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Techniques in Evaluating Instructional Television

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TECHNIQUES IN EVALUATING
INSTRUCTIONAL TELEVISION

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CHAPTER I

THE PROBLEM AND DEFINITIONS

OF TERMS USED

When television first began to be used for direct classroom instruction, many questions were raised about its role in education. There were some who took a dim view of television's potential. There was the argument, for example, that television was essentially a one-way medium of communication and that its use for instruction would deprive the student of valuable contact with the teacher. As one critic stated, "an electronic tube cannot understand a child (10:5)". Another argued that learning would be reduced to a passive experience in which the student merely soaked up what was presented by way of a flickering image on a screen. Finally, of course, it was argued that television will never replace the teacher.

Although most of these arguments have been answered with varying degrees of success, there is still much to be learned and evaluated concerning the success from an "improvement to instruction" point of view. How can this medium improve education and facilitate learning for the child? The question must be explored in the light of the evidence developed in the last decade.

To put the question aside lightly is to be irresponsible at a time when educators face challenges calling for vision and leadership of the highest order; but to

embrace the medium without thoughtfully weighing the problems inherent in its most effective use is as impractical and irresponsible as ignoring its existence and availability (9:293).

There are many reasons this type of evaluation is not easily accessible. The most important of these seems to be the inability to easily identify and measure objectively the success of interactions among the television teacher, the students in a classroom, and the classroom teacher. Since television has come into the classroom, the word interaction seems to have developed tremendous proportions. It has been defined as a two-way communication, generally thought of as involving teacher and pupil. If this is the true meaning of the word and, if interaction is really necessary to learning, one may assume that television would not be a valid resource in learning.

Experiments have shown that television's potential as an important educational resource and tool is unlimited and, as yet, only the surface has been scratched. In fact, the realm of interaction has broadened through classroom viewing to the extent that a new and complete evaluation of the relationship between the student and teacher must be made.

The problem of how this two-way communication can take place between students and the studio teacher is one which is not easily answered. It would seem that the

interaction could be achieved only if all of those participating (studio teacher, classroom teacher, and students) are actively involved. And what about the impressions of our community? A great deal can be learned by exploring the attitudes and feelings of the Mom's and Dad's who sit at the dinner table evening after evening forming opinions while listening to their youngsters re-enact the day's activities.

To adequately evaluate the total instructional television program and its effect on improvement to instruction, all of these areas must be explored and investigated for their contributions to the solution of the problem.

I. THE PROBLEM

Statement of the problem. The purpose of this paper will be to (1) identify and clarify the questions: who should evaluate, why should evaluation take place, how often should evaluation be conducted, and how should evaluation be achieved; and (2) provide sample questionnaire material from which evaluations could be made.

Importance of the study. Instructional television is not only a means of mass communication, but a teaching tool that has many potentialities that have yet to be

thoroughly explored. There has been much written on television in education, but little has been compiled on the different techniques available or being utilized in the evaluation of this medium.

According to Saylor and Alexander in their book on Curriculum Planning (8:607), four important points in evaluation must be considered:

1. The planning of learning experiences for all learning groups should include provisions for evaluation by the groups and their teachers of the experience.
2. A systematic set of procedures for securing evaluative evidence should be in operation.
3. These procedures should be based on values agreed upon by all who participate in curriculum planning.
4. Evidence should be secured regarding (a) the progress of pupils during the period concerned toward specific curriculum goals; (b) the progress of pupils after completing phases of the curriculum; and (c) the opinions of parents and teachers bearing on curriculum planning.

Specifically, evaluation of instructional television must be used to measure its degree of value toward the total educational program.

II. DEFINITIONS OF TERMS USED

Instructional Television. Any use of television for formal courses for any age group, either for or without credit. This term may refer to courses presented on commercial or educational stations, or by closed circuit television (11:16).

Television. Scientifically, television is an electrical method of transmitting visual and aural images over a considerable distance, reproducing these visual-aural images in an unlimited number of places, and doing the whole thing so rapidly that for all practical purposes it is instantaneous (3:12).

Interaction. To act upon each other or a mutual and reciprocal action or influence. This is an essential ingredient in instructional television that is necessary to clarify ideas, help test reality, insure agreement on meanings and reinforce learning.

Evaluation. To ascertain the value of, or amount of, or to appraise a program for its worth toward the total goal.

Television Team Teaching. This term refers to the classroom teachers participating as members of a team along with the television teacher in the fostering of the learning program in each of the subject fields. They cooperatively arrive at the objectives, plan the appropriate units, participate in teaching the lesson, and engage in common evaluative procedures. In television team teaching, the classroom teacher and the television teacher are both active for a part of the teaching period (4:289).

III. APPROACH TO THE PROBLEM

A general review of the available literature was made in an effort to identify the practices and procedures involved in evaluating instructional television. An attempt was made to study the short history, function and recent trends in this medium. Emphasis in research was also placed on the practicality and completeness of evaluative devices already in existence.

Finally, the writer attempted to establish positive guidelines in evaluation techniques that would assist his own future work in this area.

CHAPTER II

REVIEW OF THE LITERATURE

A considerable amount of literature concerning the use of television in education exists in all types of printed materials. Writers both in and out of education have been expressing their views on this subject. Since the amounts of literature concerning the different aspects of television are quite huge, the review will be contained within the framework of experiments in educational television and television team teaching.

Experiments in educational television were being conducted prior to 1958 in St. Louis, Chicago, Cincinnati, Hagerstown, Pittsburg, Miami, and several other cities. Two major conclusions reached are of great significance to the future of in-school television in this country (7:29).

The first conclusion is that television will not replace the classroom teacher in any significant degree in the public schools. Apparently some of the early hope that television would result in a large financial saving to school districts has dimmed.

A second conclusion which appears tentatively to have been accepted is that television can serve as a supplement to teaching but cannot stand alone as an instructional medium. Introduction and follow-up by a classroom teacher is now believed essential to the success

of teaching by television. Some of the reasons are efficiency, relative expense, and sharing of materials, according to Lewis.

Lewis further stated that "there should be two receivers in each classroom for equality of viewing and in case one receiver fails to function, the lesson is not lost" (5:40).

In the Hagerstown experiment, 50 per cent of the class period was devoted to the televised lesson; the rest of the time was taken up with questions, answers, and discussions.

Another type of teaching by television attempts to teach the basic essentials of a given course, leaving it to the local teacher to adapt the telelessons to the needs, interests, comprehension levels, and experiences of her class. Of the hundred or more experimental T. V. teaching projects in progress in 1958, a majority were using this type of lesson presentation (6:4).

Too little attention is being given to teaching "with" television and its relationship with teaching "by" television. Although the television teacher works in the spotlight, the teaching goes into and goes on in the classroom (1:23). Thus, the classroom teacher has an extremely important job making sure that learning does take place.

I. WHO SHOULD EVALUATE?

Why is each of the human ingredients so important to the success of the program?

First of all, the student is the person whose educational needs should adequately be realized, regardless of all other criteria. As one critic asked, "Can television teach as well as 'conventional' methods?" This is an interesting question because it assumes that there is a method or methods which can be labeled "conventional". It also assumes that television teaching is different from conventional teaching, when in fact, the so-called television teaching is usually the same old conventional teaching with an additional medium of communication interposed between learner and teacher (9:303). Regardless of the medium or tool, the learner must be stimulated towards the goals of continuous academic, social, emotional, and moral growth.

Secondly, the classroom teacher is the person who should have a sense of belonging, responsibility and success to promote student and self growth. The manner in which the classroom teacher uses the lesson and his attitude toward television will usually determine how effective the lesson is for the children in his classroom. He can make a good television lesson better or he can destroy even an excellent television lesson. He does this through his attitude and through the way in which he handles the

televised lesson (7:30).

Third, the television teacher is the person whose very presence before the camera pre-supposes the meaning of excellence in his field to all others involved. He teaches not to one class but to many classes. Before him is not a live audience, but the lens of a camera. As a studio teacher he needs to visualize beyond that lens a host of listeners. As he teaches, however, he must teach to each individual. He must consider the lens of that camera as linking him to a boy or girl someplace getting the instruction he is giving. The studio teacher must know about boys and girls and young people and must understand them. He must be able to anticipate their needs and their questions. These he must incorporate in his teaching and as he does so, he becomes an effective teacher (7:27).

And fourth, the parents, and in a broader sense, the community has a direct interest in any program that is conducted in the schools. They have the privilege of being consulted not only from the standpoint of the financial support which makes the program possible, but it is the needs of their youngsters that must be met and satisfied. If those reasons aren't enough, the community is the recipient of all the youngsters who are placed into active participation within their midst.

II. WHY SHOULD EVALUATION TAKE PLACE?

Several of the reasons for conducting an evaluation are very obvious, especially to those in education and other fields who realize that only through evaluation can one see where he has been and systematically and adequately plan for improvement. Kimball Wiles says: "Evaluation is the process of making judgments that are to be used as a basis for planning. It consists of establishing goals, collecting evidence concerning growth or lack of growth toward goals, making judgments about the evidence, and reviewing procedures and goals in light of the judgments. It is a procedure for improving the product, the process, and even the goals themselves" (13:279). In a stricter sense concerning the project of educational television, there are several other reasons for evaluating that refine Wiles' explanation into objective views.

Foremost in the views is to see that the needs of the pupils are being met. If usable subject content, level of interest, expanding of ideas, or promotion of an individual's incentive to learn are not in evidence, a reappraisal of the objectives of the televised program would certainly be in order.

Secondly, is the medium meeting the needs of the classroom teacher? If the subject being viewed is one in

which a particular teacher can use assistance, is he being given enough basic material through the televised lesson and the study guide to provide a starting point for changing this weakness into a strength? Or conversely, if the subject being viewed is a particular teacher's strength, is there enough supplemental and enrichment material in the lesson to be of value to his teaching experience? The assumption should not be made that the classroom teacher is relegated to a minor role when he turns on the television set. He has the specific task of creating the climate for learning. He deals directly with the youngsters in expanding the lesson and evaluating the lesson.

Only through evaluation can assistance be given to the television teacher in planning an effective program. Subject content, course pace, course sequence, inclusion of resources, use of visuals and many other ingredients to an effective lesson cannot be pulled out of the air and put together by one person. This brings us to the final reason for evaluating.

Evaluation will assist in developing a good inter-relationship between the classroom teacher and the television teacher. There are many contributions that must be made, and if anyone does not deliver his contribution, the whole operation will suffer and the teaching is usually ineffective. They must meet together, plan together, and work together.

When the members of the team are involved in the making of a decision, they will work hard at trying to see the total contribution to the total school program. The team approach will pay rich dividends, not only in so far as the program itself is concerned, but in developing good human relations through this inter-relationship (7:32).

III. HOW OFTEN SHOULD EVALUATION BE CONDUCTED?

Evaluation, unquestionably, must be a continuous process if the quality of instruction is to be improved. Continuous evaluation should also be stressed and encouraged if the classroom teacher is fulfilling the responsibilities of her team role. A call on the phone or a note in the mail assists the television teacher in knowing whether an idea used was good or bad, whether the presentation fell flat or was successful, or whether a change in technique or material should be made immediately rather than waiting for a new year.

Regardless of the value of the above type of evaluation, one must also strive to conduct a planned and more formalized type of evaluation.

There should be an evaluation conducted fairly early in the fall to analyze the courses set up by the previous year's committee to determine if changes in over-all course outlines should be made for the present school year. Some

factors that could prevail in redesigning a course of study are:

1. A huge teacher turn-over with the new personnel having different, and perhaps better, ideas.
2. A change in television instructors with the new assignee's personality or methods not meeting or surpassing the standards of the old.
3. A change in organizational or instructional pattern that would alter time blocks, grouping of youngsters, etc.
4. A failure in financial support either through participating districts or sponsoring district with the end result of having to curtail the operation.

Assuming the fall evaluation was completed successfully and the program continued throughout the year, the year's end evaluation can now be considered. This analysis should be most thorough and all-inclusive because of the implications regarding the next terms courses. The work of the entire previous year must be re-examined by all concerned to adequately draw judgments concerning course outlines, objectives, and methodologies for the future. It is during the summer months that the television teacher does most of the broad preparation for the coming term and only through a complete evaluation and committee appraisal can she know her preparations are going to meet the needs of the youngsters, teachers and program.

IV. HOW SHOULD EVALUATION BE ACHIEVED?

The methods of how to evaluate are many and varied.

Although some of these are undoubtedly better than others, all should be sampled and used, if possible, to formulate a complete and well rounded approach. All of the varying types of evaluations can be compiled into two categories, the objective and the subjective.

Needless to say, the objective method revolves around the testing of the youngsters. Even though a test can be devised dealing with such factors as appreciations, understandings, attitudes, and problem solving, it is by the very nature of being a test weighted heavily in terms of information and knowledge of the subject matter. Therefore, the testing program should attempt to evaluate how well the youngsters are learning the subject matter presented through the televised lesson.

The remainder of the types of evaluation can be classified into the subjective category because of the human factors involved in each. Most of them are self explanatory and reasonably easy to conduct, but very difficult to judge because of that unknown variable, personal attitudes.

First of all the written evaluation sheets or questionnaire type of evaluation must be considered. There should be opportunity for the classroom teacher, the children, the principal, and the parent to take part in this portion of the evaluation program. The questions

should be devised as objectively as possible but still allow for degrees of acceptance or rejection. The questionnaires may be filled out periodically and submitted to the television programming office for the information of the studio teachers and those responsible for television program planning. An example of questionnaires for each of the persons involved is included on the following pages.

TEACHERS' EVALUATION SHEET

Name of TV lesson viewed _____

Grade __ Underline one if grouped (High, Average, Low)

Date _____ Name of Classroom Teacher (Optional) _____

Name of School _____ District _____

1. How would you rate classroom viewing conditions such as seating, lighting, etc.?

- a. _____ good
 b. _____ average
 c. _____ poor

Comments _____

2. How would you rate television reception, both picture and sound?

- a. _____ good
 b. _____ average
 c. _____ poor

Comments _____

3. What percentage of your pupils are VERY interested in the program?

- | | |
|--------------|---------------|
| a. _____ 25% | c. _____ 75% |
| b. _____ 50% | d. _____ 100% |

4. What percentage of your pupils are presently NOT interested in the program?

- | | |
|--------------|---------------|
| a. _____ 25% | c. _____ 75% |
| b. _____ 50% | d. _____ 100% |

5. How is the general pupil behavior during the TV program?

- a. _____ better than usual
 b. _____ same as usual
 c. _____ worse than usual

Comments _____

TEACHERS' EVALUATION SHEET continued

6. How long do you think this program should be?

- a. _____ about 10 minutes d. _____ about 30 minutes
 b. _____ about 15 minutes e. _____ longer
 c. _____ about 20 minutes

Comments _____

7. How is the level of lesson for the students?

- a. _____ too difficult
 b. _____ too easy
 c. _____ satisfactory

Comments _____

8. Is there ample opportunity for you to feed back to the TV teacher suggestions and information you think is important?

- a. _____ yes b. _____ no

Comments _____

9. Is there sufficient opportunity for student to participate during the program?

- a. _____ yes b. _____ no

Comments _____

10. Do you think the program should be continued? Is it of value to you?

- a. _____ yes, it should be continued
 b. _____ no, it should not be continued
 c. _____ it should be continued with the following qualifications:

11. Would you be willing to tape record one lesson for the benefit of the TV teacher?

- a. _____ yes b. _____ no

TEACHERS' EVALUATION SHEET continued

12. What time of day would you prefer this program?
a. _____ first choice b. _____ second choice
13. Are there enough graphics and visuals to retain the student's interest?
a. _____ yes b. _____ no
14. Are the TV teacher's techniques of teaching effective?
a. _____ yes b. _____ no

Comments _____

15. What are the problems found by students with TV lessons?

16. Is the subject matter appropriate?
a. _____ yes b. _____ no
17. Does the study guide adequately meet the needs for your preparation?
a. _____ yes b. _____ no
18. Does the study guide provide the proper amount of follow-up or enrichment suggestions?
a. _____ yes b. _____ no

Comments _____

19. Are all materials required by the lessons available?
a. _____ yes b. _____ no

Comments _____

20. Would you be willing to allow your students to participate in a televised lesson?
a. _____ yes b. _____ no

STUDENTS' EVALUATION SHEET

Listed below are five questions which the classroom teacher could use as a basis of discussion with the children and then compile the responses for the benefit of the TV teacher; or the classroom teacher may wish to ditto off enough copies for the students and let them write their own responses to the questions.

1. What part of this lesson do you like best? What makes this program interesting to you?
2. What part don't you like? Why?
3. Do you think the TV lesson is long enough?
4. Can you see and hear the television lesson clearly?
5. Do you feel you are learning anything from this program?

PRINCIPALS' EVALUATION SHEET

ITEM	NOT OBSERVED	EXCELLENT	AVERAGE	POOR
1. Room Viewing Conditions Comments:				
2. Television Reception Comments:				
3. Arrangement of Pupils for Viewing Comments:				
4. Classroom Decorum During Program Comments:				
5. Teacher Participation Comments:				
6. Teacher Encouragement of Pupils Comments:				
7. General Pupil Interest Comments:				
8. General Teacher Attitude Comments:				

Note: A program should be observed at least twice before evaluation.

PARENTS' EVALUATION SHEET

Dear Parents;

In our continued attempt to evaluate thoroughly our educational television program, we are asking that you take a few minutes of your time to give us your views and observations. We realize that the only contact you have would be through your youngster's comments. Therefore, we are asking that you fill this out without specifically asking your youngsters for their judgments on the following questions. We want your opinions as they have formed from your experience with this medium--limited though they may be. Thank you for your cooperation.

1. Has there been a noticeable effect on your youngsters as a result of any of the educational television programs they have in school? If so, in what manner?
2. Does there appear to be satisfaction gained or 'couldn't care less' attitude by your youngsters from this educational television experience?
3. What is your candid opinion of the medium of television as an educational tool?
4. Further observations or comments:

Classroom visitations by the television teacher are another valuable type of evaluation. They are especially helpful to the television teacher if some of her lessons can be filmed on video tape so that she can visit while a lesson is in progress. Visitation is also an especially desirable method of establishing rapport between the students and television teacher and the classroom teacher and the television teacher.

Suggestion boxes in each school will assist the bashful youngster or teacher in broaching a problem without being embarrassed by a personal presentation. This approach is also quite usable for jotting down an idea when it appears rather than trying to remember it for use in a personal conference.

The conferences between classroom teacher and television teacher, whether on a group or one-to-one basis, are the most valuable technique for planning while evaluating. The conferences are often accomplished through work shops or other in-service education media.

Last but not least, one other method besides the questionnaire to gather opinions from the parents and/or the community must be considered. This method involves the use of a forum or discussion meeting to inform and seek information. The meeting can be held in conjunction with a Parent-Teacher Association meeting or can be set up

expressly for the purpose of evaluating the particular problem presented.

CHAPTER III

SUMMARY AND CONCLUSIONS

In the preceding pages, the writer attempted to bring to light certain aspects and techniques appropriate in evaluating instructional television. Though this is only one facet involved in a successful program, the classroom teacher embarking on the use of television will want to find out as much as he can about the medium. What has been done with television in the schools? What has gone into its instructional development? How can the medium be used effectively? The answers to these and other questions about television will build upon, rather than replace, what he already knows about good teaching (12:31).

In conclusion, an attempt must be made to evaluate as completely and conclusively as possible just what contribution educational television is making toward improvement of the total school program. To adequately evaluate is one reply to unanswered questions such as:

1. What subject areas are best suited for televised teaching?
2. How can television instruction provide for individual differences?
3. How can the studio teacher and classroom teacher more effectively coordinate their instruction, their assignments, and their procedures so as to provide for a really unified program of instruction?
4. Is television instruction better than, comparable to, or inferior to conventional instructional methods?

By working with both objective and subjective evaluation tools, the assurance that proper exploration in determining the answers to these and many more questions will continue as a cooperative enterprise among the school, the home, and the community.

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