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A STUDY OF THE USES OF TELEVISION IN THE EDUCATION OF PUBLIC SCHOOL TEACHERS BY EDUCATIONAL INSTITUTIONS IN THE UNITED STATES DURING 1958-1959

A Thesis

Presented to

the Faculty of the Department of Speech

Indiana State Teachers College

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Frank Hayashida
January 1960



THESIS APPROVAL SHEET

The thesis of FRANK HAYASHIDA

Contribution of the Graduate School, Indiana State
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A STUDY OF THE USES OF TELEVISION IN THE EDUCATION OF
PUBLIC SCHOOL TEACHERS BY EDUCATIONAL INSTITUTIONS IN
THE UNITED STATES DURING 1958-1959
is hereby approved as counting toward the completion of
the Master's Degree in the amount of 8 quarter hours'
credit.
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Approval of Associate Dean of Instruction:
Elmer J. Clark February 2, 1960
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CHAPTER I

THE INTRODUCTION AND PRESENTATION OF THE PROBLEM

With the close of World War II, each new year saw the public schools across the nation becoming more and more crowded and enrollments becoming larger and larger. With this continually growing enrollment came a demand for more teachers—a demand so great that at the present time there is a critical shortage of instructors.

The teacher-shortage crisis is of concern to educators across the country and has prompted many colleges and universities to experiment with the use of television in teacher training programs.

This research will present a study of television, used as a tool of instruction by and for educators, in the preparation of public school teachers.

Statement of the problem. It is the purpose of this study to survey and to compare current practices in the use of television by educational institutions in the training of teachers for the public schools: to determine the extent these practices are effective as evaluated by the colleges or public school systems which use television in the training of teachers; to report the opinions of those involved in this

type of experiment as to the probable future uses of television in teacher training programs.

Importance of the study. This study will be important for several reasons: First, such a study will be important for all concerned with teacher training and with television, as material of this nature has not been previously compiled into one complete report. Second, the current emphasis on continued and upgraded teacher training programs, represented in part on the local area with scholarship funds and exemplified in part on the national level with the National Defense Education Act, makes this study important and valuable. Third, the teacher shortage and the increasing enrollments in the public schools and the colleges over the country are a constant reminder of the need to examine any and all methods for the effective education of teachers. Television as a tool in teacher education is important in helping to provide more and better teachers.

¹See Appendix O.

CHAPTER TWO

THE TYPE OF MATERIAL AVAILABLE FOR THE STUDY

Because no university, college of education, state supported department of education, research organization, education foundation, or philanthropic society has ever issued a complete report of the material with which this study was concerned, it was difficult to secure printed books or authoritative comments by people in the field of education on the use of television for the training of teachers.

Individual institutions, some organizations such as the Chicago Board of Education, and a few foundations have published pamphlets, booklets, and some reports on a yearly or first time basis. Whenever possible, the author collected these materials for reference. When this was not possible, he sent letters to organizations directly involved with educational television for some details to their program. Sometimes articles describing television studies involving experiments in different institutions or organizations were checked for information.

As a result of letters sent to organizations and agencies, over twenty pamphlets were received which gave

definite facts and opinions concerning the use of television in the training of teachers, and are listed in the bibliography.

Many of these pamphlets, booklets, and reports dealt primarily with the use of television in the presentation of courses over television and had little to do with the use of television in the training of teachers. Because of the material concerning teacher training through television these booklets and opinions reflected a valuable part of the literature which the author found was available in this field.

Because no publisher had issued a book containing authoritative facts, figures, and opinions on the phase of education of teachers by television, the author prepared for utilization a questionnaire to obtain these opinions and these facts. This questionnaire was sent to those individuals directing the use of television in the institutions concerned with the type of training with which this study was concerned. The pertinent information thus obtained would provide additional information relating to the study as a whole.

A questionnaire was mailed to all of the institutions which were listed as using television as part of the teacher training program by the Joint Council on Educational Television and the Committee on Television of the American Council on Education. In addition, a questionnaire was sent to those colleges and universities which were using television as a

teacher education device. Questionnaires were sent to those educational institutions which are listed below:

- 1. Abilene Christian College, Abilene, Texas.
- 2. Brockport State Teachers College, Brockport, N. Y.
- 3. California College of Arts and Crafts, Oakland, California.
- 4. Central Washington College, Ellensburg, Washington.
- 5. Chico State College, Chico, California.
- 6. Concordia Teachers College, Seward, Nebraska.
- 7. Dominican College of San Rafael, San Rafael, California.
- 8. Eastern Montana College of Education, Billings, Montana.
- 9. Fisk University, Nashville, Tennessee.
- 10. Fresno State College, Fresno, California.
- 11. Gallaudet College, Washington, D. C.
- 12. Georgia Teachers College, Collegeboro, Georgia.
- 13. Henderson State Teachers College, Arkadelphia, Arkansas.
- 14. Illinois State Normal University, Normal, Illinois.
- 15. Iowa State Teachers College, Ames, Iowa.
- 16. Kansas State Teachers College, Emporia, Kansas.
- 17. Millersville State Teachers College, Millersville, Pennsylvania.
- 18. New Jersey State Teachers College, Upper Montclair, New Jersey.
- 19. Notre Dame University, Notre Dame Indiana.

- 20. Ohio State University, Columbus, Ohio.
- 21. Oregon College of Education, Monmouth, Oregon.
- 22. Rhode Island College of Education, Providence, Rhode Island.
- 23. Sacramento State College, Sacramento, California.
- 24. San Diego State College, San Diego, California.
- 25. San Francisco State College, San Francisco, California.
- 26. San Jose State College, San Jose, California.
- 27. Southwest Texas State Teachers College, San Marcos, Texas.
- 28. Stanford University, Stanford, California.
- 29. State University of Iowa, Iowa City, Iowa.
- 30. Teachers College, Columbia University, New York, New York.
- 31. University of Arizona, Tucson, Arizona.
- 32. University of California, Berkeley, California.
- 33. University of Florida, Gainesville, Florida.
- 34. University of Georgia, Athens, Georgia.
- 35. University of Minnesota, Minneapolis, Minnesota.
- 36. University of North Dakota, Grand Forks, North Dakota.
- 37. University of Toledo, Toledo, Ohio.
- 38. Utah State University, Logan, Utah.
- 39. Wayne State University, Detroit, Michigan.
- 40. Western Illinois State College, Macomb, Illinois.
- 41. Alameda County School System, Alameda, California.

- 42. Baltimore County School System, Towson, Maryland.
- 43. California State Department of Education, Sacramento, California.
- 44. Evansville School System, Evansville, Indiana.
- 45. Fresno County School System, Fresno, California.
- 46. Jefferson County Public Schools, Louisville, Kentucky.
- 47. Washington County School System, Hagerstown, Maryland.
- 48. Evanston Township High School, Evanston, Illinois.

The questionnaire was designed to be general in nature so as to allow for individual comment and individual application of the material at the institutions where it was employed. It was also specific enough to provide facts and figures from which conclusions could be drawn as to what the educational institutions were doing with television in the training of teachers. A copy of this questionnaire, which was an essential part of this thesis study, is presented in the appendix.

This questionnaire provided a large body of current facts and opinions on this vital subject of the training of teachers through television. Since so few books and pamphlets are available on the subject, the responses to this questionnaire are the principal source of information for this study.

CHAPTER THREE

CURRENT PRACTICES IN THE USE OF TELEVISION AS A TECHNIQUE EMPLOYED BY EDUCATIONAL INSTITUTIONS IN THE TRAINING OF TEACHERS

The first objective in the investigation of this problem was to find to what extent television was being used by colleges and universities for the training of teachers for the public schools. The questionnaire provided the answers to this question.

One outstanding report was the one issued by the San Jose State College, which gave in detail what seems to be a good example of how to provide for teacher training through the medium of television. As a result, the San Jose program will be dealt with in great detail so that one specific example can be developed for a better understanding of this type of teacher training.

The San Jose authorities felt that one of the most valuable experiences offered teaching candidates in their training program was the observation of actual classroom operation. San Jose State College does not operate an

²Television Project Report From San Jose State College, San Jose, California (San Jose, California: San Jose State College, 1958), 151 pp.

actual laboratory or demonstration school, and as a result all observation for in-training teachers must be managed in the public schools in the area near the college.

ments within the college has created a great many problems in the San Jose area in the teacher education program. San Jose pointed out that because of their increasing college enrollments, there was a large burden on the public schools within traveling distance, and it had become almost impossible to provide sufficient classrooms for all the observers who wished to take pre-practice observation.

Another point was the difficulty in obtaining sufficient situations where the observer is able to see how the best classroom teacher actually worked. This lack of observation seriously reduced the efficiency of their teacher education program. As a result, one of the very first developmental studies in television at San Jose State College undertook to decide whether closed-circuit observation could be used to take the place of field observation for many students.

In addition to the actual observation, large groups of students would be able to receive comments from a good college instructor who was trained in the evaluation of what the teacher on duty was actually doing. This could be done at the moment the observation was taking place, because it was being conducted outside the room where the class was in

session; a discussion could be managed immediately, and the person in charge could point out any errors that were being made, as well as indicating those things which seemed particularly skillful.

The closed-circuit television program, therefore, seemed to San Jose State College to be the answer to some of the problems, and also to add a wonderfully new dimension to the teacher education program.

It is interesting to follow in detail the manner in which the schedule for this teacher training program was actually developed. A block viewing situation for ninety-eight students in five sections of this particular observation course was arranged in an extremely large room in the school's regular education building. This building had formerly been a small playhouse theatre with a capacity of some 300 people and had been converted into a classroom.

The college used four 21" Conrac television receivers, one on each outside aisle and two in front of the room. The students were required to attend television observation for two hours from 9:30 to 11:30 A.M. twice each week for four weeks.

Five elementary education instructors alternated in giving directed observation to the viewing students, and in addition the individual instructors were able to use the receivers in their rooms in class time for supplementary viewing.

³Ibid.

In order to make clear exactly what was arranged by San Jose State College in this pre-teacher training program, it is best to quote directly from their pamphlet dealing with the television project for the year 1957 through 1958.

Methods of Observation. The participating teachers and principals in the public schools cooperated heartily with every phase of the program. While the Education Division instructors believed that it would be desirable to observe a given class for several days, the elementary school teachers objected to this schedule, not wishing to be observed by large groups for more than one day at a time.

At one of the elementary schools, three teachers rotated days so that the classrooms of these teachers were observed for four hours each day, and at their request all viewing was interrupted during recess and lunch hours. At the end of three weeks, the program was moved to another elementary school where a similar arrangement was made. These teachers rotated teaching for television in the same manner as at the first elementary school.

Prior to television observation, each college student and instructor in the program received a packet containing:

1. A map of the school.

2. A seating chart of each room to be observed, giving location of each student (by first name), and the location of the cameras.

3. A map of the playground.

4. A schedule of each teacher's program for each day's observation.

⁴<u>Ibid.</u>, p. 38.

⁵<u>Ibid</u>., p. 39.

It would seem, therefore, that the instructors involved in this experiment were given ample time to prepare their material, and that they would not seem to be constantly on display. The system of having one day on and two days off the television camera made it possible for them to have time to prepare, yet in case of any discipline problems there would be time, during the two-day period when the teacher was off camera, for these items to be managed without any difficulty.

The San Jose State College program worked out a system of instructor and student evaluation. In addition to this the public school teachers had to give evaluations, and in all cases these observations were placed together for discussion and correction for the next time the course was offered on television.

It will be advantageous to consider what these evaluations were.

Instructors' Evaluations

Each college faculty member was given an "ITV Diary" in which he was asked to list such facts as conferences attended, how much he used television observation during class time, his impressions of the program week by week, the effect of the observation on him as an instructor and any comments and criticisms not covered in the body of the diary.

Students' Evaluations

Each student at the beginning of the course before television observation started, was asked to fill out a pre-test designed to obtain an indication of his anticipation of what television could do as compared with field observation.

Observation Program, the Education 104 students were given the same form as a post-test and asked to fill it out in terms of the television observation experience. In addition, the students were asked to fill out a different form . . ., giving their opinion of the advantages, limitations, recommendations, and general comments for both the television observation and field observation experience.

Public School Teachers' Evaluation

The participating teachers in the public schools were requested to prepare summary statements concerning the televised classroom program conducted at their school. These statements were to include advantages, disadvantages, suggestions, and recommendations for future use.

The many charts and graphs which were employed by the San Jose State College to support the evidence and the criticisms and the evaluations of the teachers, the instructors, and the students participating in the observation class produced several interesting results.

As a kind of quick summation, it might be pointed out that the majority of the people felt that the amount of lecture material which had to be covered lessened the value of random observation during class time when the random viewing could not be correlated with the topic at hand.

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^{6&}lt;u>Ibid., pp. 39-40.</u>

^{7&}lt;sub>Ibid.</sub>, p. 45.

Also the technical difficulty, such as audio transmission, and inexperience with the operation of television receivers was frustrating to the instructors.⁸

In addition to this, one of the chief targets for criticisms was the block observation, and it was criticized for several reasons. First of all, it was felt that two hours was too long a viewing period. Second, the presence of a large number of students from several classes inhibited discussion. Third, audio difficulties were bothersome and upsetting to some students during the long sessions. Fourth, the routine school classroom situation did not often hold the interest of the college students, especially while the instructors and the students were exploring a totally new technique of observation. 9

A rather quick summary showing some of the results which San Jose State College felt were gained from the general television program will follow.

San Jose presented several general impressions on the value of the work, but one of the most important was that of having a class work before television cameras. This helped the teacher as much if not more than the children. The children themselves seemed to feel a sense of responsibility, and

⁸Ibid.

 $^{^9}$ Ibid.

they appeared interested and tried to do their best work at all times. They felt sure that in the children's desire 'to help their teacher, the strain of an entire day became too much for them. Sometimes the children seemed very glad the day was over because of having to work so hard while "on camera", and thus an atmosphere of their learning deteriorated measurably. 10

The fact that it is a strain for any instructor to prepare material for a good class even under normal conditions, it is obvious that the preparation and production involved in front of a television camera becomes a very difficult activity. San Jose felt that four hours of this type of teaching in one day was a major effort for the demonstration teacher. 11

The children were interested in the equipment, especially the cameras, and they enjoyed having the room very well lighted which was necessary for televising the class session. Because of the noise distortion on the microphones, the children were asked to move quietly, and the windows were closed. This caused the temperature to go up in the room and presented an unsatisfactory teaching situation. 12

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¹⁰Ibid., pp. 59-60.

¹¹ Ibid.

¹² Ibid.

San Jose State College felt that their telecasting of classroom activities was a success. They felt that great' care was needed to be taken in selecting the instructor to be seen on the television screen. Among their conclusions and recommendations are the six which as listed in their order of importance to San Jose State College.

- 1. Give greater consideration to the major role played by the classroom teacher by:
 - a. Arranging a more precise schedule of viewing. Use each minute of the program she has worked so hard to prepare; optional viewing is a waste of her efforts and energies.
 - b. Asking her to spend less time than four hours each day in front of cameras. (Perhaps one-half of a school day should be the maximum).
 - c. Allowing her more days off between telecasting days.
 - d. Increasing the two-way communication between the teacher and the college instructors.
 - e. Taking steps to insure that the reception is viewed only by college students in a classroom situation.
 - f. Providing an adequate monetary compensation for the extra efforts rendered by the teacher. (Some consideration also should be given to awarding professional growth or other units to the teachers involved.)
- 2. Give more attention to the protection of school buildings and classrooms. (Such as removing nails from woodwork or putting in

more permanent fixtures; put furniture back in place when it is necessary to move it; closing and locking doors and windows; taking care not to disturb room decorations).

- 3. Give more thought to the length of time technicians are asked to focus on one child. A few moments after the child becomes aware, his actions are other than normal.
- 4. Equip classrooms with sound-proofing so that windows may be opened for ventilation, especially on hot days. (Even if windows are open and the shades are closed, circulation of air isn't sufficient enough to permit adequate ventilation. Then too, the shades flap noisily in the draft).
- 5. Send classroom teacher an evaluation of the general technical impressions and suggestions, and a list of the specific uses to which their efforts were put.
- 6. Make up a form to be used for the evaluation of the program. 13

The criticism of participating teachers indicates that a technical approach is necessary, and that well-trained, highly skilled, and extremely competent directors and cameramen are needed if the experiment is to be as successful as the teachers involved seem to feel that it can and should be.

This experiment, then, is one of major studies and shows to a great extent the current practices in the use of television as a technique employed by an educational institution in the training of teachers for the public schools.

^{13&}lt;u>Ibid</u>., p. 61.

The San Jose project was picked because it is the only college or university project in the United States which has been given competent evaluation. Although other institutions are involved in this type of teacher training, they have by no means managed to reach the level of the San Jose operation.

It is very possible that some of the plans of the future will be much more extensive than the system at San Jose, but at the present time, it seems the most complete and effective.

One of the schools which plans to employ the use of closed-circuit television in its operation, is located in Chicago, Illinois. There the Board of Education of the City of Chicago is finishing a complete closed-circuit television in the Chicago Teachers College and the Wilson Branch of the City College System, where a \$45,000 closed-circuit television installation will be completed within the next year.14 The television coordinators in these schools plan to use the closed-circuit situation both as a means of training teachers and teaching subject matter.

¹⁴Discussion with Dr. M. Mainwaring, Head of Audio-Visual Education, Chicago Teachers College and Wilson Branch of Chicago City Colleges.

At present, however, Chicago Teachers College in cooperation with Station WGN-TV is sponsoring a program to aid teachers in the instruction of mathematics. To quote an article in the Chicago Sunday Tribune:

The second semester of TV Teachers College, telecast weekdays over Channel 9, will be devoted to improvement [of] instruction in mathematics.

The courses will again be held for teachers in the primary, intermediate, and upper grades.

The courses will be offered for credit by the Chicago Teachers College and are intended primarily for in-service teachers. However, college graduates or persons who have taught for several years are also eligible to take the courses for credit. 15

In a later chapter discussion will be made on the extent and techniques now being employed by other institutions in the use of television as a means of training teacher trainees. The San Jose State College was used primarily in this chapter because, as indicated before, it is well catalogued and highly detailed and is one of the few programs in the country which seems to be beyond the experimental stage.

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¹⁵News item in the Chicago Sunday Tribune, February 8, 1959.

CHAPTER FOUR

THE EXTENT OF THE EFFECTIVENESS OF TELEVISION AS EVALUATED

BY THE COLLEGES OR PUBLIC SCHOOL SYSTEMS WHICH ARE USING

TELEVISION IN THE TRAINING OF TEACHERS

In order to determine the use of television in the training of public school teachers, a questionnaire was sent, as indicated, to forty-eight colleges, universities or public school systems. Of these forty-eight, a total number of thirty-two responded by saying that they were using or would use some sort of television for their teacher training program. A list of the colleges actually using such a program follows:

- 1. Abilene Christian College, Abilene, Texas.
 - 2. Brockport Teachers College, Brockport, N. Y.
 - 3. Central Washington College, Ellensburg, Wash.
 - 4. Chico State College, Chico, California.
 - 5. Eastern Montana College of Education, Billings, Montana.
 - 6. Fresno State College, Fresno, California.
 - 7. Gallaudet College, Washington, D. C.
 - 8. Henderson State Teachers College, Arkadelphia, Arkansas.
 - 9. Illinois State Normal University, Normal, Ill.
- 10. Millersville State Teachers College, Millersville, Pennsylvania.

- 11. Oregon College of Education, Monmouth, Oregon.
- 12. San Jose State College, San Jose, California.
- 13. State University of Iowa, Iowa City, Iowa.
- 14. Teachers College, Columbia University, N. Y.
- 15. University of Toledo, Toledo, Ohio.
- 16. Utah State University, Logan, Utah.
- 17. Wayne State University, Detroit, Michigan.
- 18. Western Illinois State College, Macomb, Ill.
- 19. Baltimore County School System, Towson, Md.
- 20. Evansville School System, Evansville, Ind.
- 21. Jefferson County Public Schools, Louisville, Ky.
- 22. Evanston Township High School, Evanston, Ill.

It is well to consider the amount of use and the advantages and uses of television in classroom observation. Of the schools reporting that they were using television as a device for the training of teachers in education, 80 per cent felt that observation could be made without disturbing the class, and this was one of the greatest advantages of the use of television in classroom observation.

Teachers involved in teaching the regular demonstration class indicated that a demonstration or lesson is automatically disrupted whenever an outside college class arrives for observation purposes. Almost all of the instructors who replied felt that this is true. The use of the television camera, in this situation, makes it possible for any number

of people to observe a class at any given time without disturbing the class.

One of the most interesting observations made by the instructors replying to the questionnaire was the fact that the students who were observing the class by use of television were able to see classwork in progress without the pupils aware that there are unseen visitors watching them perform. Ninety per cent of the instructors involved felt that this is one of the distinctive advantages of observing a class by television. The viewing students not only see an actual class situation, but they also see the same situations because of the camera's "eye."

Eighty per cent of the people reporting felt that commentary by the instructor, which could be given during the observation, was of great importance, and 70 per cent of the schools felt that the facial expressions of the students could be observed as opposed to the back-of-the-head view which is seen by a class when they do visit a demonstration class in a normal situation. Most of the returns indicated that observation opportunities seemed far greater through the use of television than by actual attendance in the classroom. The overall opinion was that the observation facilities in a classroom were inadequate, and the more relaxed atmosphere of the viewing room with more comfortable, movable seats and more individual space

allowed the students watching the observation to become more aware of what was actually going on in the classroom.

It is, of course, physically impossible to provide the opportunity for observing by more than thirty students if they must actually visit a classroom. In most cases there would be no limitation whatsoever on the number of people who could watch a demonstration class in action if an adequate number of receiving sets were provided for their use.

The advantages of being able to ask or introduce questions about some situation which might occur during the observation period could not but make the training of students involved more meaningful.

Students involved in teacher training are concerned with many different research projects and often with the preparation of material for use in class for pre-practice or actual practice teaching. As long as the students in teacher training could secure as much information through the television situation as by actual attendance in observing a demonstration class in session, the use of television is a distinct advantage.

Several of the teachers who returned the questionnaire were disturbed about the fact that the camera could only look in one direction at one time. This means that the camera could reveal only one person at a time or one section of the room at one time. Many things can be happening all over the

classroom simultaneously, and, in all probability, the television camera might not reveal all of the events which would be of interest to the students watching the demonstration. It is also true that the camera would be able to focus on visual aids being used by the teacher, or perhaps it could show something being prepared by the pupils of the class without their being aware of it. As a result the disadvantages and advantages would probably balance themselves out as this focusing of attention on important objects could be accomplished more effectively for the observer than by the observer.

Frequent difficulty with reception of the picture in the viewing room, distortion of sound, and other technical problems were noted; these tend to cause some of the instructors to feel that teaching by television had some disadvantages. Certainly the failure of sound or video at an important point in the observation of a class would render the period practically useless. Adequate technical assistance should be employed in the presentation of these observations.

The natural curiosity concerning new things in a classroom, such as a new picture, a new instructional material, and so on, caused children in the room to be curious concerning the television equipment. However, the questionnaire revealed that after initial curiosity had passed, the equipment in the demonstration room did not disturb the pupils

involved. This would seem to indicate that more equipment could be used, which, possibly, would improve the technical reception as well as allowing for additional monitoring so that many areas of the room could be covered at all times.

Emphasis was placed on the advantage of good teamwork in the production of the television lesson. Almost all of the instructors wanted a good technical crew to assist them in their productions, and they wanted to have as much preparation as possible before the class was presented. Also in those cases where the students may ask questions following the demonstration, the college instructor and the demonstration teacher should plan the lesson together so that there would be ample time for questions from the college students observing the class. The planned lesson was to help both students and instructors who had to meet with other classes. In addition, the college instructor could alert his class to watch for certain questions and situations which were being set up by the demonstration teacher.

The use of television in the demonstration class did not usually affect the normal working situation in the class-room. Very little was done to alter existing classroom light. Almost nothing was done to improve the acoustics of the class-room, and the microphones were not placed necessarily so as to give the best possible pickup.

All of the schools involved used whatever camera or

cameras they had. There did not seem to be much question about camera angles or techniques, or the use of many cameras' to properly televise the classroom situation.

Thus, it seems that there are two effective uses of television, and one large area in which the effectiveness of the medium is considerably lessened. The advantages are that any number of people may observe the same class situation without being seen and without disturbing the class, and that the instructor of the college class can ask questions, give comments, and answer questions put to him during the observation period. Much of the ineffective use of the medium comes as a result of inadequate technical facilities, but it is also true that in almost every case reported the technical process of production was considered inadequate and far below the average of a standard commercial station.

The actual percentages, as well as answers to specific questions about some of the points discussed in this chapter, can be found in the appendix. Reference should be made to that portion of this study for answers to any specific questions about this material.

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CHAPTER FIVE

THE EFFECTIVENESS OF THE USE OF TELEVISION IN THE TRAINING
OF TEACHERS AS EVALUATED BY THE COLLEGES AND SCHOOL SYSTEMS
EMPLOYING THE MEDIUM

The reporting institutions all seemed pleased generally with the results of their television work in the training of teachers. They were specifically able to point out a number of places where they felt that some improvement might be made.

This chapter deals with the effectiveness of the plan as it is currently employed, and also emphasizes those elements which are somewhat weak in the procedure now employed.

The various institutions reported that the number of students watching the classes in teacher training in using television in the teaching of multiple classes ranged from fourteen to one hundred. This range provided a very interesting scale, as only 8 per cent of the schools questioned had fourteen students watching only one lesson, and 8 per cent had a hundred students watching any one lesson, so that both ends of the scale had the same percentage. Thirty-three per cent employed approximately twenty-five students viewing each lesson. So far as the other numbers were concerned, 8 per cent allowed fifteen students; 8 per cent, twenty-five

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to thirty-five; 8 per cent, thirty; 17 per cent employed forty students; thus it seems that twenty-five students is the average number employed by the greatest number of college and universities in the viewing of a television class.

This size is approximately that of a regular class taught by conventional methods. The advantage to television is that multiple sections of the same college course can be watching simultaneously the same television presentation. As long as there were sufficient viewing rooms and sets, as many as several thousands of people could be watching the same class.

In most cases, however, it would be impossible to provide a discussion leader or instructor teaching the class in an education department for more than three or four viewing sections. This is due to the lack of qualified instructors.

The institutions responding to the questionnaire found that they preferred a classroom with movable chair seats; 66 per cent of those responding indicated a preference for movable seats. The next highest percentage, 25 per cent, preferred an auditorium or a theatre type room. Seventeen per cent preferred a classroom with fixed seats, 8 per cent a lecture hall with levels for seats, and 8 per cent also for a lecture hall with movable seats.

As a result of the figures given above, the conclusion to be drawn is that the majority preferred a room with movable seats. In modifying the classroom into a room for television viewing, 42 per cent indicated that they did dim the lights, and 42 per cent said they did not. Since almost half of the institutions dimmed the lights and almost half did not, there was no consistent practice or advantage to either dimming the lights or leaving them on. A possible theatre-like atmosphere is not in any way created nor found to be especially desirable.

Eighty-three per cent of the responding institutions indicated that they used multiple receivers for the classroom. Thirty-three per cent indicated that they used only one receiver. Some of these institutions indicated that funds more than the desire for any particular number dictated the number of receivers used.

Fifty-eight per cent of the institutions questioned placed the receivers at the front of the room, 33 per cent at the side, 25 per cent put them both at the front and the side, and 8 per cent placed them at the back.

Fifty per cent of the institutions used only one speaker for the classroom, and 33 per cent of those responding indicated they used multiple speakers to get a sterophonic effect so that the audio could be heard from all sides of the room. In 58 per cent of the cases, the speakers were placed at the front of the room, and the remaining responses indicated that speakers were placed at various angles about the room depending on the architecture of the room involved.

The television receivers were placed from three and a half to seven feet from the floor, and 58 per cent indicated that five to six feet was the height best suited for viewing.

Many of the preceding statements indicated that the extent of the use of television is considerable and that this use is not in any great way influenced by the type of room which is involved. Most of the respondents indicated that television receivers can be placed in most regular college or university classrooms without extensive remodeling or alteration of existing facilities. In the questionnaires returned there seemed to be no reason to indicate that a normal classroom procedure in a traditional type of room would not be satisfactory for televised instruction.

A question was asked as to what subjects or subject areas were best suited to the use of television in the teacher training program. Answers to the question indicated that there were more classes taught in the subject matter area than any other area listed in the questionnaire.

The complete listing of these is included in the appendix, where is is pointed out that in the teacher training program classes in composition, European Government, dramatic interpretation, mathematics, shorthand, art, music, beginning chemistry, English literature, typing, speech arts, science, and social sciences are all high on the list of those being taught by television.

In the area of professional education, courses taught by television included observation of classes, observation of testing demonstrations, secondary curriculum and instruction, direct teaching in observation, elementary school curriculum, human development, educational survey of the field, and observation of education classes. The institutions involved in teaching these areas by television are listed in the appendix.

The questionnaire requested the opinions of the institutions and the instructors involved as to which of the courses they mentioned were best adaptable for televised instruction in the training of teachers. The questionnaire also asked whether or not the teaching of this class provided any special training for the future teachers and requested an explanation.

One of the colleges reported that the observation of classes and demonstrations was particularly valuable because it revealed to future teachers the actual application of theory. This seemed to be worth considerable attention and time because of the fact that so many textbooks emphasize theoretical materials as well as application. By providing the students the opportunity to actually see the classroom teaching procedure in action, this institution felt that a great deal of good could be accomplished. 16

¹⁶Western Illinois State College, Macomb, Illinois.

In the human development area, another institution felt that to provide observation of pupils at different grade levels gave students more opportunities to see development. Because of this the institution felt that the teacher training material particularly lent itself to television. 17

One institution was very emphatic that although it particularly felt that science and mathematics were best adapted to televised instruction, that almost anything at all could be adapted to television, and this was dependent upon only one thing. It had to be given a "... good adaptation by a very adaptable teacher."

It was found that the amount of time devoted to the use of television sometimes depended upon how many people were needed to prepare the material. If a great deal of supervision was necessary, this process tended to keep many programs from materializing.

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The survey reported that 36 per cent of those institutions using television teaching allowed only the teacher to decide the procedure and presentation of subject matter for the televised instruction. Nine per cent had a teacher and a producer or a person designated to oversee the entire production. Another 9 per cent had a teacher and a director or

¹⁷Abilene Christian College, Abilene, Texas.

¹⁸ Brockport State Teachers College, Brockport, N. Y.

one who directs the camera shots specifically decide on procedure and presentation of subject matter for television. Eighteen per cent allowed the teacher, the producer, and the director together to decide on procedure; four per cent allowed the teacher and department head to decide, whereas another four per cent allowed the teacher, the dean or other administrator, and the producer to decide the presentation of material. Only four per cent of the reporting institutions allowed the department chairman alone to decide on procedure, and still another four per cent allowed only the producer to decide on procedure and presentation of subject matter.

Looking at this breakdown more closely, 78 per cent of the reporting institutions using television in their teacher training program allowed only the teacher or the teacher in cooperation with other members connected with the program to decide on the procedure and presentation of subject matter. This clearly indicates that the institutions involved today in the presentation of television material for the training of teachers feel that the teacher who is doing the actual instruction is the one who is to decide on what shall comprise the instructional materials involved.

The extent of the use of television sometimes depends upon the individual involved in teaching the course over television. The institutions were asked to rate the various qualities desirable in a television instructor. Fifty per cent

thought that a performing ability was necessary, and 32 per cent felt that it was desirable. Twenty-seven per cent felt that a good voice quality was necessary, and 54 per cent felt that it was desirable. Neatness in dress and appearance was felt necessary by only 4 per cent, whereas 78 per cent felt that it was desirable. Only 4 per cent felt that good posture was necessary, 73 per cent thought it was desirable, and 4 per cent felt that it was not important at all.

Attractive physical appearance was felt desirable by 59 per cent, but 23 per cent thought it was not important. So far as enthusiasm for the televised instruction was concerned, 68 per cent thought it was necessary, and 14 per cent thought it was desirable. Seventy-eight per cent thought that enthusiasm for teaching was necessary, and 4 per cent listed it was being desirable. As to adaptability to new methods and procedures of presentation, 68 per cent thought such adaptability was necessary, and 14 per cent thought it was desirable.

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From the above it can be seen that the personal attributes of the television teacher are important. Far too often the voice of the instructor over television is untrained and so far as a television presentation is concerned, almost inadequate. All those institutions who replied to the question concerning the vocal quality of the television instructor, 81 per cent indicated that a good voice quality was either

necessary or desirable, and no single return showed it marked as not important.

As to the number of classes taught by the television instructor, some of the institutions such as Illinois State Normal University said that the number was not standardized because it was so experimental. Also that there had been no definite policy set down as yet, but 23 per cent did indicate that three other regular classes were taught. Nine per cent indicated that two were taught, 4 per cent indicated that between three and four were taught, and 4 per cent indicated that four were taught.

The preceding has attempted to show the reason why some physical attributes of the television instructor and technical aspects of television help to control the extent of television presentations. But of the most vital importance is the actual opinions and beliefs of those involved directly in the training of teachers through television.

Many of the directors of instructional television programs and television instructors were able to point out specific things which they felt to be effective about training through television. Among these are those which are to be listed on the following pages.

One of the first observations about the effectiveness in the use of television indicates that it was able to spread the influence of the very best and better trained teachers to the greatest number of students. 19

It was also possible to enable the teacher to prepare more effective lectures since the teacher was able to meet three or four sections at one time instead of meeting them individually throughout the day. This time saved could be given over to the preparation of material for the teaching of the class on television. 20

The dramatic quality of television when utilized seem, in every case according to the instructor involved, to increase the interest of the classes observing this presentation over television. ²¹

The fact that large group teaching was possible while still maintaining the intimacy of the small group seemed to be of great value to the instructor. 22

Also front-row seats for everyone helped to make possible for each person involved in the observation to see everything that was going on which was important, and to

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¹⁹ Brockport State Teachers College, Brockport, N. Y.

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

see it enlarged. This close-up advantage made the medium especially valuable. 23

On the other side occasionally a school would indicate that they were not satisfied with the results in their television lessons. For instance, experience indicated that considerable more planning was necessary than for a regular classroom presentation. If the instructor went on camera ill-prepared, his effectiveness was somewhat impaired by inadequate preparation. 24

It was felt that great resources were brought to the students by the use of the close-up, by the enlargement of materials, and by the focus of attention on what is most important. Television stimulated more student interest, participation, and discussion. 25

Again it was pointed out that a good teacher was made better because the instructor had more time for preparation, and he usually worked harder before a class because he had the sense of performing and being on view. The teachers made much better use of visual material, and the use of subject matter generally seemed better analyzed and organized. 26

²³ Ibid.

²⁴Western Illinois State College, Macomb, Illinois.

²⁵University of Toledo, Toledo, Ohio.

²⁶ Jefferson County Public Schools, Louisville, Ky.

The team approach between the teacher and her pupils and the college instructor and his students helped to provoke a professional and progressive type of work in the understanding of the course. There was a greater variety of experiences for the child involved in the experiment, and the fact that the classroom teacher was on his best behavior probably made the effectiveness of the teaching considerably more than would be usual. 27

Another questionnaire response indicated that the teacher undoubtedly prepared better as he was performing and on view and wanted, therefore, to be at his best. The students involved in watching the television program had a much better view and had no difficulty in seeing. The teacher usually controlled the center of interest by provoking the attention to that which he felt was important. A good teacher was made far more accessible to far more students than could be possible in any other way. ²⁸

One of the schools, still in the pioneering stage of instruction by television for the training of teachers, felt that the greatest asset that the program of television teaching offered was to bring the master teacher into the viewing classroom. This asset was so important that it justified all the

²⁷ Ibid.

²⁸ Evanston Township High School, Evanston, Illinois.

work and expense of adjusting to a new type of teaching procedure.

Another institution felt that the chief advantage was that television provided a better opportunity to integrate theory and practice and to allow theoretical application to be viewed with ease and without difficulty. 30

Thus, the most effective use of television by the institutions involved in this program of teacher training would be to bring the better equipped, better prepared, and most effectively trained teachers before a larger number of students in an intimate situation where all people concerned have an opportunity to see clearly and where the attention of the educational problems or the discussion for the moment can be focused on easily by the instructor in charge.

Eastern Montana College of Education, Billings, Montana.

³⁰Gallaudet College, Washington, D. C.

CHAPTER SIX

THE FUTURE USES OF TELEVISION IN THE TEACHER TRAINING PROGRAM

The institutions returning the questionnaire indicated that they had many specific aims and opinions about the use of the medium of television in teacher training programs, but many of these were involved with their needs rather than their aims. All of the material from the questionnaire, which could be catalogued in a logical fashion, has been included in the appendix.

The author will explain, and to a certain extent elaborate on, what the various institutions report by way of planning for future uses of television in their teacher education programs.

In order to enable college students who are preparing for the teaching profession to see good teaching without interfering with pupil learning, Central Washington College plans to add and to make controlled classes in television almost its sole method of teaching observation. To provide this student facility, an adequate number of viewing classrooms is essential.

By using television consistently, institutions plan to make it possible for their instructional staff better to prepare and to present the teacher training material with a little more patience and care. ³¹ The use they hope to make of these better trained teachers is to allow them to serve as models for all of the students in the teacher training program. Just how the colleges are going to inspire their faculty members to this goal was not clearly stated, but it is definitely one of the aims to be made of the medium in the future.

Still another use of televised instruction will be to provide an opportunity for teaching multiple sections in both the elementary schools and the colleges. However, this again is a future use and is listed as a goal.

Through adequate television planning and programming, many institutions felt that better use of instructional staff and teaching materials could be mananged. In some cases fairly elaborate studies are being conducted to determine how this could be managed and used in the future. 32

Almost all of the reporting institutions had plans about using an effective and integrated presentation of audio visual aids, such as pictures, graphs, and slides. Due to

³¹ Evanston Township High School, Evanston, Illinois. Jefferson County Public Schools, Louisville, Ky. Oregon College of Education, Monmouth, Oregon.
Western Illinois State College, Macomb, Illinois.

³²Millersville State Teachers College, Millersville, Pennsylvania.

the fact that television telecasting is so new at most institutions, these visual aids have not as yet been used to any great extent.

With more time and money, more experimenting and learning, those techniques peculiar to television such as close-ups and certain types of monitoring will help to make televised instruction more interesting and instructional to watch. Since it has been established already that the technical facilities and production of the medium in most of the institutions employing television leaves much to be desired, the use of television techniques is probably a long way off in the future.

Some schools plan to use the material they obtain about the effectiveness of televised instruction to decide whether or not the learning involved was lasting and as broad as that which would be possible in a regular classroom situation. 33

Another future use of television is in the adult education area designed to give community service. This service could involve such things as "refresher courses" in everything from shorthand to accounting, and instruction in languages, such as conversational French, German, or Russian.

³³ State University of Iowa, Iowa City, Iowa. Wayne State University, Detroit, Michigan.

This service can help to educate the community in which teachers serve and in which future teachers may serve.

A very specific use of television, still to be developed in almost every local area, is to allow in-service teachers to take teacher training courses which would allow them to improve their own teaching methods. The possibilities of this particular use of television seem almost to be unlimited. Many administrators have leveled harsh criticisms either against the inexperienced teacher, or the teacher with many years of service who has not kept up with the latest ideas and philosophies in education. Teacher training programs aimed directly to the in-service teachers involved would surely help to improve the various school systems involved.

Two rather technical uses of television, to be added in the future at San Jose State College, involves the use of a low power station and a video tape equipment. Through the low power station and remote control facilities, a wider variety of experiences could be presented to the teacher trainees as more cooperating schools, teachers, and classes could be observed. A video tape machine would solve many problems arising from scheduling difficulties at the college level. The use of the tape would facilitate not only the scheduling of education classes but also would provide for a permanent file of demonstration observations and lessons.

Although many different uses of closed-circuit television were advocated by various institutions, most of them indicated that their own television channel, if they had one, would allow them to use all available resources and materials.

The most significant conclusion to be drawn concerning the future use of television in the teacher training program is that the need for the training of teachers is becoming so great, so important, and so valuable, that each reporting institution indicated a desire to use television in every way possible to help produce teachers to serve a rapidly expanding school population.

CHAPTER SEVEN

SPECIFIC OPINIONS OF THE INSTRUCTORS INVOLVED IN THE TEACHING OF CLASSES THROUGH TELEVISION

The returns to the questionnaires from many of the reporting institutions included some definite statements, and these will be listed in such a way so that those expressing similar opinions will be grouped together for easy comparison and more logical organization.

The questionnaire stated "It would be of great value to this study if you will write a brief statement setting forth your opinion concerning the worthiness of television as an aid in education." The answers given by the individual institutions follow.

I am of the opinion that as enrollment increases the supply of <u>superior</u> teachers will not increase <u>proportionately</u>. So we have a choice of placing mediocre teachers in the increased number of classrooms (if we wish to hold our present ratio) or exposing these students to good teachers via TV. The phenomenon of "no significant difference" which characterizes TV research leads me to believe that the real variable is the teacher and that the superior teacher on TV will always be preferable to the mediocre teacher in the classroom. Perhaps the two working hand in hand will prove an effective combination. There are, of course, many other values of TV which are impossible to discuss here.

---Brockport State Teachers College, Brockport, New York. Television will make it possible to use better teachers for teaching more people.
---Abilene Christian College, Abilene, Texas.

Personally, I believe and would hazard a prediction that the teacher of the future--say in twenty years, possibly less--must know how to coordinate a television program in the classroom. In so doing, the present demand for qualified teachers would be helped and I believe the quality of instruction advanced.

----Eastern Montana College of Education, Billings, Montana.

To provide a means for maintaining high teaching standards when teacher shortage becomes acute through the use of the master teacher technique on open circuit TV.

----Fresno State College, Fresno, California.

It's main usefulness lies in its ability to bring a master teacher and excellent demonstrations to a large number of students who might never receive this type of training.

----Teachers College, Columbia University, N.Y., N.Y.

TV has its greates potential for education in the broader scope and larger fund of resources it can bring to the classroom to augment what the teacher can do and to enhance the understanding, interest, and enjoyment of the student.

----University of Toledo, Toledo, Ohio.

I believe that television has a great service to perform as an aid to regular classroom teaching. I do not believe that it will or should replace the classroom teacher but rather will provide material additional to the teachers and cover material with the aid of a master TV teacher specializing in such work. Further TV techniques will in some cases make more effective the teaching of the classroom teacher.

----University of North Dakota, Grand Forks, N. D.

Television has caused nearly all facets of the educational program--curriculum, buildings, educational materials, good teaching practices, and qualities of good teachers to have the searchlight thrown upon them as it has probably never been done before. It has also caused those who are opposed to it to turn the search-light inward to improve what they have been doing.

---Jefferson County Public Schools,

Louisville, Kentucky.

Although most of these institutions do not indicate anywhere in the questionnaire that they have been able to use any but superior teachers in their presentation of teacher training over television, they all do indicate that the superior or master teacher is one of the main reasons for using television in the preparation of teachers for the profession. It should be pointed out that of the nineteen specific objectives and opinions actually returned, eight of these involved this one point. In other words, almost half of the institutions who felt it desirable to issue a statement in their own words, emphasized the value of having good teachers involved with the greatest number of students possible.

CCTV can provide more meaningful A-V learning experiences to more people with the resultant effect of improved instruction.

----Millersville State Teachers College, Millersville, Pennsylvania.

Makes possible more observation of laboratory school classes by college students. Has caused re-evaluation of course content, etc.

----Western Illinois State College, Macomb, Illinois

I regard TV as the answer to many-but not all-of the problems facing education. It is, of course, a visual aid, but not only a visual aid. It is a technique and if we view communication as a process, rather than a body of subject matter, it obviously deserves (requires) specialized training.

---Wayne State University, Detroit, Michigan.

In addition to serving as an audio-visual to permit such experiences as observation and in addition to providing enrichment programs, I believe that television like the 16 mm film has great potential as a method of teaching.

----Rhode Island College of Education, Providence, Rhode Island.

These institutions seem to lean very heavily toward the fact that television is primarily an audio-visual aid. The statements on the questionnaire indicate that they are interested in certain experimentation, and in the case of Millersville State Teachers College a great deal of work is being done to determine the advantages of television teaching.

In my opinion there is no communication medium more worthy of exploration, evaluation, and utilization than television as an aid to education.

----San Jose State College, San Jose, California.

In our situation where a good team is in operation (studio and receiving) end results have been highly satisfactory-better training of receiving teachers in large group techniques would help us greatly.

---Jefferson County Public Schools, Louisville, Kentucky.

I personally feel that it must have some purpose and some capabilities for education in general and teacher education, specifically, but, I believe the loose design of the current experiments is doing little to actually establish TV as an aid to education.

---Oregon College of Education, Monmouth, Oregon.

We feel that if we can achieve better reception on the viewer this technique has real advantages for teacher training. Our chief problems are technical. ----Gallaudet College, Washington, D. C.

TV and adult or community education should be inextricably involved with each other. We have no good teacher shortage but rather a shortage, percentagewise of good students because of increasing numbers. Also TV should be just that—AN AID ONLY—a phonograph will only play back what is put into it. The discriminatory faculties of the listener (viewer) are always important and have to be developed.

----Fisk University, Nashville, Tennessee.

The first two groups of schools make definite observations, draw conclusions, or issue statements about philosophies involving the use of television as a teacher training device. However, the five schools listed immediately before are saying, in general, and in rather vague terms, that television is important, has some advantages, and has some disadvantages. They do not seem to be sure of just what they think about the medium except to issue statements saying little, but saying it well:

We haven't been in the field long enough for me to have an answer. We are looking for one.
---Illinois State Normal College, Normal, Illinois.

Let's test it some more first.
----Central Washington College, Ellensburg, Wash.

These two institutions, contrary to the group just mentioned before, are very definite in their opinions and simply say that they have nothing to say about the medium at all!

Only a few conclusions can be drawn as to what these individuals who are actually involved in televised instruction' think about the teaching of classes through television. But it does seem important to realize that the largest grouping of institutions reported in this study is very concerned with being sure that their students involved with teacher preparation have the advantage of good teacher examples. The medium of television seems to be ideally suited to take care of this requirements for most of these institutions.

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CHAPTER EIGHT

SUMMARY AND CONCLUSIONS

The results of the study indicate that most of the institutions now using television as a training device for the training of teachers believe that the use of television is an important medium in several aspects. The easiest way to appreciate these aspects is to enumerate them indicating specific points where they apply.

First, some of the reasons given for the use of television in the teacher training program are that the medium makes possible better trained and qualified instructors to be seen, and that the medium allows a great number of students more easily to see these better trained and better qualified teachers.

A second reason for the use of instructional television is that, and this is especially true in the observation of education classes, the number of students who may
observe the same demonstration class situation without disturbing the class in any way is almost unlimited. The college
instructor can make comments, ask and answer questions during
the observation period where teacher trainees observe the
actual application of teaching theory.

Along with these first two points, it will be remembered that there are three teacher advantages to television: it provides the better instructor before the greatest number of students, it provides an opportunity for all viewers to observe easily and clearly, and it focuses attention more easily on specific details.

A third reason is that television can alleviate the crowded classroom conditions. In most of the reporting institutions there seemed to be no indication that with teaching by television the quality of teaching was lessened. This is of particular importance because some critics of television teacher training have sometimes indicated that it would be difficult to present the programs as well on television as in the actual classroom. The questionnaires indicate that the institutions involved in the teacher education programs do not feel that the critics are necessarily correct. In most cases, however, there seems to be some qualification given by the person answering the questionnaire. As a result of this, it is difficult positively to be sure what the institution actually thinks. In some cases specific and definite opinions have been given, and these have been placed in an earlier portion of this work.

The fourth conclusion to be drawn is that the teacher training curriculum at the institutions involved with such a

program will be enlarged in the future. A great many more subjects will be offered for in-training teachers and for in-service teachers as well. This expansion of the use of television will be made possible as soon as adequate facilities are provided. These institutions, which seem to want to enlarge their curriculum, indicate they are being held back only through lack of facilities, lack of funds, and perhaps time to develop the overall program as it will eventually be organized.

A fifth conclusion is that more adequate teacher preparation before appearing before the camera must be made so that the instructional material will be given to the in-training teachers with the greatest possible ease and the greatest possible preparation.

Accompanying better teacher preparation is the need for maintaining a better technical procedure and presentation of the teacher education program.

The developments of a larger curriculum, better teachers, and more and better technical facilities and presentation probably will help to relieve the teacher shortage because it will allow not only a great number of people to watch classes on television, but also provide a greater number of people with the proper examples of teaching procedures as employed by better prepared and better qualified instructors.

It should be pointed out that along with the many great advantages the institutions found in their instructional television program, there were a number of problems which still needed to be analyzed and solved. The institutions were cognizant of the fact, as was San Jose State College, whose program was more thoroughly discussed at the beginning of the study, that much more experimenting needed to be done in order to overcome many of the difficulties. teacher education programs at the different institutions all presented specific problems peculiar to their own situation. Many of these problems were technical concerned with equipment and physical facilities. Each institution was not only examining experiments and results of other colleges and universities, but also trying to adapt them to their own objectives, their own curriculum, their own staff, and their own institution in general. At the earliest stages sometimes this involved the matter of educating the instructors to the medium itself and how it might be utilized to the best advantages. The institutions involved with television in teacher education are aware of their own problems, and because of this awareness they were not always definitive in answering specific items on the questionnaire used for this study. The instructors and administrators involved with instructional television feel that the medium of television has much to offer to education in general and more

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specifically to teacher education.

A final conclusion involves all of the institutions questioned, and they gave no indication of ceasing their experimentation or the actual programs they have already developed. Every institution returning the questionnaire seemed to expect their program to expand and to grow. There was a great desire on the part of those involved in the administration of the teacher training program to continue their experimentation and to expand and to improve the use of television as a device in the training of teachers.

APPENDIX

TERRE HAUTE, INDIANA

Dear Colleague:

Those of us who work in the field of teacher training are always seeking ways through which we may better prepare tomorrow's teachers for the task facing them. Your school has been listed by the Joint Council of Educational Television and the Committee on Television of the American Council of Education as one interested in using television in the training of teachers. To learn

I.	Do yo	u use television as a tool in the training of teachers?
	Y	es No
	A.	If your answer was "Yes," do you use:
		1. Commercial television
		2. Closed circuit television (CCTV)
		3. Both
	B	Do you use television to:
		1. Observe classes in a demonstration school
#s		2. Teach multiple sections of the same class
		3. Both

If you checked Number 2 above-TEACH MULTIPLE SECTIONS OF THE SAME CLASS-you need only complete Section Two of this questionnaire.

If you checked Both please complete Sections One and Two.

REGARDLESS OF WHAT YOU HAVE CHECKED ABOVE WILL YOU ALSO COMPLETE SECTIONS THREE, page 5, and SECTION FOUR, pages 6 and 7.

	N ONE: Observe classes in a demonstration school
	at are the advantages in the use of television in assroom observation?
1.	Observation made without disturbing the class
2.	All students see the same situation which occurs in the classroom
3.	Commentary by the instructor may be given during observation
4.	Facial expressions of students can be observed as opposed to the "back-of-the-head" view seen when a class is visited
5.	Others
	at are the disadvantages in the use of television in assroom observation?
1.	Camera may miss important closeup
2.	Equipment disturbs those students being observed
3.	
	etc.)
4.	
4.	Others
	Others
Wh	Othersat is the average size of class observing demonstration?
Wh	others at is the average size of class observing demonstration? preparing a classroom for televised demonstration:
Wh In	others at is the average size of class observing demonstration? preparing a classroom for televised demonstration: Did you increase lighting? Yes No
Wh In	others at is the average size of class observing demonstration? preparing a classroom for televised demonstration: Did you increase lighting? Yes No Did you install acoustical material? Yes No
Wh In	Others at is the average size of class observing demonstration? preparing a classroom for televised demonstration: Did you increase lighting? Yes No Did you install acoustical material? Yes No If "Yes," was it on the walls, ceiling,
Wh In 1.	Others at is the average size of class observing demonstration? preparing a classroom for televised demonstration: Did you increase lighting? Yes No Did you install acoustical material? Yes No If "Yes," was it on the walls, ceiling, floor, All three
Wh In 1. 2.	Others at is the average size of class observing demonstration? preparing a classroom for televised demonstration: Did you increase lighting? Yes No Did you install acoustical material? Yes No If "Yes," was it on the walls, ceiling,
Wh In 1.	at is the average size of class observing demonstration? preparing a classroom for televised demonstration: Did you increase lighting? Yes No Did you install acoustical material? Yes No If "Yes," was it on the walls, ceiling, floor, All three How many microphones were found to provide adequate audio pickup?

V.	In your use of camera equipment:
	1. How many do you use?
	2. How many lens(es) do you use?
	Size of lens(es)
	3. If you have mobile equipment, are they operated by students? Yes No
	4. If they are stationary, are they remotely controlled?
a Na Sa	Yes No
	Please list number of cameras located a. At the back
	b. At the side
	c. At the front
I.	During the observation:
	1. Does the college instructor make commentary to the student observers? Yes No
3	2. Does the demonstration teacher make commentary to the student observers? Yes No
I.	Following the observation does the demonstration teacher discuss anything with the student observers?
1. 1. 4	YesNo
II.	Please describe any other techniques you might have used or as using to make the demonstration-observation meaningful.
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	In what subject or subject areas is television used in your teacher training program? (Please list specific course by n
	Professional General Subject Matter A Education Area Education Area
٠	
	What is the average number of students viewing a television set?
	What type of room have you found to be most successful for viewing televised instruction?
	1. Classroom with fixed seats
;	2. Classroom with movable seats
,	3. Lecture hall with levels for seats
	4. Lecture hall with single level for all seats
	5. An auditorium or theatre type room
	6. A lounge area
	7. Others
,	What adaptations do you make in your receiving room?
	1. Do you dim the lights? Yes No
	2. Do you use one or multiple receiver(s) for the classroom? They are placed at the front, side, or both
	3. Do you use one or multiple speaker(s) for th classroom? They are placed at the front, side or both
	4. How high are the television sets placed from the floor?

Has the teaching of this class any special importance in the training of future teachers? If so, explain.

6.5

SEC	TION THREE: Questions concerning the p	reparation of the teacher
I.	Who decides on the procedure and prese matter for the televised instruction?	ntation of subject
	1. The Dean or other Administrator the	Director (One who directs camera shots)
•	2. The department Head 6. Other	TS
	3. The teacher	
	4. The producer (A person 7. If t designated to oversee the entire presentation) numb	wo or more of the above, se indicate by item ers
II.	Please rate the following, using the s designed to indicate your estimate of aspects of the television teacher and arrangement of items below does not in rank the items in an order of importan	the value of certain his presentation. The dicate any attempt to
	Necessary Desirable Not Important	
	1.	Performing ability
	2.	Good voice quality
	3.	Neatness in dress and appearance
	4.	Good posture
	5.	Attractive physical appearance
	6.	Enthusiasm for televised instruction
	7.	Enthusiasm for teaching
	8. Principal de Pr	Adaptability to new method and procedure of presentation
CII.	Is there a reduction of teaching load period in the semester preceding the accourse on television? Yes No	for any preparation ctual teaching of the
	If "Yes," what percentage of his teach preparation?%	ing is allowed for this
IV.	How many classes other than those on to expected to teach during the semester : teaching on television? Please give no	in which he is occupied in

we that television provides a superior method of instrumpared to traditional classroom procedures. If this is a list some of the reasons for this belief on your part ight your use of television in teacher training be help expansion of your present television facilities?	responses to the			
If you offer televised instruction consistently, you probabelieve that television provides a superior method of inst as compared to traditional classroom procedures. If this please list some of the reasons for this belief on your particle. How might your use of television in teacher training be he by an expansion of your present television facilities? Would the expansion of your present facilities as mentioned.				of television
delieve that television provides a superior method of instal as compared to traditional classroom procedures. If this please list some of the reasons for this belief on your particles as method of the reasons for this belief on your particles. How might your use of television in teacher training be hely an expansion of your present television facilities? Would the expansion of your present facilities as mentioned.				
delieve that television provides a superior method of instal as compared to traditional classroom procedures. If this please list some of the reasons for this belief on your particles as method of the reasons for this belief on your particles. How might your use of television in teacher training be hely an expansion of your present television facilities? Would the expansion of your present facilities as mentioned.				
delieve that television provides a superior method of instal as compared to traditional classroom procedures. If this please list some of the reasons for this belief on your particles as method of the reasons for this belief on your particles. How might your use of television in teacher training be hely an expansion of your present television facilities? Would the expansion of your present facilities as mentioned.				general services and the services are also services and the services and the services and the services and the
delieve that television provides a superior method of instal compared to traditional classroom procedures. If this please list some of the reasons for this belief on your particle. How might your use of television in teacher training be hely an expansion of your present television facilities? Would the expansion of your present facilities as mentioned.	الله الله الله الله الله الله الله الله	Manufacture of the state of the	markan dan dan dan dan dan dan dan dan dan d	
by an expansion of your present television facilities? Would the expansion of your present facilities as mentione	pelieve that to as compared to	elevision protraditional	vides a superior m classroom procedur	ethod of instr es. If this i
oy an expansion of your present television facilities? Nould the expansion of your present facilities as mentione			llectually section platfol histophene pick in substrate at a temperature and the history of property as a given histophene substrate and histophen	
by an expansion of your present television facilities? Would the expansion of your present facilities as mentione				And described the second se
by an expansion of your present television facilities? Would the expansion of your present facilities as mentione				
Would the expansion of your present facilities as mentione				
Would the expansion of your present facilities as mentione				
Would the expansion of your present facilities as mentione				
Would the expansion of your present facilities as mentione				
Nould the expansion of your present facilities as mentione				
above permit you to increase the number and kind of class presentation utilizing television? If so how?	by an expansion			
	Vould the expansion	n of your pre	present facilitie	s as mentioned ind of class

It would be of great value to this study if you will write below a brief statement setting forth your opinion concerning the worthiness of television as an aid to education.
A self-addressed, stamped envelope is enclosed for your convenience in returning the material. A summary of the findings will be mailed to you if you so indicate:
I would like to receive a summary of the
findings of this study.
I do not wish to receive a copy of the

APPENDIX B.

CURRENT USE OF TELEVISION IN THE TRAINING OF TEACHERS 1

I.	Do	you	use television as a tool in the training of teachers?
, pm ²			Yes 46%
			No 21%
	A.	If	your answer was "Yes," do you use:
		1.	Commercial television
		2.	Closed circuit television
		3.	Both
		4.	Stationed owned educational television [sic] 5%
	В.	Do	you use television to:
		1.	Observe classes in a demonstration school 27%
		2.	Teach multiple sections of the same class 41%
•	***	3.	Both
		4.	ETV workshop for future teachers [sic] 9%
		5.	Research [sic] 5%

¹Thirty-two institutions reporting.

APPENDIX C.

ADVANTAGES AND DISADVANTAGES IN THE USE OF TELEVISION IN CLASSROOM OBSERVATION¹

What are the advantages in the use of television in class-room observations?

TO	OM O	oservations:	
	1.	Observation made without disturbing the class	80%
	2.	All students see the same situation which occurs in the classroom	90%
	3.	Commentary by the instructor may be given during observation	80%
	4.	Facial expression of students can be observed as opposed to the "back-of-the-head" view seen when a class is visited	70%
			· .
		re the disadvantages in the use of television in com observation?	
	1.	Camera may miss important close up	30%
	2.	Equipment disturbs those students being observed .	20%
	3.	Technical difficulties (sound failure, poor reception, etc.)	70%

¹Ten institutions reporting

APPENDIX D.

AVERAGE CLASS SIZE¹

What is the average size of class observing demonstration?

20	•	•	•	•		•	•	. •	•	•	•	20%
25	•	•	•	•	•	•	•	•	•	•	•	10%
25	to	3	5	•	•	•	•	•	•	• -	•	10%
35	•	•	٠	•	•	٠	•	•	•		•	20%
30	to	4	0		•	•	•	•	•	•	•	20%
40	•					•		•		٠		40%

¹Ten institutions reporting

APPENDIX E.

		DEMONSTRATI	ON CLASSRO	oom ¹	
In pre	paring a cla	ssroom for	televised	demonstration	on
1.	Did you inc	rease the 1	ighting?		
			Yes		. 40%
			No	• • • • • •	. 60%
2.	Did you ins	tall acoust	ical mate	ria1?	
			Yes	· · · · · · · · · · · · · · · · · · ·	. 30%
			No		. 70%
	If "Yes", w	as it on th			. 66%
	en e		ceiling. floor		. 66% . 33%
			all three		. 00%
3.	How many mi audio picku	p?		to provide a	idequate
e e			+ + + + +	30%	
		2	* * * * *	10%	
	·	2 to 3.	* * * * *	10%	
		3	• • • • •	10%	
		4		10%	÷ .
		1 to 4.	+	10%	
ti salah di salah di Salah di salah di sa	Jan B. Carry	Never [s	ic]	10%	
	were these:	a. suspe	nded from	ceiling	. 40%
		b. on st	ands		. 70%
		c. other 1) bo	s: om mike .		. 20%
		2) 1a	valier tyr	e	. 30%
		3) b	lackboard	chalk trays	. 10%
	¹ Ten insti	tutions rep	orting		

APPENDIX F.

CAMERA EQUIPMENT¹

							ANLEK	A EQ	OTEN	ENI	· ma						
In	you	r us	e of	c	ameı	a e	quip	ment									
	1.	How	mar	ıy (do y	70u 1	use?		L.	• 4	•		•	• •	•	30%	
	*		• .				. '	;	2.	• 8	· •	• •	•	• •	•	30%	
									3.		•.	• . •	•	• •	•	30%	
	2.	How	man	ıy .	1ens	s(es) do	you	use	?	Š	Size	of	1 en	s(es)	
			1	•	• •		• •	10%		·		111	•		•	30%	
			2	•	• •	• •		10%				1".	•	•		60%	
			3	•	• •			00%				2 ^{tt} .	•	• •	•	60%	
			4	•		• •	. • •	30%				311.	•	• •	•	30%	
			5	•	* *		• •	30%				411.	•	.	•	10%	
			6	•	• •	• •	• •	20%				Zoo	mar	s .	•	10%	
	3.	If stu	you dent	hav	ve n	nobil	Le ed	quip	nent	ar	e i	they	ope	erat	eđ	by	
		` \ \	40110	· ·		Yes	s	• •	• •	• •	•	40%					
		,				No.	• • •		> 0	• •	.•	40%					
	4.	If ·	they	aı	re s	tati	ionaı	cy ai	ce t	hey	re	emot	e 1y	con	tro	11e d	1?
						Yes	5	• • •	•	• •	6	30%				5.4	•
					•.	No.	• • •	• • •	• •			30%					
	5.	P1e	ase	1 i s	st n	umbe	er of	car	nera	s 1	oca	ated	at	the	se	poin	its
		at	the	bac	ck		at	the	si:	đe			at	the	fı	ront	
		1.	• •	60)%		1		.40	%		V- '	1.	•	. 4	10%	
		2.		00)%			2	.00	%			2.	• •	. (0%	
		3.	•	00	0%		3	3	.10	%			3.	•	. (0%	

¹Ten institutions reporting

APPENDIX G.

COMMENTARY DURING AND FOLLOWING THE OBSERVATION¹

During the observation:

1. Does the college instructor make commentary to the student observers?

Yes 80%

No. 00%

Very little [sic] . . 20%

2. Does the demonstration teacher make commentary to the student observers?

Yes 40%

No. 60%

Following the observation does the demonstration teacher discuss anything with the student observers?

Yes 90%

No. 10%

¹Ten institutions reporting

APPENDIX H.

AVERAGE NUMBER OF STUDENTS VIEWING A TELEVISION SET1

In teaching multiple sections of the same class by television, what is the average number of students viewing a television set?

14	•	٠	٠		•	•	•	•	٠	•	8%
15	٠	•	•	•	•		•		•	•	8%
25	•	•	•	•	•	•	•	٠	•	. 3	33%
25	to) 3	35	***	•	•	٠	•	٠	•	8%
30	•	•	•	•	•	٠	•	٠	1 4	•	8%
40	•	•	•	•	٠	٠	•	•	•	. 1	17%
100)。		•		•		٠	٠	•	•	8%

¹ Twelve institutions reporting

APPENDIX I.

TYPE OF ROOM FOUND MOST SUCCESSFUL FOR VIEWING TELEVISED INSTRUCTION1

What type of room have you found to be most successful for viewing televised instruction?

1.	Classroom with fixed seats
2.	Classroom with movable seats 669
3.	Lecture hall with levels for seats
4.	Lecture hall with single level for all seats 00%
5.	An auditorium or theatre type room 25%
6.	A lounge area
7.	Others
	Lecture hall with movable seats

¹Twelve institutions reporting

APPENDIX J.

ADAPTATIONS MADE IN RECEIVING ROOMS 1

	the state of the s	
What a	daptations do you make in your receiving room?	
1.	Do you dim the lights? Yes	
	No 42%	
2.	Do you use one 33% receivers for the classroom	?
	multiple . 83%	
	They are placed at the front 58%	
	side	
	both	
F .	back 8%	
3.	Do you use one 50% speakers for the classroom?	
	multiple . 33%	
· · · · · · · · · · · · · · · · · · ·	They are placed at the front	
	side 17%	
	both	
4.	How high are the television sets placed from the floor?	
	$3\frac{1}{2}$	
	4 8%	
	5' 25%	
	61	<u></u>
	5 to 6'8%	*
	7 8%	

¹Twelve institutions reporting

APPENDIX K.

SUBJECT AND SUBJECT AREAS USED IN TEACHER TRAINING PROGRAMS1

In what subjects or subject areas is television used in your teacher training program?

Professional Genera1 Education Area Education Area Subject Matter Area Observation of General psychology. Comprehensive classes: (Western I11. European Government; Observation of State College) Greeks and the Bible; testing demonstra-Dramatic Interpretation. Hygiene. (State Univ. of Iowa) (Western I11. (III. State State College) Normal Univ.) Mathematics; shorthand. (Wayne State Univ.) Secondary curriculum and instruction, Art; music. direct teaching and (Jefferson County observation; Public Schools) the learner, observa-English composition; Elementary school Beginning chemistry; curriculum, observa-English literature. tion. (Oregon College of (San Jose State Col.) Education) Human Development. Typing; Speech Arts; (Abilene Christian Col.) English. (Evanston Township Educational survey High School) of the field. (Univ. of Toledo) Science; English; Music: Social sciences. Observation of (Brockport State education classes. Teachers College) (Brockport State Teachers Col.)

Education.

(Wayne State Univ.)

¹Twenty-two institutions reporting

APPENDIX L.

PERSON DECIDING ON PROCEDURE AND PRESENTATION OF SUBJECT MATTER¹

Who decides on the procedure and presentation of subject matter for the televised instruction?

1.	The	dean or other administrator	
2.	The	department head	
3.	The	teacher	
4.		producer (a person designated to oversee the . 4% ire production)	
5.	The	director (one who directs the camera shots) 00%	
6.	Othe	ers	
7.	Any	two or more combinations of the above	
	a.	The teacher and the producer 9%	
	ъ.	The teacher and the director 9%	
1 1 € 1,	c.	The teacher, producer and the director 18%	
	đ.	The teacher and the department head 4%	
	e.	The dean, the teacher and the producer 4%	

¹Twenty-two institutions reporting

APPENDIX M.

THE TELEVISION TEACHER1

Please rate the following, using the scale provided, which is designed to indicate your estimate of the value of certain aspects of the television teacher and his presentation. The arrangement of items below does not indicate any attempt to rank the items in an order of importance.

		Nec e ssary	Desirab1e	Not important
1.	Performing ability	50%	32%	
2.	Good voice quality	27%	54%	
3.	Neatness in dress and appearance	4%	78%	
4.	Good posture	4%	73%	4%
5.	Attractive physical appearance	• •	59%	23%
6.	Enthusiasm for televis instruction		14%	
7.	Enthusiasm for teaching	g . 78%	4%	
8.	Adaptability to new methods and procedure of presentation	68%	14%	

¹Twenty-two institutions reporting

APPENDIX N.

TEACHING LOAD FOR THE TELEVISION TEACHER1

Is there a reduction of the teaching load for any preparation period in the semester preceding the actual teaching of the course on television?

Yes	•		•		•	•	•	•	•	٠	•	23%
No.	•	•		•	•	•	٠		•			59%

If "Yes," what percentage of his teaching is allowed for this preparation?

25% allowed 60% 50% allowed 40%

How many classes other than those on television is the instructor expected to teach during the semester in which he is occupied in teaching on television? Please give number.

two .	•	•	•	•		•	•	•	٠	•	9%
three	•	•	•	•	•	٠	•	•	•	•	23%
three	01	r 1	f o	ır	•	•		•	•	•	4%
four.		•	•	•	•	•	•	•	•	•	4%
regul:	ar	s	ch e	eđi	116	≥.	•			•	4%

¹Twenty-two institutions reporting

THE NATIONAL DEFENSE EDUCATION ACT Public Law 85-864, signed September 2, 1958

Federal funds authorized by the National Defense Education Act1

1958-59 1959-60 1960-61 1961-62 (Thousands of dollars)

Title II. LOANS TO STUDENTS 1	\$47,500	\$75,000	\$82,500	\$90,000
Title III. FINANCIAL AID FOR STRENGTHENING INSTRUCTION:				
Equipment and remodelling State supervision	70,000 5,000	70,000 5,000	70,000 5,000	70,000 5,000
Title IV. FELLOWSHIPS	(2)	(2)	(2)	(2)
Title V. GUIDANCE, COUNSELING, TESTING:	•			
State programs	15,000 6,250	15,000 7,250		15,000 7,250
Title VI. LANGUAGE DEVELOPMENT: Centers	8,000 7,250	•		8,000 7,250
Title VII. RESEARCH IN USES OF TV RADIO, MOVIES, ETC	3,000	5,000	5,000	5,000
Title VIII. AREA VOCATIONAL EDUCATION	15,000	15,000	15,000	15,000
Title IX. SCIENCE INFORMATION SERVICE	(2)	(2)	(2)	(2)
Title X. (SEC. 1009). IMPROVING STATISTICAL SERVICES	(3)	(3)	(3)	(3)

In addition to the amounts given here, the Act authorizes (1) "such sums as may be necessary" for the 4 years following 1961-62 to permit every student under the program to continue or complete his education, and (2) up to a total of \$25 million for the entire period for loans to the institutions to help them finance their share of the loan funds.

^{2&}quot;Such sums as may be necessary."

^{3&}quot;Such sums as the Congress may determine." No State may receive more than \$50,000 a year.

^{1&}quot;National Defense Education Act, A Full Report,"
School Life, 41:5, October-November 1958.