10 yrs. experience (81)	89	7	4
Over 10 yrs. experience (303)	77	16	7
Teachers of			
Art (15)	100	0	0
Business (34)	79	18	3
English (68)	76	19	5
Foreign Languages (16)	75	13	12
Home Economics (16)	88	6	6
Industrial Arts (43)	74	19	7
Mathematics (39)	67	21	12
Music (13)	92	8	0
Physical Education (23)	96	0	4
Science (31)	74	23	3
Social Science (42)	83	12	5
2 or more subjects (142)	85	10	5

Numbers in () indicate total respondents in each group

PERCENTAGE OF RESPONDENTS BY CATEGORIES
 EXPRESSING AGREEMENT, NON-AGREEMENT, AND THOSE NOT ANSWERING
 IN REGARD TO PLACING COST ITEM FOR TELEVISION RECEIVING EQUIPMENT
 IN THE INSTRUCTIONAL BUDGET OF THE BOARD OF EDUCATION

Based on Answers to

Question 7: "Again assuming that there will be education-television programs designed for school use - do you think that the cost of television sets for the schools, and the installation and service charges, etc. should be covered by the instructional (visual aid) budget?"

Categories	Percentage of Response		
	Yes %	No %	No Answer %
All Respondents (533)	79	11	10
Administrative Group (51)	80	16	4
Superintendents (19)	68	21	11
Principals (18)	89	11	0
Supervisors (14)	86	14	0
Teachers (482)	79	11	10
0-5 yrs. experience (98)	78	13	9
6-10 yrs. experience (81)	83	6	11
Over 10 yrs. experience (303)	78	11	11
Teachers of ...			
Art (15)	93	7	0
Business (34)	41	18	11
English (68)	87	6	7
Foreign Languages (16)	81	6	13
Home Economics (16)	63	0	37
Industrial Arts (43)	88	9	3
Mathematics (39)	74	13	13
Music (13)	77	8	15
Physical Education (23)	91	0	9
Science (31)	65	29	6
Social Science (42)	83	10	7
2 or more subjects (142)	75	12	13

Numbers in () indicate total respondents in each group

PERCENTAGE OF RESPONDENTS BY CATEGORIES
FAVORING, NOT FAVORING, AND NOT ANSWERING IN REGARD TO
USE OF A DAILY DETAILED INSTRUCTION TYPE TELEVISION PROGRAM

Based on Answers to
Question 16a: "What do you think of a daily detailed
instruction type television program?"

Categories	Percentage of Response		
	Like the Idea %	Do not like it %	No answer %
All Respondents (533)	21	69	10
Administrative Group (51)	27	57	16
Superintendents (19)	37	47	16
Principals (18)	17	78	5
Supervisors (14)	29	43	28
Teachers (482)	21	71	8
0-5 yrs. experience (98)	22	67	11
6-10 yrs. experience (81)	14	84	2
Over 10 yrs. experience (303)	22	68	10
Teachers of ...			
Art (15)	13	87	0
Business (34)	15	76	9
English (68)	18	76	6
Foreign Languages (16)	0	100	0
Home Economics (16)	38	50	12
Industrial Arts (43)	35	60	5
Mathematics (39)	10	87	3
Music (13)	15	77	8
Physical Education (23)	22	61	17
Science (31)	19	71	10
Social Science (42)	12	79	9
2 or more subjects (142)	20	72	8

Numbers in () indicate total respondents in each group

APPENDIX XI M

PERCENTAGE OF RESPONDENTS BY CATEGORIES
FAVORING, NOT FAVORING, AND NOT ANSWERING IN REGARD TO
USE OF A WEEKLY DETAILED INSTRUCTION TYPE TELEVISION PROGRAM

Based on Answers to
Question 16b: "What do you think of a weekly detailed instruction
type of television program?"

Categories	Percentage of Response		
	Like the Idea %	Do not Like it %	No answer %
All Respondents (553)	42	57	1
Administrative Group (51)	35	51	14
Superintendents (19)	53	32	15
Principals (18)	22	78	0
Supervisors (14)	29	43	28
Teachers (482)	32	58	10
0-5 Yrs. experience (98)	39	58	3
6-10 Yrs. experience (81)	27	65	8
Over 10 Yrs. experience (303)	31	56	13
Teachers of ...			
Art (15)	13	87	0
Business (34)	35	50	15
English (68)	19	69	12
Foreign Languages (16)	19	69	12
Home Economics (16)	38	44	19
Industrial Arts (43)	40	51	9
Mathematics (39)	33	64	3
Music (13)	46	46	8
Physical Education (23)	35	48	17
Science (31)	35	52	13
Social Science (42)	19	71	10
2 or more subjects (142)	38	52	10

Numbers in () indicate total respondents in each group

PERCENTAGE OF RESPONDENTS BY CATEGORIES
FAVORING, NOT FAVORING, AND NOT ANSWERING IN REGARD TO
USE OF WEEKLY SUPPLEMENTARY INSTRUCTION TYPE TELEVISION PROGRAMS

Based on Answers to
Question 16c: "What do you think of a weekly supplementary
instruction type television program?"

Categories	Percentage of Response		
	Like the Idea %	Do not Like it %	No answer %
All Respondents (533)	84	8	8
Administrative Group (51)	84	4	12
Superintendents (19)	74	11	15
Principals (18)	94	0	6
Supervisors (14)	86	0	14
Teachers (482)	84	9	7
0-5 Yrs. experience (98)	95	3	2
6-10 Yrs. experience (81)	88	5	12
Over 10 Yrs. experience (303)	80	11	9
Teachers of ...			
Art (15)	100	0	0
Business (34)	82	3	15
English (68)	84	13	3
Foreign Languages (16)	88	6	6
Home Economics (16)	69	19	12
Industrial Arts (43)	77	16	7
Mathematics (39)	77	15	8
Music (13)	92	0	8
Physical Education (23)	87	0	13
Science (31)	87	10	3
Social Science (42)	86	7	7
2 or more subjects (142)	87	5	8

Numbers in () indicate total respondents in each group

PERCENTAGE OF RESPONDENTS, BY CATEGORIES,
INDICATING PREFERENCE FOR CERTAIN AVERAGE DAILY STATION TIME ALLOTMENT
FOR TELEVISION PROGRAMS

Based on Answers to
Question 8: "How much time should television stations
allot to educational programs for school
use? _____ minutes per day (average)"

Categories	Percentage of Response						
	Minutes					More than	No
	0	15	30	45	60	60	Answer
%	%	%	%	%	%	%	
All Respondents (533)	1	5	15	6	20	19	34
Administrative Group (51)	0	2	20	6	22	12	38
Superintendents (19)	0	0	26	11	16	11	36
Principals (18)	0	0	22	0	33	11	34
Supervisors (14)	0	7	7	7	14	14	51
Teachers (482)	1	6	15	6	20	19	33
0-5 yrs. experience (98)	0	5	13	7	29	27	19
6-10 yrs. experience (81)	0	1	20	11	19	28	21
Over 10 yrs. experience (303)	2	7	14	4	18	15	40
Teachers of ...							
Art (15)	0	0	27	0	27	20	26
Business (34)	0	12	18	6	12	9	43
English (68)	1	6	12	4	15	19	43
Foreign Languages (16)	6	6	19	6	6	13	44
Home Economics (16)	0	6	31	0	13	13	37
Industrial Arts (43)	0	2	16	5	28	14	35
Mathematics (39)	3	8	13	10	26	8	32
Music (13)	0	0	15	8	23	23	31
Physical Education (23)	0	0	9	13	39	22	17
Science (31)	0	16	19	3	23	19	20
Social Science (42)	0	5	14	2	17	31	31
2 of more subjects (142)	2	5	13	6	20	25	29

Numbers in () indicate total respondents in each group

PERCENTAGE OF RESPONDENTS
EXPRESSING FAVORABLE, NON-FAVORABLE, AND NO OPINIONS WITH REGARD TO
CERTAIN TYPES OF ADVERTISING TO PAY COST OF TELECASTING

Based on Answers to

Question 14: "Assuming that the cost of education-television may be met by advertising, — are the following acceptable for sponsorship of:

	Educational Programs?			Athletic Events?		
	Yes %	No %	No Answer %	Yes %	No %	No Answer %
Insurance	73	11	16	63	10	27
Book Publishers	75	10	15	60	11	29
Automobiles	57	21	22	58	12	30
Television Mfgs.	69	12	19	62	11	27
Food	64	16	20	59	13	28
Sports Equipment	55	19	26	69	8	23
Soft Drinks	33	39	28	42	27	31
Cigarettes	9	62	28	13	54	33
Beer	7	65	28	10	56	34

PERCENTAGE OF RESPONDENTS BY CATEGORIES
WHO INDICATED PREFERENCE AS TO HOW THE COST OF EDUCATION-TELEVISION
PROGRAMS MIGHT BE MET

Based on Answers to

- Question 9: "Meeting cost of television-educational programs
a. Television station foot the bill - no advertising
b. Station may sell advertising time to any sponsor
c. Restricted sponsorship acceptable

Categories	Percentage of Response			
	To a. %	To b. %	To c. %	No Answer %
All Respondents (533)	26	10	58	6
Administrative Group (51)	35	2	59	4
Superintendents (19)	21	5	68	6
Principals (18)	28	0	67	5
Supervisors (14)	64	0	36	0
Teachers (482)	25	11	57	7
0-5 yrs. experience (98)	20	6	70	4
6-10 yrs. experience (81)	25	15	56	4
Over 10 yrs. Experience (303)	27	11	54	8
Teachers of ...				
Art (15)	46	7	40	6
Business (34)	15	12	73	0
English (68)	34	3	53	10
Foreign Languages (16)	6	25	63	6
Home Economics (16)	19	13	63	5
Industrial Arts (43)	12	9	72	7
Mathematics (39)	28	13	54	5
Music (13)	8	54	38	0
Physical Education (23)	30	9	61	0
Science (31)	32	6	55	7
Social Science (42)	33	10	48	9
2 or more subjects (142)	25	10	58	7

Numbers in () indicate total respondents in each group

PERCENTAGE OF RESPONDENTS, BY CATEGORIES,
 EXPRESSING WILLINGNESS, NON-WILLINGNESS, AND THOSE NOT ANSWERING
 WITH REGARD TO HELPING TO PLAN EDUCATION-TELEVISION PROGRAMS
 FOR SCHOOL USE

Based on Answers to
 Question 5: "Would you be willing to assist in the planning of
 television programs for school use, if given the
 opportunity?"

Categories	Percentage of Response		
	Yes %	No %	No Answer %
All Respondents (533)	60	30	10
Administrative Group (51)	76	16	8
Superintendents (19)	79	16	5
Principals (18)	72	17	11
Supervisors (14)	79	14	7
Teachers (482)	58	32	10
0-5 yrs. experience (98)	70	23	7
6-10 yrs. experience (81)	64	22	14
Over 10 yrs experience (303)	53	37	10
Teachers of ...			
Art (15)	80	7	13
Business (34)	56	32	12
English (68)	60	32	8
Foreign Languages (16)	44	50	6
Home Economics (16)	63	19	18
Industrial Arts (43)	58	40	2
Mathematics (39)	41	51	8
Music (13)	77	0	23
Physical Education (23)	83	9	7
Science (31)	35	52	13
Social Science (42)	55	36	9
2 or more subjects (142)	61	28	11

Numbers in () indicate total respondents in each group

APPENDIX XII

SUMMARY OF EVALUATIONS FOR PROGRAM ONE	XII A
SUMMARY OF EVALUATIONS FOR PROGRAM TWO	XII B
SUMMARY OF EVALUATIONS FOR PROGRAM THREE	XII C
SUMMARY OF EVALUATIONS FOR PROGRAM FOUR	XII D

TYPES AND FREQUENCIES OF COMMENTS BY PROGRAM EVALUATORS
CONCERNING UNIQUE APPEAL, AND HANDICAPS OF
"A TOUR OF A TELEVISION STATION"

UNIQUE APPEAL		HANDICAPS	
Immediacy	27	Still picture deadened	3
Novelty	16	Shows need for rehearsal	2
Stimulated interest	5	Explanations poor	1
Broad or general subject appeal	1	Material too technical	2
Possible substitute for field trip	10	Technical limitations; screen size; small details; not comparable to movies	24
Total	59	Covered too much	3
		Too much of interviewer on screen	1
		No preparation by introductory materials; too hodge-podge; not integrated	5
		Lacked finish of commercial programs	2
		Lacked action - static	2
		Not enough close-ups	6
		Weak voices	5
		Needed more illustrative material	1
		Program consumed and cannot be repeated; no chance for questions	2
		Lack of spontaneity	1
		Limited viewing facilities	1
		Appeal to a few only	1
		Total	62

TYPES AND FREQUENCIES OF COMMENTS BY PROGRAM EVALUATORS
CONCERNING UNIQUE APPEAL, AND HANDICAPS OF
"NATURE PHOTOGRAPHY IS FUN"

UNIQUE APPEAL		HANDICAPS	
For large numbers and varied interest	10	Covered too much	11
Provides hard-to-get materials	8	Cards used were indistinct	1
Provides specialist in field	5	Not enough close-ups	4
Personal appeal because of local persons and environment; intimate	2	Needed rehearsal	4
Use of actual specimens	1	Limited to certain interest groups	10
Presentation a novelty	2	Lack of pre-program material	4
		Illustrations too small; not clear	6
Total	28	Technical limitations; color; screen size; picture passes too fast	11
		Limited interest in subject	1
		Too little action - static	3
		Poor use of charts	2
		No opportunity for questions	16
		Non-coordination of television cameraman with subject	1
		Lecture procedure inadequate	5
		Total	79

TYPES AND FREQUENCIES OF COMMENTS BY PROGRAM EVALUATORS
CONCERNING UNIQUE APPEAL, AND HANDICAPS OF
"THE ETRUSCAN WARRIOR"

UNIQUE APPEAL		HANDICAPS	
Expert in field	21	No color	2
Personal appeal because of well-known persons	1	No questions possible; passive aspects	7
Community resources	14	Technical limitations; close-ups; color; picture size	23
Stimulated interest	14	Television cameramen not coordinated with topic	1
Correlated with many subjects; cut across many subject areas	12	No action; static; flat	3
Good use of illustrative material	1	No pre-program material	3
Can see picture in lighted room	1	Total	39
Immediacy	2		
Good introduction	2		
Total	68		

TYPES AND FREQUENCIES OF COMMENTS BY PROGRAM EVALUATORS
CONCERNING UNIQUE APPEAL AND HANDICAPS OF
"THE JOB IS YOURS"

UNIQUE APPEAL		HANDICAPS	
An authority or expert in field	22	Poor camera shots	1
Current immediacy	8	Technical limitations; can't be repeated	16
For large number and varied interest	16	Poor use of charts	11
Personal appeal because of local person	7	Limited to small groups	3
Personal community resources	10	Too static; lack of variety; lack of movement	6
Novelty	5	Too much lecture	7
		No opportunity for questions	7
Total	68	Lack of rehearsal evident	7
		Total	58

APPENDIX XIII

FORMAT AND SCRIPT FOR "LOOK LEARNING" PROGRAMS

A TOUR OF A TELEVISION STATION	APPENDIX	A
NATURE PHOTOGRAPHY IS FUN	APPENDIX	B
THE ETRUSCAN WARRIOR	APPENDIX	C
THE JOB IS YOURS	APPENDIX	D

TITLE SPECIAL EDUCATION PROGRAM CLIENT 199

DAY DATE APRIL 11 TIME 10:30 - 11:00 AM SCRIPT No.

WRITER

PRE-SHOW ANNOUNCEMENT -- COPY ATTACHED - CARDS 1:
STANDARD OPENING - COPY ATTACHED - CARDS :30
CAMERA 2 IN LOBBY .. SHOT OF 2 STUDENTS ON PORCH 1:30

STUDENTS; WE CAME FOR A TOUR ...

BOB; WELCOME -

NOTICE: THE SETTING OF THE BUILDING - HEIGHT OF TOWER -
IT'S RELATION TO THE SIGNAL EFFICIENCY

Q: JUST HOW DOES THE SIGNAL TRAVEL? 2:00

BOB: HERE'S THE GUY WHO CAN TELL YOU - INTRODUCES
EARP WHO EXPLAINS.

WHILE CAMERA IS ON EARP, STUDENTS AND BOB TO STUDIO #1

BOB: DESCRIBES STUDIO AND EQUIPMENT, BRIEFS TALENT AND SHOW. 10:00

Q: HOW MANY PEOPLE DOES IT TAKE TO DO A TV SHOW?

Q: WHO MAKES THE SETS? .. ON WHOSE ORDERS?

Q: I KNOW YOU CAN RECORD AND PLAYBACK A RECORDING FOR
RADIO; IS THERE ANY COUNTERPART IN TV?

Q: HOW DO YOU DO THESE TRICKS?

WHILE DEMONSTRATION OF UPSIDE DOW, DISSOLVE, SEEING DOUBLE, WRITING
APPEARS, ETC., IS GOING ON WITH FINAL REMARKS BEING LEFT TO AN
ENGINEER - THE THREE MOVE TO CONTROL ROOM.

BOB: EXPLANATION ON CONTROL, BALOP, COAX, ETC. UPON 3:00
MENTIONING FILMS ...

Q: WHY ARE THEY SO OLD? CAN YOU USE ANY FILM?

Russ: ANSWERS.

ALLOWING RUSS TO GIVE ANSWER TO KATHY ... SO THAT BOB AND LEROY CAN GET BACK TO STUDIO #1

BOB: DESCRIBES ACTIVITY IN STUDIO #1 TO LEROY (KATHY, GETS 3:00
 INTO PIX AS SOON AS SHE CAN GET DOWN THERE. SETUP
 FOR HULLABALLOO, MINIATURES, VISUAL AIDS, AND
 THEN MURPHY ENTERS, IS PRESENTED (MURPHY IN COLUMBUS
 ON AUDIO ONLY) EXTENDS WELCOME TO STUDENTS. 4.00

Q: HOW CAN YOU GET A SIGNAL FROM TEXAS?

Q: IS TV MAKING ANY MONEY?

WATCH HULLABALLOO REHEARSAL FOR A COUPLE OF MINUTES KIDS AND	2:00
KIDS AND BOB MOVE TO RECEPTION ROOM FOR GOODBYES	:45
FINAL SHOT - STUDENTS LEAVING THE BUILDING	
STANDARD CLOSE WITH NEXT WEEK'S SHOW ANNOUNCEMENT	:15

TOTAL TIME: 29:30

APPENDIX - XIII B

NATURE PHOTOGRAPHY IS FUN

Program opens on cards introducing Heger from which he will take over.

- I. Brief Introduction -- picture here showing Heger talking. Take wide enough shot to show portion of stage set-up, but keep Heger in sharp detail.
- II. Shows different types of cameras then goes into an explanation of major differences between a simple camera such as the Box camera and the speed graphic.
- III. Explains simple rules on operating cameras taking about 10 minutes.
 - a. Keep lens clean
 - b. camera steady---picture here
 - c. eye close to finder
 - d. squeeze release shutter
 - e. focus lens
 - f. shutter speed selection
- IV. Rules of composition demonstrated on several pictures -- Picture here as he points out vertical or horizontal lines or something similar.
- V. Examples of nature photography illustrated with slides and cards on easel.
- VI. Techniques of getting different nature shots
 - a. use of remote control
 - b. stalking - take picture here
 - c. use of various types of blinds - picture here
 - d. use of telephoto lens
- VII. Repeat simple rules as shown in III. Close program.

The set-up will be a table on which Heger will have his cameras and any other equipment set against a plain flat. To one side he will have his blinds and will probably move to that side of the flat when that point is demonstrated. To the other side will be the easel he uses to display the nature pictures. A picture showing this entire set-up should be made before the program begins, either with or without Heger, whichever you deem best on seeing the actual set-up keeping in mind that the shot should signify something. If you should miss this shot before the program, then get it afterwards.

WLW-T CONTINUITY

202

ANNOUNCER	PRODUCTION	MUSIC	SOUND	CONTROL	CAST
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TITLE THE WARRIOR CLIENT SPECIAL EDUCATIONAL SERIES FOR HIGH SCHOOLS

DAY MONDAY DATE APRIL 24, 1950 TIME 10:30-11:00 A.M. SCRIPT No. _____

WRITER _____

SUMMARY:

"The Warrior," third telecast in the special series of four, is designed to test the feasibility of teaching art appreciation through television. Program is based on small figure of an Etruscan Warrior, 2500 years old and one of the prize possessions of the Cincinnati Art Museum. Dramatic introduction of warrior figure is used as springboard for discussion of Etruscans, their way of life and their importance as an historical force, as well as for display and analysis of other of their art objects. Explanation is by Philip R. Adams, Director of the Cincinnati Art Museum.

Balop Card:

OUTLINE

WLW-T
and

The Cincinnati Art
Museum present

MUSIC: "L'Oreste d'Eschyle" by Milhaud, Cut 1. _ _ _ _ (Hold

for G B and increase volume until figure fills screen.
Fade under narration, bring up big and cut on cue.)

Balop Card:

THE WARRIOR

CAMERA 1: Cover shot of
Etruscan warrior revolving
on pylon with dramatic under-
lit shadow cast on backdrop.
Dolly in slowly for closeup.

NARRATOR: Today, WLW-T and the Cin-
cinnati Art Museum present the third
in a special series of programs for
schools. Today we go back through the
centuries, back, long before the
American revolution.....

(more)

Camera 2: Calendar showing APPENDIX XIII C

-2-

1776

203

(pull from calendar pad, fuzz
focus, refocus on next date.)

before Columbus discovered America...

Camera 2: Calendar shows

1192

(pull from pad, fuzz,
refocus.)

before William the Conqueror invaded England.....

Camera 2: on

1066

(pull, from pad, fuzz, refocus)

before Caesar crossed the Rubicon....

Camera 2: on

49 B.C.

(pull, fuzz, refocus)

Camera 2: on

490 B.C. Before the battle of Marathon.....

(pull)

Camera 1: cover shot of map,
dolly up to valley
of the Arno, north of
Rome.

back to a race of warrior men whose civilization reached its
peak 500 years before the birth of Christ, in the valley of
the Arno River. Today you will see some of the things
they left behind.....odd and strangely beautiful objects
which remain today as treasured works of art. Our guide in
this trip back through the ages is the Director of the
Cincinnati Art Museum, Philip R. Adams.

(more)

Camera 2: Medium shot of Adams
at map.

Cameras: stay on Adams,
art objects and map
hereafter as in-
dicated.

ADAMS: (Tells the story of the Etruscans...briefly tell their evolution as a warrior aristocracy...how they settled in Arno region, then gravitated to Umbria, then met Latin-speaking peoples, fought them, dominated them for a time, but were finally absorbed by them. Tell about sources of their wealth — copper and iron mines — reputation.

Cameras: Closeups, very close,
indicated here.

as skilled metalworkers (show hinges, situla, strygl, other objects).

Then to story of warrior figure (take from pedestal). Explain role of warrior aristocrat. (Get into minute detail on statue — spikes on feet, etc.) Tell about Etruscan religion. Describe some of superstitions they originated, i.e., throwing salt over left shoulder for good luck, etc. Tell about love of luxury. Bring in wine cup, perfume vase, etc. Tell about elaborate tombs. (burial urn can be shown here.) Battles meant danger, hence talismans like warrior figure. End on this note.)

Camera: CU of warrior back on
pedestal, then dolly
away, showing shadow as
figure revolves.

MUSIC: Milhaud, "L'Oreste d'Eschyle." (funeral chant). Cut
on cue.

Balop:

MUSIC: An RKO Finish. Resphigi "Pines of Rome" toward final
part has good crescendo.

CARD: "THE WARRIOR"

FADE UNDER:

Balop:

NARRATOR: You have been listening to "The Warrior," one of a series of programs being presented especially for audiences in Greater Cincinnati schools. Our guest today was Philip R. Adams, Director of the Cincinnati Art Museum, in Cooperation with whom the program was arranged.

CARD: "Presented by WLW-T"

Balop:

CARD: and the Cincinnati
Art Museum

(more)

Your comments on this program will be welcomed. Simply drop a card or letter to Special Broadcast Services, WLW-T, Cincinnati 2, Ohio.

STATION SIG.

MUSIC: Up and Out

PRODUCTION NOTES

Pls. bear in mind that program will be seen in large classrooms, so that large images are desirable insofar as practicable. Closeups should be used freely, especially on detail work.

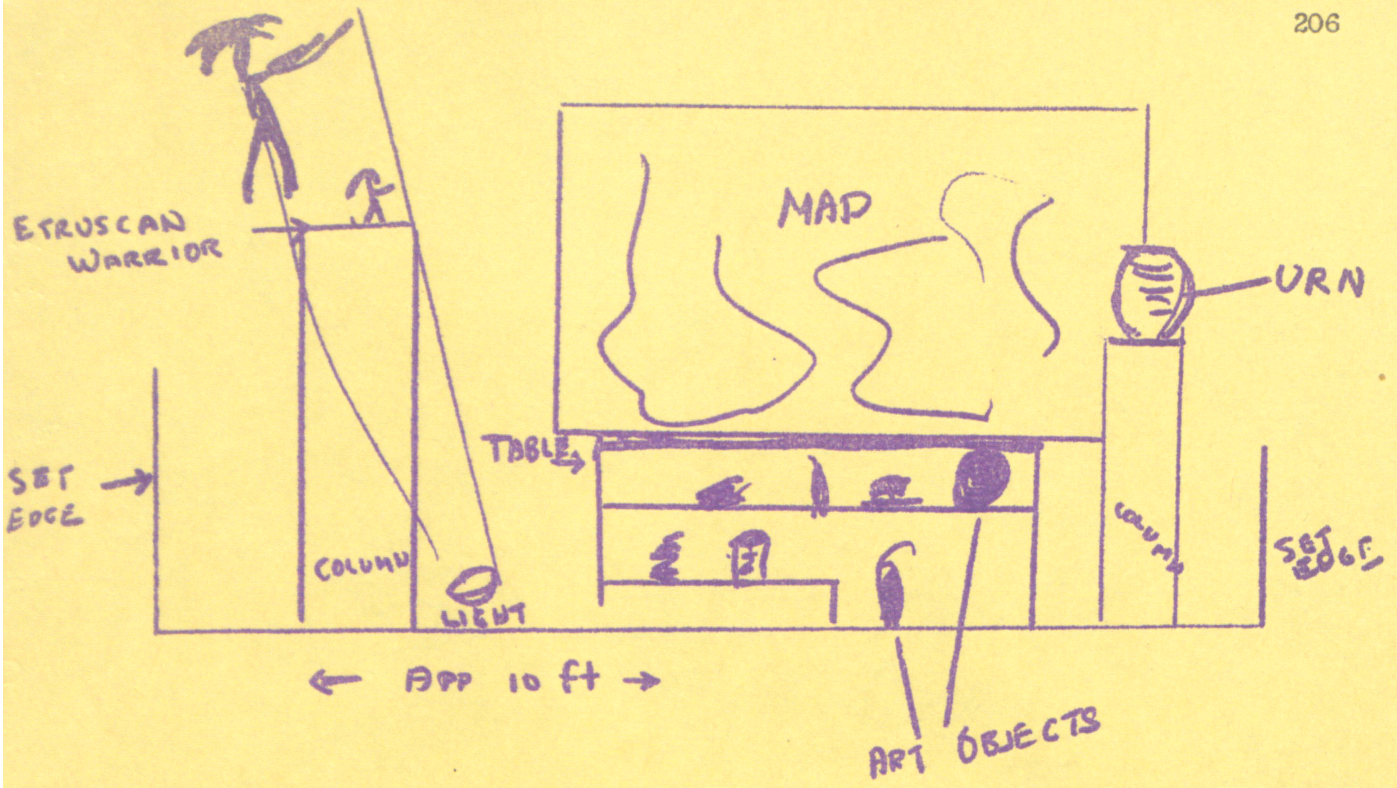
Extreme caution in handling of art objects is required. Small Etruscan warrior, for example, is valued at about \$20,000.

Plan on as many run-throughs as necessary to tie in dramatic Milhaud music chants with screen action. This is Greek chant, but very like Etruscan.

Museum is sending map, pedestals, etc. Station should have chalk and dark crayon ready for Adams' use in marking map. Small table and some sort of shelf for holding art objects should be ready at WLW-T.

Much work with spotlights desirable to get huge black shadow cast by Etruscan warrior as it revolves. Necessary also in placing turntable stop. Tentative set arrangement attached.

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WLW-T CONTINUITY

ANNOUNCER	PRODUCTION	MUSIC	SOUND	CONTROL	CAST
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TITLE THE JOB IS YOURS CLIENT _____

DAY _____ DATE _____ TIME _____ SCRIPT No. _____

WRITER _____

VOICE: HELLO LET ME INTRODUCE MYSELF. I'M THE LITTLE MAN THAT STANDS ON YOUR SHOULDER, AND WHISPERS IN YOUR EAR. YOU CAN'T SEE ME BUT YOU'LL BE HEARING MORE FROM ME. I'D LIKE TO TELL ABOUT A FRIEND OF MINE. HIS NAME IS JOE. JOE WAS INTERVIEWED FOR A JOB LESS THAN A MONTH A GO

VOICE FADES OUT ... DISSOLVE INTO 35 SHOT OF JOE LOOKING VERY SMALL AND SCARED

VOICE: JOE, THE LADY SAID MR. KLINE WILL SEE YOU NOW. REMEMBER ... YOU WANT TO SELL YOURSELF. HE DOESN'T OWE YOU A JOB. IT'S UP TO YOU TO PROVE THAT HE NEEDS YOU JUST AS MUCH AS YOU NEED THE WORK.

JOE STANDS .. LOOKS GRIM .. AND WALKS OFF SET

KLINE: COME IN, YOUNG MAN.

JOE: I'M JOE HANSON, MR. KLINE. YOU WANTED TO SEE ME.

KLINE: YES, JOE. SIT DOWN. I HAVE YOUR APPLICATION HERE. I WANT TO TALK TO YOU A LITTLE ABOUT YOURSELF. JUST WHAT KIND OF A JOB DO YOU WANT WITH US?

JOE: I'LL TAKE ANY KIND OF A JOB.

KLING: ARE YOU INTERESTED IN ANY SPECIAL TYPE OF WORK?

VOICE: DON'T LOOK SO PUZZLED, JOE. IF YOU DON'T KNOW WHAT HE MEANS, ASK HIM.

JOE: I'M NOT SURE I KNOW WHAT YOU MEAN BY SPECIAL TYPE OF WORK.

KLING: WELL, LET ME PUT IT THIS WAY. ARE YOU INTERESTED IN OFFICE WORK OR FACTORY WORK?

JOE: I HAD FACTORY WORK IN MINE, SIR. SOME TYPE OF MECHANICAL WORK...BUT I'M NOT ABSOLUTELY POSITIVE. MR. KLING, WHAT QUALITIES SHOULD I HAVE TO ADVANCE IN MECHANICAL WORK:

KLING: ANSWER

I BELIEVE YOU SAID ON YOUR APPLICATION THAT YOU COMPLETED HIGH SCHOOL. IS THAT RIGHT?

JOE: YES, I GRADUATED FROM MIDWEST HIGH SCHOOL THE FIRST PART OF THIS MONTH.

KLING: WHAT TYPE OF COURSE DID YOU TAKE?

VOICE: HE WANTS TO KNOW IF YOU HAVE HAD ANY TRAINING ALONG A MECHANICAL LINE. TELL HIM ABOUT YOUR COURSE IN MANUAL TRAINING ...AND....

JOE: I TOOK A GENERAL COURSE WHICH INCLUDED CLASSES IN MANUAL TRAINING FOR TWO YEARS. I WORKED IN WOOD AND METAL. I ALSO HAD TWO SEMESTERS OF DRAFTING. MR. RICHLEY, OUR DRAFTING TEACHER, TAUGHT US BLUE PRINT READING AND DRAFTSMANSHIP. WE EVEN MADE OUR OWN BLUE PRINTS.

KLING: DO YOU LIKE DRAFTING?

- JOE: Yes, I do.
- VOICE: REMEMBER HOW YOU WEREN'T AT ALL SURE YOU'D LIKE DRAFTSMANSHIP. YOU EVEN TRIED TO MANEUVER THINGS SO THAT YOU WOULDN'T TAKE IT ... LUCKY FOR YOU THAT MR. BROWN WARNED YOU THAT YOU WOULD NEED THAT COURSE ALONG WITH THE BLUEPRINT READING IF YOU MEANT TO WORK IN THE MECHANICAL LINE. VOCATIONAL GUIDANCE IS IMPORTANT.....
- KLINE: HAVE YOU EVER HELD A PART TIME JOB, OR WORKED WHILE ON VACATION?
- VOICE: HE WANTS TO KNOW IF YOU'RE SELF RELIANT, JOE.
- JOE: I WORKED AS A STOCK BOY AT POTTER'S LAST YEAR.
- KLINE: DID YOU LIKE YOUR JOB?
- JOE: I LIKED IT ALL RIGHT. I EARNED SOME MONEY FOR CLOTHES TO GO BACK TO SCHOOL, BUT I WOULDN'T WANT IT AS A REGULAR JOB. I THINK I'D REALLY LIKE TO A TOOL MAKER NECESSITY FOR STARTING NEAR THE BOTTOM. REASONS WHY?
- KLINE: DID YOU EVER HAVE ANY OTHER JOB?
- JOE: I USED TO CARRY PAPERS IN NORTH NORWOOD.
- VOICE: TELL HIM MORE, JOE. HE CAN'T COME RIGHT OUT AND ASK YOU IF YOU'RE AMBITIOUS AND WILLING TO WORK TO GET AHEAD. YOU SEE, JOE, WHAT YOU CAN DO, IS DETERMINED BY WHAT YOU HAVE LEARNED IN THE WAY OF KNOWLEDGE AND HOW YOU HAVE DEVELOPED YOUR OWN PARTICULAR SKILLS. WHAT YOU WILL DO IS REVEALED BY THE ATTITUDES YOU HAVE FORMED...TOWARD OTHER PEOPLE, EARNING A LIVING, YOUR USE OF LEISURE TIME, AND YOUR OTHER RESPONSIBILITIES.

- JOE: I CARRIED PAPERS FROM THE TIME I WAS 12 UNTIL I WAS 14, AND MR. LANEHOUT, MY BOSS, GAVE ME THREE RAISES. ON SATURDAY MORNINGS I USED TO COLLECT FOR HIM, AND TRY TO GET NEW SUBSCRIPTIONS.
- VOICE: GOODBOY, JOE, THAT ALSO HELPS TO SHOW YOU'RE HONEST.
- KLINE: I LIKE TO SEE A BOY WITH AMBITION, JOE. BY THE WAY, HOW MANY ARE THERE IN YOUR FAMILY?
- JOE: I HAVE TWO BROTHERS AND A SISTER.
- KLINE: WAS IT NECESSARY TO HELP YOUR PARENTS FINANCIALLY?
- JOE: NO, I WANTED TO EARN MY OWN MONEY. I COULD HAVE MORE SPENDING MONEY THAT WAY.
- KLINE: DID YOU SAVE ANY OF IT, JOE?
- VOICE: LUCKY FOR YOU, JOE, YOU LEARNED THE VALUE OF A DOLLAR.
- JOE: I BOUGHT CLOTHES WITH MOST OF IT, BUT I DID SAVE \$78.00.
- KLINE: ARE YOU LOOKING FOR A PERMANENT JOB?
- VOICE: YOU LEARNED FROM THAT PERSONNEL MAN WHO TALKED AT YOUR SCHOOL ABOUT THAT, JOE? EVERY TIME A NEW EMPLOYEE IS HIRED THE COMPANY REALLY IS MAKING AN INVESTMENT IN THAT INDIVIDUAL. AND IN SOME CASES, HE SAID, THE INVESTMENT IS NOT COMMENSURATE WITH THE LENGTH OF SERVICE. NATURALLY AN EMPLOYER WOULD RATHER MAKE HIS INVESTMENT IN SOMEONE WHO MEANS TO STAY LONG ENOUGH TO PAY OUT. IN LOTS OF CASES, YOU REALLY LOSE MONEY ON A NEW EMPLOYEE ... FOR MAYBE AS LONG AS THE FIRST 6 MONTHS.
- JOE: YES I AM, MR. KLINE.

- KLINER: WHAT ABOUT COLLEGE? HAVE YOU EVER CONSIDERED GOING TO COLLEGE?
- JOE: YES, I'D LIKE TO GO TO COLLEGE, BUT MY PARENTS CAN'T AFFORD IT.
- KLINER: WHY DID YOU APPLY HERE FOR WORK?
- VOICE: HE WANTS TO KNOW WHY YOU THINK THIS IS A GOOD PLACE TO WORK.
- VOICE: YOU SEE, JOE, HAPPY PEOPLE DO THE BEST WORK. ANY EMPLOYER WOULD WANT TO KNOW WHY YOU CHOSE TO APPLY AT HIS COMPANY. HE REALLY WANTS TO KNOW IF YOU CHOSE TO COME THERE BECAUSE YOU FEEL IT'S A FINE COMPANY TO BE IDENTIFIED WITH ... AND WHETHER YOU COULD HAVE A REAL PRIDE IN THE PRODUCT THEY MANUFACTURE. YOU KNOW HOW YOU LEARNED THAT EVERY SINGLE INDIVIDUAL IS A COMPANY CAN BE AN EMISSARY OF GOOD WILL FOR THE PLANT. EACH EMPLOYEE IS A PUBLIC RELATIONS INSTRUMENT ... AND INSTRUMENT THROUGH WHICH OUTSIDERS GET A VIEW OF THAT COMPANY. OF COURSE, THE MAN WANTS AN EMPLOYEE WHO CAN HAVE REAL PRIDE IN HIS COMPANY.
- JOE: MY UNCLE WHO WORKS HERE LIKES IT AND HE FELT THAT I WOULD ALSO.
- KLINER: DO YOU KNOW WHAT OUR COMPANY MAKES?
- JOE: YES, WE USED YOUR PRODUCTS IN OUR SCHOOL.
- KLINER: WELL, JOE, IF WE DID GIVE YOU A JOB WOULD YOU BE WILLING TO TAKE ADDITIONAL NIGHT SCHOOL COURSES TO ADVANCE YOURSELF?

- VOICE: OF COURSE YOU KNOW WHAT THAT MEANS. HE WANTS TO KNOW IF YOU'RE LOOKING IN TO THE FUTURE, AND ARE YOU WILLING TO WORK HARDER THAN NECESSARY TO FURTHER YOURSELF.
- JOE: YES, MR. KLINE, I WANT TO GET AHEAD. EVEN IF I CAN'T GO TO COLLEGE, I'LL TAKE ALL THE COURSES I CAN.
- KLINE: JOE, IN HIGH SCHOOL, WHAT EXTRA-CURRICULAR ACTIVITIES DID YOU TAKE PART IN?
- VOICE: HE WANTS TO KNOW IF YOU CAN GET ALONG WITH OTHER PEOPLE. SOME FOLKS LIKE TO WORK WITH THINGS. SOME LIKE TO WORK WITH OTHER PEOPLE AND OF COURSE, SOME LIKE BOTH.
- KLINE: STORY SHOWING PART TEMPERMENT PLAYS IN THE RIGHT JOB FOR YOU.
- JOE: I BELONG TO THE STUDENT COUNCIL AND THE HI Y (THAT'S THE HIGH SCHOOL YMCA).
- VOICE: NOW JOE, IT'S NICE TO BE MODEST, BUT LET'S NOT OVER-DO IT. TELL HIM YOU WERE PRESIDENT.....
- JOE: I WAS CLASS PRESIDENT OF MY JUNIOR YEAR, AND I WAS STUDENT COUNCIL PRESIDENT IN MY SENIOR YEAR. AND I WAS TRESURER IN THE SCHOOL GLEE CLUB. I WORKED WITH THE ...
- VOICE: SLOW DOWN, JOE, HE'S STARTING TO GET BORED.
- KLINE: DO YOU HAVE ANY HOBBIES, JOE?
- VOICE: NATURALLY HE'S INTERESTED IN WHAT YOU DO IN YOUR SPARE TIME.
- JOE: I BUILD MODEL PLANES AND TRAINS. I GUESS THAT'S ONE

OF THE REASONS I'M INTERESTED IN MECHANICAL THINGS.

KLINE:

THAT'S A GOOD SIGN, JOE. CITIES EXAMPLE OF PERSON WHO ADVANCED BECAUSE OF LEISURE TIME ACTIVITY.

VOICE:

I TOLD YOU CONSTRUCTIVE HOBBIES WORE NEVER A WASTE OF TIME. AREN'T YOU GLAD YOU DIDN'T WASTE YOUR TIME CO COLLECTING FUNNY BOOKS WHEN YOU WERE IN GRADE SCHOOL.

JOE:

I PLAYED FOOTBALL ... BUT I WASN'T FIRST STRING.

VOICE:

THAT'S GOOD, JOE! EVERYONE ISN'T GOOD AT EVERYTHING. ADMISSION THAT YOU WEREN'T A FOOTBALL STAR WILL HELP HIM SEE YOU'RE AN ADJUSTED INDIVIDUAL. YOU DON'T FEEL PERSECUTED OR MARTYRED ... AND YOU DON'T HAVE TO BE TOPS IN EVERYTHING TO ENJOY IT!

KLINE:

WELL, JOE, SINCE YOU ARE INTERESTED IN FACTORY WORK, IT WILL BE NECESSARY FOR YOU TO TAKE OUR PERSONNEL TESTS TO DETERMINE YOUR APTITUDE AND ABILITY.

JOE:

I'LL DO MY BEST, MR. KLINE.

KLINE:

AD LIB ON ADVANTAGES AND DISADVANTAGES OF JOE'S INTER-VIEW AND PHILOSOPHY OF EMPLOYERS ON SECURING EMPLOYEES.

WLW-T CONTINUITY

ANNOUNCER	PRODUCTION	MUSIC	SOUND	CONTROL	CAST
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TITLE LIVE INTRO TO TV-EDUCATION SERIES "LOOK LEARNING"
 CLIENT _____

DAY _____ DATE _____ TIME _____ SCRIPT No. _____

WRITER _____

ANNCR: THE CROSLY BROADCASTING CORPORATION

HAS BEEN METICULOUS IN ITS ATTEMPTS

TO AVOID ANY FEELING ON THE PART OF

THE PUBLIC OR THE EDUCATOR THAT THE

STUDY OF WHICH THIS TRIAL SERIES OF

TELECASTS IS A PART, HAS BEEN DETERMINED BY

COMMERCIAL INTERESTS. THEREFORE, IT HAS BEEN

DETERMINED BY THE MANAGEMENT THAT CROSLY

TV RECEIVERS BE NOT EXCLUSIVELY USED IN THE

CLASSROOMS. TO AVOID ANY SUCH FEELING AS

WIDE A CHOICE AS POSSIBLE OF TELEVISION

RECEIVERS HAS BEEN PLACED IN THE SHHOOLS

AND WE ACKNOWLEDGE WITH APPRECIATION THE

COOPERATION OF:

CARDS:

(ANNOUNCER READS NAMES
 OF DISTRIBUTORS AND
 THEIR TV SETS AGAINST
 CARDS)

BIMEL CO. ADMIRAL

HUGHES-PETERS INC. EMERSON

GENERAL ELECTRIC GENERAL
 SUPPLY CORP. ELECTRIC

GRAYBAR ELE CTRIC RAYTHEON
 CO.

OHIO APPLIANCES RCA
 INC.

GRIFFITH ZENITH
 DISTRIBUTING CORP.

LOOK LEARNING .. TV EDUCATION SERIES...PAGE...2

ANNCR: THIS IS THE LAST IN A SERIES OF
FOUR TRIAL PROGRAMS DESIGNED TO
SUPPLEMENT THE EDUCATION OF HIGH
SCHOOL STUDENTS.

TODAY'S PROGRAM IS ENTITLED:

"THE JOB IS YOURS,"

FEATURING MR. R.E. KLINE,
DIRECTOR OF EDUCATION-TRAINING
OF THE NATIONAL CASH REGISTER
COMPANY, DAYTON, OHIO

CARD: THE JOB IS YOURS

CARD.. FEATURING MR.R.E.
KLINE, DIRECTOR EDUCATION
TRAINING NATIONAL CASH
REGISTER CO. DAYTON, O.

LOOK LEARNING ??????.....CLOSING.....3

ANNCR: "THE JOB IS YOURS" HAS BEEN PRESENTED CARD: LOOK LEARNING
AS THE FINAL PROGRAM IN A TRIAL SERIES
DESIGNED TO SUPPLEMENT THE EDUCATION OF
HIGHSCHOOL STUDENTS. WE WISH TO GRATEFULLY
ACKNOWLEDGE THE REAL COOPERATION AND INTEREST
OF THE NATIONAL CASH REGISTER COMPANY OF DAYTON,
OHIO, AND THE PERSONAL ASSISTANCE OF THE NCR'S
MR. ROBERT E. KLINE, DIRECTOR OF EDUCATION-
TRAINING. WE SHALL WELCOME THE REACTION OF
OUR VIEWERS ON THIS SERIES OF PROGRAMS. THE
FOUR TRIAL PROGRAMS HAVE BEEN PREPARED AS A
PART OF THIS COMPANY'S EFFORT TO DETERMINE
WHETHER OR NOT TV CAN BE AN EFFECTIVE TEACHING
TOOL. DO YOU FEEL THAT THIS WOULD BE A WELCOME
ADDITION TO CLASSROOM EDUCATION? DO YOU FEEL
THAT YOU AS A HOME VIEWER WOULD FIND INTEREST
AND INFORMATION FROM SUCH PROGRAMS?
IF YOU ARE A PARENT WE WOULD PARTICULARLY LIKE
TO HAVE YOUR REACTION. JUST SEND US A CARD
OR LETTER TO LOOK LEARNING, CARE OF WLW TELEVISION,
CINCINNATI 2, OHIO.

APPENDIX XIV

LETTER TO PRINCIPALS REQUESTING COOPERATION
IN EDUCATION-TELEVISION SURVEY

APPENDIX XIV A

LETTER TO SPECIAL TEACHERS, SUPERVISORS,
AND SUPERINTENDENTS REQUESTING COOPERATION
IN EDUCATION-TELEVISION SURVEY

APPENDIX XIV B

LETTER TO PRINCIPALS AND SUPERINTENDENTS
EXPRESSING THANKS FOR COOPERATION
GIVEN TO SURVEY

APPENDIX XIV C

ANNOUNCEMENT OF THE "LOOK LEARNING"
PROGRAMS SENT TO SCHOOL SUPERINTENDENTS
OF WLW-T AREA

APPENDIX XIV D

APPENDIX XIV A

LETTER TO PRINCIPALS, OCTOBER 24, 1949

I am the holder of The Crosley Broadcasting Corporation Fellowship for the study of the relationship of television and education. As you know, the study is under the direction of the Teachers College, University of Cincinnati.

The purpose of the study is to find out what school people think about the educational use of television.

I would like your advice and counsel concerning this problem. When I call you, I hope you can find a convenient time for some discussion of this project with me.

Sincerely yours,

Russell E. Helmick

REH:dk

APPENDIX XIV B

LETTER TO SPECIAL TEACHERS, SUPERVISORS AND SUPERINTENDENTS

January 18, 1950

I am making a study on television and education under the auspices of the Teachers College, University of Cincinnati.

Will you please participate in this study by spending about forty-five minutes checking the enclosed questionnaire and scale which I am using to collect opinions from selected superintendents and supervisory officers in the Cincinnati area.

Because of your special qualifications, I value your reply and will appreciate your response. A stamped envelope addressed to me is enclosed. Thank you for your consideration.

Sincerely yours,

Russell E. Helmick
Principal Holmes High School
Covington, Kentucky
(on leave)

REH:sk

APPENDIX XIV C

LETTER TO PRINCIPALS, APRIL 26, 1950

The "pilot" education-television program series has now been completed. These presentations were a part of the education-television study which began last summer. The survey could not have been made without the splendid assistance given by you and the members of your staff.

It is my sincere hope that the results of the education-television study may provide further impetus for the appropriate use of television as an educational tool. As soon as possible we shall make every effort to furnish you and your staff a summary of the survey and other available information in reference to other outcomes of the television study.

Let me thank you again for your cooperation and the willing assistance given throughout the progress of the survey.

Sincerely yours,

Russell E. Helmick, Principal
Holmes High School
Covington, Kentucky
(on leave)

REH:sk

APPENDIX XIV D

ANNOUNCEMENT OF THE "LOOK LEARNING" PROGRAMS
SENT TO SCHOOL SUPERINTENDENTS OF WLW-T AREA

"LOOK LEARNING"

CALLING YOUR ATTENTION TO FOUR SPECIAL TELECASTS
April 11, 18, 24 & 25, 10:30 - 11:00 A.M. Over WLW-T.

As a part of the WLW Television Education Study we are calling to your attention a special series of four telecasts designed for "in school" consumption. The first of these programs will be presented this Tuesday, April 11, 10:30 - 11:00 AM. We hope that you will find it possible to view this important series and will give us your reaction.

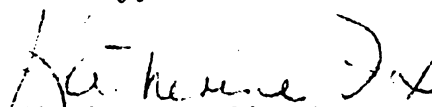
The following subject areas will be featured:

- | | | | | |
|----|---|----------|---|--|
| #1 | - | April 11 | - | THIS IS TELEVISION
Behind the scenes in TV station. |
| #2 | - | April 18 | - | NATURE PHOTOGRAPHY IS FUN |
| #3 | - | April 24 | - | THE ETRUSCAN WARRIOR
The culture of the Etruscans and their contemporaries as interpreted by the Director of the Cincinnati Art Museum. |
| #4 | - | April 25 | - | THE JOB IS YOURS
Career guidance. |

These programs have been planned in co-operation with representatives of public and parochial secondary schools in Cincinnati and vicinity. Fourteen television sets have been installed in the various local high schools where selected student groups will view the series. Evaluation of student and teacher reaction will be a final step in the television Education Study which began last June with the establishment of a fellowship at the University of Cincinnati for this purpose.

Your comments on these experimental programs will be gratefully received.

Cordially,


Katharine Fox, Director
Special Broadcast Services
WLW

KF:sk

TELEVISION HISTORY

by

J. M. McDONALDOctober 20, 1949

- I First television activity began in Engineering Department, with equipment design and development, under direction of R. J. Rockwell, in April, 1937.
- II One engineer added in April 1937, followed by 3 more in February 1939 for TV development and construction.
- III First application for TV station Construction Permit was made in February 3, 1939.
- IV 48th. floor of Carew Tower leased for TV purposes on March 27, 1939.
- V First public demonstration of TV in Cincinnati occurred April 26, 1939, under direction of R. J. Rockwell, with equipment designed and constructed in Broadcast Engineering Labs.
- VI First Construction Permit for TV station was granted August 28, 1940 with call letters W8XCT.
- VII First TV test transmission made in April 1941 shortly before construction stopped due to transferring TV engineers to factory for war work.
- VIII First authorization to begin equipment test transmissions granted May 22, 1946 and transmissions began immediately.
- IX First application for license for experimental TV Broadcast Station W8XCT was made February 26, 1947.
- X Regular experimental license granted W8XCT March 24, 1947.
- XI On January 8, 1948 Commission authorized use of W8XCT equipment to operate on commercial basis using call letters WLFT. Regular commercial program service started this date.
- XII Application for construction permit for commercial TV station for Cincinnati filed November 10, 1944. Assignment of call letters WLFT requested. Application placed in pending file for war duration.
- XIII Construction Permit for WLFT granted November 21, 1946.
- XIV Physical construction WLFT tower started in Clifton November 4, 1947. Tower completed March 1, 1948.

- XV Broadcasting started from WLWT at Mt. Olympus April 9, 1948. Use of old experimental equipment of W8XCT at Carew Tower discontinued April 27, 1948.
- XVI Application for Construction Permit for TV station in Columbus filed December 28, 1944. Call letters WLWC requested. Placed in pending file for war duration.
- XVII Construction Permit for WLWG granted November 21, 1946.
- XVIII Physical construction WLWC started September 1948.
- XIX WLWC equipment test transmissions started March 7, 1949.
- XX WLWC commercial operation began June 16, 1949.
- XXI Application for Construction Permit for TV station in Dayton filed February 23, 1945. Call letters WLWD requested. Placed in pending file for war duration.
- XXII Construction Permit granted for WLWD on April 4, 1947.
- XXIII Physical construction WLWD started September 48.
- XXIV WLWD equipment test transmissions started March 7, 1949.
- XXV Commercial operation WLWD began March 15, 1949.
- XXVI Network service to WLWT, WLWD and WLWC started September 25, 1949. Co-ax Cable.