

Summer 1980

Media Effectiveness Training

Robert Lee Davis

Follow this and additional works at: https://digitalcommons.cwu.edu/graduate_projects



Part of the Educational Assessment, Evaluation, and Research Commons, Educational Methods Commons, Educational Technology Commons, and the Teacher Education and Professional Development Commons

MEDIA EFFECTIVENESS TRAINING

A Project Report

Presented to

The Graduate Faculty

Central Washington University

In Partial Fulfillment

of the Requirements for the Degree

Master of Education

by

Robert Lee Davis

August, 1980

MEDIA EFFECTIVENESS TRAINING

by

Robert Lee Davis

August, 1980

An analysis of the Tolt Junior-Senior High School faculty's use of instructional media showed a need for a program designed to increase the effective use of the Learning Resource Center's available media. This project consisted of developing a series of inservice classes designed to train the teachers to better utilize the overhead, opaque, slide, filmstrip, and 16mm projectors, tape recorders, VTR, microfiche reader/printer, and dry mount press. Appropriate examples have been produced in each medium and a tool created for the evaluation of the inservice program.

ACKNOWLEDGMENT

Dr. Lillian Canzler, chairperson, Dr. Charles Vlcek and Dr. William Floyd, the members of my committee, have my sincere thanks for their support and guidance. Dr. Alexander H. Howard has my gratitude for his contributions during the formative stages of this project.

I also acknowledge the very special help of my wife, Barbara, whose patience, love and support have made this possible.

TABLE OF CONTENTS

	Page
LIST OF FIGURES	viii
LIST OF PLATES	ix
Chapter	
1. INTRODUCTION	1
Background	1
Statement of the Problem	2
Importance of the Problem	3
Teacher Welfare and Media Use	3
Learning Resource Center Trends	4
State Guidelines Impact	5
Inservice Programs Direction	5
Purpose of the Project	6
Inservice Program	6
Assumptions	7
Key Parameters	7
Scope	7
Audience	8
Limitations	8
Definitions	9
Instructional Media	9
Performance Objectives	9
Inservice Education	9

TABLE OF CONTENTS (cont.)

Chapter	Page
2. REVIEW OF RELATED LITERATURE	10
Instructional Media Theory	10
Learning Theory and Instructional Media	10
Dale's paradigm	10
Stewart's model	13
Instructional Design	13
Kemp's model of instructional design	15
Vlcek's model of instructional design	17
Teacher's use of instructional design	19
Selection of Instructional Media	20
Development of Performance Objectives	24
Instructional Media Research	26
Application of Research	26
Research Supporting Instructional Media Use	27
Inservice Program Design	30
3. COURSE DESIGN	35
<i>Context</i> — Course Rationale	35
<i>Process</i> — Preparation and Implementation	36
Development of the Inservice Program	36
Implementation	37
<i>Product</i> — Unit Plans	38
Format	38
Definitions	39
Comments	39

TABLE OF CONTENTS (cont.)

Chapter	Page
Lessons	41
Performance objectives	42
Lesson 1	46
Lesson 2	52
Lesson 3	56
Lesson 4	61
Lesson 5	67
Lesson 6	73
Lesson 7	78
Lesson 8	84
Lesson 9	87
Lesson 10	92
Lesson 11	94
Lesson 12	97
Lesson 13	101
Lesson 14	105
Evaluation	108
Inservice Content Evaluation	108
Inservice Program Evaluation	108
4. SUMMARY AND SUGGESTIONS FOR FURTHER STUDY	109
APPENDICES	
A. Learning Resource Center Questionnaire	110
B. Tolt Learning Resource Center Evaluation	111
C. Tolt Principal's Endorsement	113
BIBLIOGRAPHY	114

LIST OF FIGURES

Figure	Page
1. Dale's Cone of Experience	11
2. Simulation through Use of Instructional Media	14
3. Kemp's Model of Instructional Design	16
4. Instructional Development	18

LIST OF PLATES

Plate	Page
1. Chinese Proverb Transparency 1(d)	50
2. Tolt LRC Transparency 5(d)	71
3. Winner Transparency 6(b)	77
4. Laminated Poster Example 12(d)	100
5. Dry Mount Examples 13(b) and 13(c)	103
6. Dry Mount Examples 13(d) and 13(e)	104

Chapter 1

INTRODUCTION

In order to fully express the conditions which lead to this project and its ultimate design, a brief history is now appropriate.

Background

The 1979-80 school year was my initial experience as a library media specialist after ten years experience as an English teacher in a small junior-senior high school. This first year in a learning resource center was a growing experience that required a great deal of experimentation to discover the role of a library media specialist. The previous person who held this position at Tolt Junior-Senior High School, a small school in Carnation, Washington, with an enrollment of approximately 460 students, was primarily print oriented. Consequently, the teachers had had little guidance in the area of instructional media.

I then decided to keep track of how much the media equipment was being used and how well it was used, also. Certain teachers were never using some of the excellent equipment in the Tolt Learning Resource Center and others were not taking full advantage of it. At the end of the 1978-79 school year, several pieces of media equipment had been ordered but it was a difficult job to have them utilized to their full extent. They were promoted at faculty meetings and individual teachers were helped to use them, but the teachers weren't accustomed to asking for media help and I was

too busy in my new job to develop a better way to promote instructional media. Consequently, the new Kodak Visualmaker was only used three times, the Mini-matic portable Dukane about thirty times, the microfiche reader/printer was used in three classes, and the dry mount press received the most use from art and photography students and teacher's assistants.

The existing instructional media saw some good utilization from a few teachers. They were fine examples of how students could benefit from instructional media production because they allowed their students to get grade credit for employing media in reports. Other teachers made the most use of instructional media's ability to offer alternative learning modes for the wide range of students at Tolt. Seeing the educational advantages that media offers at work in those instances convinced me to broaden the impact of instructional media to reach as many of the teachers, and thus the students, as possible.

Statement of the Problem

The basic question was how can the instructional media utilization at Tolt be improved? Working with individual students who expressed an interest didn't do much to spread the use of media; an interest and awareness had to be created. The logical place to nurture that awareness was in the teacher who could then affect each student in the school. The statement of the problem narrowed to "What is the best way to improve the teacher's use of instructional media?"

Importance of the Problem

A review of the literature revealed various studies which supported the idea that the proper use of instructional media makes learning, and teaching, more effective and efficient. It also presented at least one study indicating that effective use of media may be related to mental health.

Teacher Welfare and Media Use

A teacher who doesn't have control over media can become controlled by it. Often such teachers show a film or TV program without previewing and simply parrot to the class what was said in the medium and end up doubting what their purpose is in the classroom. "Acting as a prompter is not a highly satisfying task for most classroom teachers; rather, it is a potential source of role stress and conflict" (42:232).

I conducted a study using a questionnaire during my first month at Tolt in an attempt to better understand how the Learning Resource Center was used by the faculty. Only ten of the twenty-four teachers responded but that small sampling indicated that media was not being utilized to its fullest; perhaps some of the teachers might be subject to the stress and conflict mentioned above. There was one question which directly pertained to media equipment use, "How often and for what purpose do you use the following A-V equipment: Film projector, videotape, record player, cassette player/recorder, reel to reel player/recorder, filmstrip projector, slide projector, opaque projector, maps, globes, etc., and other."

The use categories were daily, weekly, occasionally, seldom and never.

The equipment which received at least weekly use were, in the order of use,

the overhead projector (six teachers), cassette player/recorder (four), maps, globes, etc. (four), film projector (four), filmstrip projector (three), record player (two), slide projector (two), and reel to reel recorder/player (one). The complete results of this question are presented in Appendix A.

A more accurate record of media equipment use is found in the "Record of Instructional Media Use 1979-80." This is based on my records of equipment checked out of the Learning Resource Center for the entire faculty, not just ten respondents stating how often they used media equipment. The new media equipment was included in this study which examined the use of the videotape recorder, overhead projector, opaque projector, filmstrip and slide projectors, cassette tape recorder, 16mm projector, microfiche reader, and dry mount press. In addition, it contained the production of cassette tapes and slide programs. A letter grade was assigned to each teacher in each instructional media category in accordance with the following scale: A = 21 or more applications of media during the year, B = 21-11, C = 10-4, D = 3-1, E = no use. The instructional media use grades ranged from E with a .4 (one teacher) to C with a 2.0 (one teacher). The average for the 24 teachers was a D with a 1.1. This hardly indicates even an adequate use of media, since each was used by a teacher only one to three times during the year. The complete record is found in Chapter 3, Lesson 3.

Learning Resource Center Trends

Aside from teachers and students having an educational need for the appropriate use of instructional media, another need was seen to

unify print and nonprint, the AV coordinator and the librarian. As reflected by the consolidation of the Washington Association for Educational Communication and Technology and the Washington State Association of School Librarians in the fall of 1977, our libraries are now learning resource centers and incorporate both instructional media and traditional print resources. Therefore, it is a concern when the media half of the program is weak.

State Guidelines Impact

Our State Guidelines indicate a similar concern for including a good instructional media program as part of the learning resource center. The evaluation of the Tolt Learning Resource Center (Appendix B), based on the State Superintendent of Public Instruction's Standards & Guidelines for Learning Resources Programs, indicated that Tolt is not up to par for a developing program in a school of its size. Some examples of inadequate media equipment include a lack of video cassette recorders and monitors, super 8 projectors, 16mm projectors, slide projectors, filmstrip projectors, and studio production areas. This problem of improving the Tolt faculty's use of instructional media is important for building toward the State Guidelines.

Inservice Programs Direction

The final reason this problem was selected is not related to instructional media. Instead it is concerned with the Lower Snoqualmie Valley School District's inservice programs. Content of the programs was often criticized by the faculty, who generally felt they were far too theoretical. Many wanted more input into the content of these programs.

Media Effectiveness Training is an attempt by a faculty member, myself, to design such an inservice program geared to the practical application of educational theory and research specifically for Tolt teachers. For this reason, it is important that this project meet with some success so that it sets a precedence for the faculty development of future inservice programs.

Purpose of the Project

If the statement of the problem is "What is the best way to improve the teachers' use of instructional media?" then the purpose is to improve the use of instructional media by employing the most efficient and effective means.

Inservice Program

In the past I had attempted to work with the students and faculty on a one-to-one basis and to speak at faculty meetings and give demonstrations of instructional media with the hope of improving its utilization. These methods met with limited success. The only alternative remaining seemed to be an inservice program designed to give the faculty hands-on experience with the media equipment and help incorporate that media into the instructional program. Kathleen Hopkins, in An Inservice Course for the Promotion of Visual Literacy, recommends that "the topical information of the course could be organized into units centering on practical application--actual processes and procedures such as photography, film-making, video-taping, display, etc." (12:106). The success of a practical application inservice program rests on three assumptions.

Assumptions

The first assumption is that if people have a chance to work with something previously unfamiliar to them, they are much more likely to use it in the future. This inservice program presents many opportunities for teachers to become familiar with the instructional media equipment in hopes that they will utilize it with increasing regularity.

The second assumption is that the most effective way to reach the most students is through their teachers. The inservice program is for the faculty, not because instructional media is for teachers only, but because each teacher can then become a promoter of instructional media as an alternative method of communicating in a technological society.

The final assumption is that I, as instructor for the inservice program, will be all the more effective if I act as a model of what I am teaching. I have made efforts to do that in all aspects of the program, from design to implementation. For instance, the basis for selecting the appropriate medium lies in fitting it to a stated performance objective. I have done so each time a medium has been selected. /

Key Parameters

In order to make this project manageable, the following parameters have been specified.

Scope

The scope of this project is meant to be selective and suggestive, not comprehensive. Each area of instructional media examined in this in-

service program has volumes of information devoted to it. This writer cannot hope to instruct the full range of instructional media effectiveness training. Instead the content is selective, limiting it to improving the use of the instructional media available in the Tolt Learning Resource Center by focusing on educating the faculty via an inservice program. It is suggestive since it does not pretend to present a comprehensive exploration of the subjects contained in it. Instead, it intends to act as a stimulus and a starting point, a suggestion of future growth. The specific subjects included in the fourteen lesson program are the proper selection of instructional media and the operation of and educational use for the following: Videotape recorder, microfiche reader, overhead, opaque, slide, filmstrip, and 16mm projectors.

Audience

Media Effectiveness Training is designed for the faculty of Tolt Junior-Senior High School during the 1980-81 school year. The busy schedule of the faculty makes scheduling difficult so, to insure maximum flexibility, each lesson is designed to last from fifteen to thirty minutes. Lessons can then be presented in one or two week intervals or could be combined into longer sessions at greater intervals.

Limitations

For the purpose of partial fulfillment of a MEd Degree, this project is limited to the design of the inservice program and the production ~~of instructional media examples used therein. The subsequent implementation,~~ evaluation and report of results are not to be a part of this project.

Definitions

Several terms appear throughout this project which require definition.

Instructional Media

Good's Dictionary of Education defines instructional media as "devices and other materials which present a complete body of information and are largely self-supporting rather than supplementary in the teaching-learning process" (9:307).

Performance Objectives

Any performance objective must contain a statement that includes the intended audience, their expected behavior, and under what conditions and to what degree they perform the learning experience. Vlcek writes, "A performance objective consists of a terminal performance objective and the enabling objectives necessary for the achievement of the terminal performance objective" (40:2).

Inservice Education [Program]

According to Good, inservice education or program consists of "efforts to promote by appropriate means the professional growth and development of workers while on the job; includes planned and organized efforts to improve the knowledge, skills, and attitudes of instructional staff members to make them more effective on the job" (9:294).

Chapter 2

REVIEW OF RELATED LITERATURE

The components of this inservice project fall into two main categories, instructional media and inservice program design. The bulk of the literature, which examined instructional media, was divided into instructional media theory and instructional media research. The remainder of this review dealt with the theory and research on the development of effective inservice programs.

Instructional Media Theory

Learning theory and theories about instructional media, are of course, intertwined. The theories are continually being tested by educational research.

Learning Theory and Instructional Media

One of the first practioners of instructional media use per se was Edgar Dale. He presented a theory which has been extremely helpful in designing educational activities for well over a generation and has been the backbone of many teacher education classes.

Dale's paradigm. Dale's "Cone of Experience," presented in Figure 1, is a visual metaphor of learning experiences which arranges instructional media in order of increasing asbtractness from "direct,

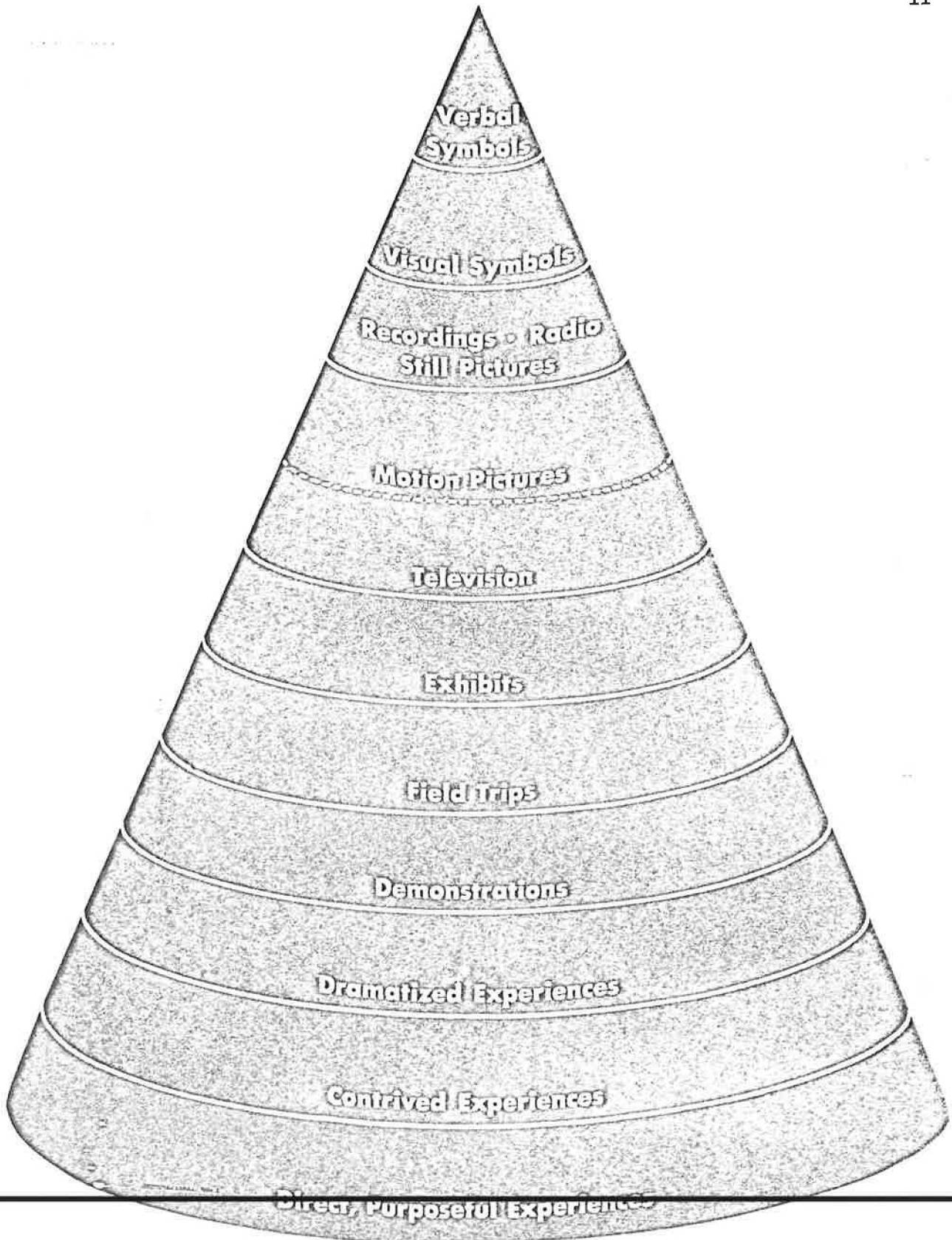


FIGURE 1: Dale's Cone of Experience (4:43)

purposeful experiences" to "verbal symbols" (4). Effective learning does not take place more readily at the base than at the peak of the cone. Rather, the important idea for the teacher is to "help students learn what they find difficult by offering them all the ways of experiencing that relate to the specific subject" (4:54). If the teacher consciously employs as many learning experiences ranging from concrete to abstract as is practical, the student is more likely to retain what is taught.

Dale contends that forgetting will occur when the student does not see the importance of what is being taught because it does not respond to the student's needs and is not sufficiently related to past knowledge, does not see clearly what he is supposed to learn and consequently has no goal, and does not make use of what has been presented, causing it to lack value and meaning (4:22). By using a variety of media spanning a large range of learning experiences at different levels of abstractness, a teacher has a much better chance of avoiding those conditions which cause students to forget. Somewhere on the scale from direct, purposeful experience to verbal symbols a learner will recognize a need for what is being taught and will be able to see it clearly. Value and meaning can also be instilled when a student is involved in producing the instructional media used in presenting learning experiences. Teachers should ask themselves how often they rely only on one or two of Dale's learning experiences in teaching a concept; and how many students consequently don't retain the information because of this narrow approach.

Stewart's model. Donald K. Stewart has developed a model based on Dale's "Cone of Experience" which indicates how instructional media can be utilized by teachers in synthetic situations (Figure 2). Synthetic situations are those contrived by the teacher to stimulate the terminal behaviors of a real-life operational situation. Stewart echoes Dale's theories that more simulations of synthetic situations (learning experiences) result in increased increments of transfer of learned behaviors. "Perfect simulation results in the performance of specified terminal behaviors in the real-life operational situation as a consequence of the transfer of learned behaviors from the synthetic situation" (36:160).

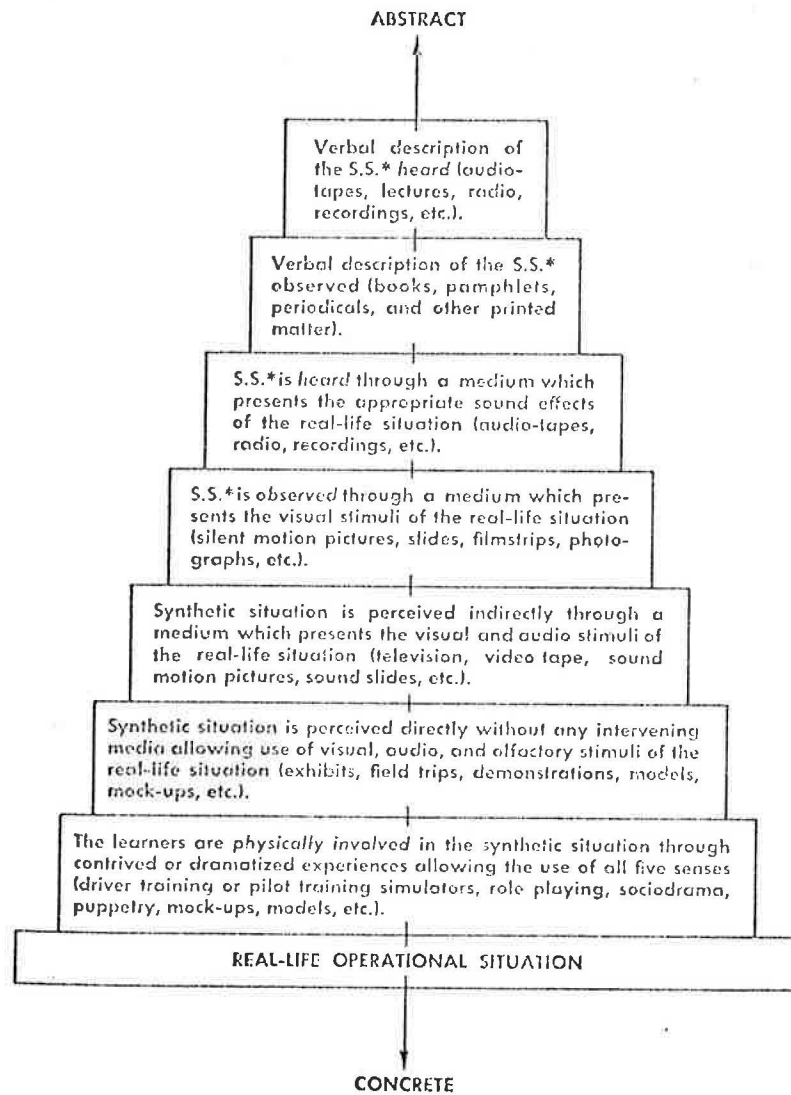
Teachers should note that, if only 50% of the terminal behaviors are transferred to the operational situation, the course materials should be restructured to a lower tier offering a greater degree of simulation. This implies a very important concept about instructional media (36:160): "Fit the media to the objectives, not the objectives to the media." It is obvious that before a teacher can apply Stewart's simulation concept, it is first necessary to apply elements of instructional design--in this case, the specification of the terminal objectives which the learning objectives of the course content are based on. It is important for teachers, then, to have a knowledge of instructional design.

Instructional Design

Instructional design has grown out of instructional technology in the field of education with programs such as Nebraska's Project

FIGURE 2

Simulation through Use
of Instructional Media (36:161)



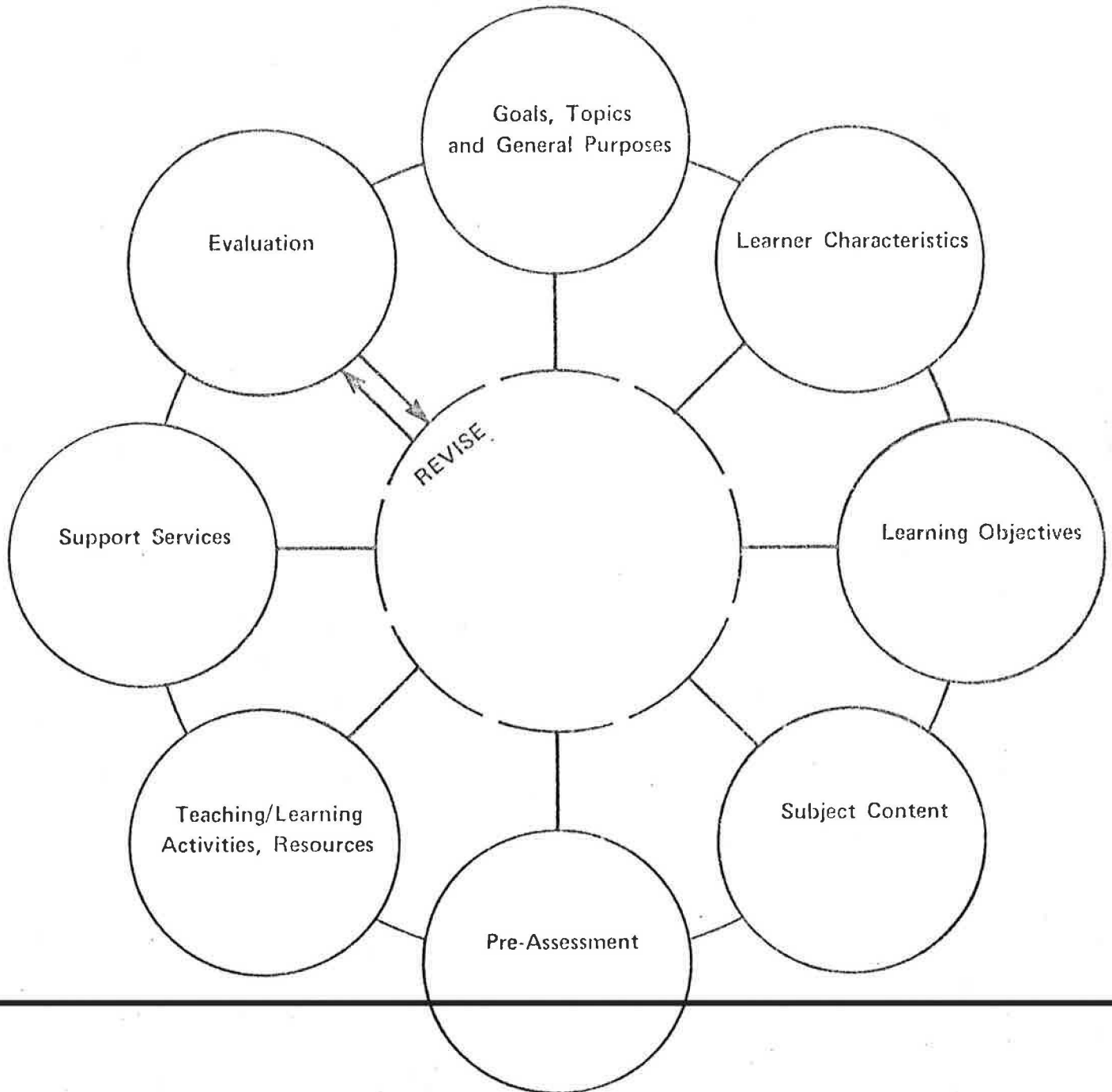
ASERT, a 1965 ESEA-funded project for developing instructional television programs. The whole instructional scheme of the project, however, evolved around a systematic approach to instructional design causing "project efforts to shift from producing television for instruction to designing instruction for television" (3:16). These efforts were continued by the Great Plains National Instructional Television Library. The resulting instructional design was field tested in 1971 and discussed at the 1972 Lincoln Leadership Conference in Instructional Design. "Out of the dialogue at this conference came a common realization that the concepts reflected in this approach to instructional design are essential to the future survival of technology in instruction" (3:15). This model of instructional design resulting from Project ASERT has been explained in detail by C. Edward Caert but it is by no means the sole model of instructional design.

Kemp's model of instructional design. A model which is less complex and easier for a classroom teacher to apply is shown in Figure 3 (15:9). Kemp's model has a framework common to all models of instructional design: the elements of objectives, strategies, and evaluation. More specifically, Kemp's plan consists of these inter-related components (16:6):

1. Choose topics to be treated.
2. State general purposes to be served by the topic.
3. Enumerate the important characteristics of the student group for which the instruction will be designed.
4. Indicate the subject content that will lead to the objectives.
5. Specify the learning objectives to be achieved as related to the content and purposes.
6. Develop pretests to determine each student's background and present level of competence with the topic.

FIGURE 3

Kemp's Model of Instructional Design (15:9)



7. Select teaching/learning activities and instructional resources that will treat the subject content to accomplish the objectives.
8. Coordinate necessary support services, such as budget, personnel, facilities, equipment, and schedules to carry out the instructional plan.
9. Evaluate student learning in terms of the accomplishment of objectives, with a view to revising and reevaluating any phases of the plan that need improvement.

Kemp states that following such a plan insures that media are not supplemental to the instructional program but are, in fact, the content of the instruction itself.

Instructional designs are meant to be working models, adapted to each particular educational setting as required. Kemp's model is ideal for starting fresh; it begins with selecting topics and general purposes. Charles Vlcek's model (Figure 4) is appropriate for using instructional design to modify and improve existing instructional programs.

Vlcek's model of instructional design. This model (39:5-8) begins with identifying a problem by comparing an ideal situation with what actually exists. Thus needs are clarified and problem statements written and prioritized to work toward the ideal. The setting is analyzed (learner characteristics and resources reviewed) which may alter the initial problems statements. Next the management must be organized, roles and responsibilities outlined, and channels of communication opened. Performance objectives stated in behavioral terms are then created, along with the evaluation tools to measure them. The performance objectives are then taken one at a time and methods are specified determining the instructional strategy and media formats to be used (and alternate formats in case of unforeseen



INSTRUCTIONAL DEVELOPMENT

Instructional Development (38)

FIGURE 4

Please note: Images on this page were redacted due to copyright concerns.

problems). At this stage, the construction of the prototypes is accomplished, facilities are prepared and personnel trained. The prototype is tested on a representative sample of learners, the results are analyzed, and, as determined by the results, decisions are made whether to implement or recycle prototype. Many people are necessarily involved in the implementation of Vlcek's model and the task is a group effort, calling for much time and effort from a variety of people, but, because so many have a stake in it, the success of such a design is assured.

Teacher's use of instructional design. How can instructional design be employed by the classroom teacher who simply wants to improve his or her instruction and use of media? This teacher may be motivated by a problem, as in Vlcek's model, such as too many failing students in Contemporary World Problems. However, the teacher has neither the time nor inclination to try to mobilize the entire history department, principal, superintendent, library media specialist, etc. Kemp's model may seem more appropriate in this case. However, it also calls for a group effort; support services must be included with this plan, also. The teacher need not throw hands in the air and wait for the arrival of an instructional designer, though. The important points of instructional design (define, develop, and evaluate) can be followed by any classroom teacher and should result in improved instruction even if the instructional design model is modified from the examples presented here.

Selection of Instructional Media

Models of instructional design give the teacher a systematic way to develop lessons. How does the teacher select the appropriate instructional media for those lessons? Gerlach and Ely emphasize, "A medium of instruction must be selected on the basis of its potential for implementing a stated objective" (8:281). This is why it is important to have written objectives in measurable form; without them, a teacher has no criteria with which to choose the best media. There are eight types of media, according to Gerlach and Ely, to consider.

Real things, contrasted with other media, are not substitutes for the actual object or event. Verbal representations include printed or projected words as well as aural verbal representations. Graphic representations are charts, graphs, maps, diagrams, or drawings. Still pictures are photographic representations. Motion pictures include television. Audio recordings are reproductions of actual events or of sound effects. Programs are sequences of information which are designed to elicit predetermined responses, such as programmed textbooks. Simulations are replications of real situations designed to be as near the actual event as possible, such as educational games. Notice that a variety of hardware may be employed with each of these media.

Before the medium is selected according to the stated objective, there are five factors to consider. Appropriateness speaks ~~to the behavior the students will be required to exhibit as a result~~ of the teaching experience. If, for example, students are expected to

identify faulty speech habits, an appropriate medium would be a tape recorded or a VTR, since students must hear (and preferably see) themselves to accomplish such a goal. Level of sophistication refers to the software being at the right grade level so it doesn't talk down or go over the heads of the students. Cost is definitely a factor; a film cannot be rented if the school district has no money in the budget for it. Availability is a limiting factor if, for instance, the program is on a videodisc, but your school doesn't have the appropriate videodisc player. The last selection factor is technical quality; is it poor enough to get in the way of the stated educational objective? The teacher could then consult a matrix demonstrating the considerations to apply when selecting instructional media. This can help the teacher place the objective before the instructional media.

Jerrold E. Kemp has reviewed some of the research-based models others have developed to help instructors and instructional designers select the appropriate medium. He noted that most of the models are similar as they strive to correlate media selection with various instructional elements, usually to the puzzlement of the average teacher who is simply trying to figure out which medium to use. Kemp quotes the researcher Briggs in this regard (17:13-14):

Unfortunately, it is not possible to make optimum media selections by simply following a chart, or table, or "cookbook", which would say essentially, "For this competency identify the type of learning listed in a column, find its intersection with type of learner listed in a row, and use the medium named at the intersection." Nor is it possible to make such mechanical rules based on the instructional event to be supplied or on the basis of the subject matter involved.

If such charts and tables are impractical, is the teacher left with the educationally irresponsible "decisions of convenience"? Kemp

suggests a yes-no sequence flow diagram where each response leads the practitioner to a more definitive question until the end is reached which indicates an appropriate media class for the lesson. This guide, though it is not difficult to use, has the drawback of stating the obvious. In other words, common sense would lead most instructors to the same conclusion without the bother of the yes and no questions.

Probably the easiest and most practical advice on selection of media for a classroom teacher to utilize was presented by John McConnell (21). He presented the importance of performance objectives and then asked the teacher to examine six elements of media and their ability to implement the stated objectives. The six elements are:

1. Visuals. The instructor should realize the more concrete the material, the more important visuals are in lieu of the material.
2. Student Control. How important is it that the student control the pace of the instructional material?
3. Motion. Usually action is necessary in psychomotor objectives, though sometimes a series of stills is appropriate.
4. Color. Must visuals be viewed in their true colors or is black-and-white adequate?
5. "Edit-ability." Can the medium be altered to keep current or adapt it to different performance objectives? Can portions of it be easily used?
6. Flexibility. How restricted is the medium to a particular time and place?

After examining potential instructional media in the light of these six elements, the teacher could then select the one which has the elements necessary for the stated performance objective without extra elements which would increase the cost of the media but not add to the achievement of the objective.

An illustration of this selection method is based on this objective: The student will identify five types of poisonous plants. Obviously, realia would be the most direct media to use, but it would

be inadvisable to have poisonous plants in the classroom. Since they must identify the plants, visuals are necessary. Student control is a must since memorization occurs at different rates with different individuals. Motion is not necessary. Color is important. "Edit-ability" should be a consideration since it would be helpful to limit the number of plants the student is exposed to so that attention can be focused on the poisonous ones mentioned in the performance objective. Flexibility is also important because the student may require several reviews to correctly identify the plants. Compiling this information, the best medium to employ would be a textbook, if it had color photos. The next best medium would be selected slides with an appropriate script. This media can still be controlled by the student, but the flexibility is reduced, since a rear-screen slide projector would have to be scheduled for use in the classroom or library. A poor selection of media for this objective would be a 16mm film, since motion is not necessary and flexibility, "edit-ability", and student control are lacking. The worst selection would be an audio tape, for obvious reasons. The main idea in selecting media is to state the performance objective, consider the requirements of the learners, evaluate the elements of the media, and select the medium accordingly.

A key skill which teachers need to develop in order to effectively select instructional media is how to write the objectives which determine the appropriate media. Objectives should not describe what activities the teacher will perform during the lesson. "If the school's purpose is to alter students' thoughts and behavior in a

desirable direction, it appears reasonable to state objectives so that they spotlight the desired changes in students rather than focus on what the teacher intends to do in class" (37:38). Stating objectives is part of all instructional design models and it begins with an idea or problem, a generalized statement of purposes (16:30). The more specific the objectives, the easier it becomes to prescribe the appropriate media and evaluate the effectiveness of the instruction.

Development of Performance Objectives

A good format for teachers to employ has been adapted by Charles Vlcek from the Superintendent of Public Instruction guidelines (40:1-3). This format specifies two levels of objectives, Terminal Performance Objectives (TPOs) and Enabling Objectives (EOs). TPOs stem from the generalized statement of purposes and indicate the performance the student must exhibit when assessment takes place at the end of the instruction. EOs state the essential behaviors of the student needed to achieve the TPO. The process usually begins with one or more TPOs which are then broken down into the component EOs. The specific learning activities and appropriate instructional media can then be selected for each EO. It is at this stage that the evaluation tools are created, based on each EO. The specificity of the EOs (or TPOs) makes this task easy.

To insure that the objectives are complete, it is suggested that the teacher follow the A, B, C, D method. Each objective should contain the Audience, Behavior, Conditions and Degree. Audience refers to who is doing the learning, what is their entry level, etc.

The behavior must be stated in terms that are observable. The conditions are time and resource limitations placed on the student's performances when he is being evaluated to determine if he has achieved the objective. Degree is a statement of to what extent the student must master the objective satisfactorily. As an example, the inservice program has the following EO: "Each of the Tolt teachers participating in this lesson will demonstrate their ability to use the Singer projector to present a portion of a 16mm film to a class of their choice by the end of the school year without ruining the film or wasting class time by incorrectly using the projector." To evaluate such an objective, all the Tolt teacher need do is ask the inservice instructor to observe the class when such a film portion is ready to be presented.

A final consideration when using performance objectives is which domain do they fall into--psychomotor, cognitive, or affective? (16:30) Psychomotor objectives are performance skills which involve the use of skeletal muscles; cognitive ones include knowledge, information and intellectual skills; the affective domain deals with attitudes, appreciations and values. Affective objectives are the most difficult to design because they are difficult to objectively measure. Keeping Dale's "Cone of Experience" in mind, it is a good idea to use all three whenever possible, thus increasing the student's chances of learning being retained. The example objective given previously would fall into the psychomotor domain. Objectives could be written in the cognitive domain by, for instance, having the Tolt teachers state or list the steps necessary to present a portion of a

film to a class. The affective domain could be measured through how many times each teacher used this technique, thus giving an indication of attitude.

Instructional Media Research

This section not only deals with some of the pertinent educational research concerning instructional media but also its application for the classroom teacher. How is a teacher to use the results of this research?

Application of Research

Francis M. Dwyer has done intensive research into improving visualized instruction since 1967, the results of which are compiled in A Guide for Improving Visualized Instruction (6). Dwyer's research projects have lead him to the conclusion that, because there are so many variables associated with the design and production of visualized instruction, it is "virtually impossible" to develop a single learning theory. Consequently, teachers cannot wait for commercial producers to deliver the answer, in the form of instructional media designed to work with all students and curricula, to them. The answer is for the teachers to do their own research in the classroom: "The only certain way to establish the effectiveness of the different types of visualization is to use them and to measure the achievement obtained from samples of the intended learner population" (6:96).

Dwyer is suggesting educational research, including random sampling of the student population, experimental and control groups,

experimental variables and statistical analysis, all of which may not be practical in a small school such as Tolt. However, the questions a researcher should ask are applicable to classroom teachers, also

(6:96):

1. What types of educational objectives are to be achieved by the students in the instructional program?
2. What student characteristics should be taken into consideration in a field testing program?
3. How will the visualized instruction be presented to the students; that is, will the instruction be externally paced or self-paced?
4. What types of visual materials are currently being used for instruction? Should other types of visuals also be included in an empirical evaluation designed to determine relative effectiveness?
5. What types of cueing techniques will be incorporated in the visualized instruction?

These questions parallel the components of instructional design models previously discussed as they require objectives, learner characteristics, and the development of instructional media based on those factors. Teachers, then, could employ Dwyer's ideas of experimenting to find the best instructional media for their own particular teaching situation even when they are not doing formal research.

Research Supporting Instructional Media Use

Dale's learning theories of more than a generation ago are still constantly being supported by recent research. For instance, Gavriel Salomon's work (33) indicated that varying the presentation of content, or levels of experience, by employing a range of instructional media can be beneficial to students since "different formats, typical of the television medium, differentially affect the mental skills which are called into play. Thus, in spite of a common content,

knowledge acquisition was mediated by different kinds of skills, depending on the nature of the dominant format in which the content was presented" (33:38). Thus the variety of formats presented with the range of instructional media stimulate different mental skills in different students. This would indicate extensive use of a variety of instructional media, as Dale would agree, to insure that as many as possible learn.

Other literature which indicates that instructional media is effective has been researched by John Moldstad, who found (24:390)

when instructional technology is carefully selected and used:

1. Significantly greater learning often results when media are integrated into the traditional instructional program.
2. Equal amounts of learning are often accomplished in significantly less time using instructional technology.
3. Multimedia instructional programs based on a "systems approach" frequently facilitate student learning more effectively than traditional instruction.
4. Multimedia and/or audiotutorial instructional programs are usually preferred by students when compared with traditional instruction.

Moldstad's review of the literature, then, reveals even more support for use of instructional media.

Recent educational research done by Kankowski and Minaruth (28) on the effects of a multimedia approach (instructor with slides and television) echoed the first result summarized by Moldstad. College geometry students "taught by the multimedia approach have higher mean scores than the students taught by the conventional approach" (28:119). The range of scores in the multimedia group was also more constricted than in the conventionally-taught group. These older college students benefitted from instructional media; what about younger students?

Joanne Rovet conducted research on third-graders to determine if instructional media can help develop mental skills. "In sum the results have shown that audio-visual media can indeed facilitate the development of cognitive skills in children" (30:9). Her study demonstrated that the audio-visual media were even comparable to learning achieved through direct active experience.

The recent influx of split-brain research indicates possible importance of instructional media in the development of children. Michael Grady has found that "split-brain research provides a rationale for the study of media in schools, since media studies provide a vehicle for the development of the right hemisphere" (10:47). The left hemisphere of the brain contains functions such as reading, writing, calculating, and speaking--those activities associated with a traditional educational approach. The right hemisphere deals with images, spacial concepts, intuition, and music, which are best exercised through instructional media. To make the most out of the whole brain, the "learn by doing" idea should be used. Media should not be "done to students," where they have the role of passive receivers of information. Rather, studies "suggest that instead of giving a specific assignment, a teacher should permit students to explore and assign a problem of production" (10:48). Solving production problems involves both hemispheres of the brain and leads to balanced development.

The bulk of this research points to teachers becoming more visually literate and employing more instructional media. Oxford and Moore (26:21) point out some interesting ways the teacher can use

instructional media, such as visuals, for motivational purposes. An example, which uses the right hemisphere to motivate the left, is the use of a still picture as an analogy to the parts of speech, where the students identify the grammatical parts of the picture (noun, verb, adjective, etc.). Oxford and Moore have designed and taught courses which allow students to produce, and learn from, instructional media. "One of the purposes of the visual literacy movement was to provide students with the opportunities for success through visual expression" (26:20).

There exists a great amount of educational research that indicates the importance of instructional media in education and its most effective usage. As Angie LeClerc states, "Teachers have found that audiovisual materials at all levels of the cone [Dale's 'Cone of Experience'] can help students in the development of concepts and ideas" (19:35). Teachers cannot do this on their own, however. LeClerc sees the library media specialist as the person in the school building who can provide one-on-one instruction in the area of instructional media to the student as well as provide instructional support for the classroom teacher. One way to provide this support is through an inservice program designed for each school's particular needs.

Inservice Program Design

This review of the literature has focused on the need for using instructional media in education and its selection and utilization. Research indicates that people can be taught to use the

right hemisphere of the brain; visual literacy as a subject as well as a medium has its place in the school. Oxford and Moore have written, (26:21), "Can the eye be trained to identify visual cues correctly and to interpret the intent of the visual messages. We think the answer is yes. But we must first start with the teachers." The teacher is the key, the way to reach students, so it is logical that the teacher be trained first, and the logical way to accomplish that is through an inservice program.

In small public schools the task of recognizing the need and developing such a program usually falls on the library media specialist. LeClercq has elaborated on some of these new responsibilities.

"Increasingly aware that many teachers, especially at the grade school and high school level, need assistance in integrating these new materials [nonprint] into the curriculum, this new breed of librarian is ready with suggestions that range from selection of AV titles for a unit of study, to actually planning and teaching a unit developed around various media" (19:34). What form should these instructional units take?

Lavon Hart has also recognized that teachers "need to be influenced and informed about newer ideas and techniques. Workshops help overcome this problem of communication but the opportunity is limited for holding them in a large school system" (11:14). Hart has suggested the use of a newsletter to communicate instructional media information, but a newsletter does not give teachers hands-on training.

What methods are preferred by teachers?

Rutherford (31) reported how the elementary reading teachers

felt about the method of instruction. The three modes, in order of preference, were live demonstrations, staff presentations, and credit courses. Who should instruct these courses was examined by Reilly (29) in her study of confidence levels of California elementary school teachers concerning inservice education. These teachers indicated that they had more confidence in an experienced peer than any other type of inservice instructor, including experienced professors and principals. A mode, then, that would be likely to gain acceptance from teachers is one that includes live demonstrations presented by a member of the faculty. An inservice program fits these criteria.

Other literature indicates some important considerations in designing such an inservice program to insure its success with the participants. Perry Zirkel's study of 288 Connecticut teachers indicated some important factors (43:331-32):

Overall, the teachers attached the highest priority to the content of inservice offerings. The time at which the training would be offered was accorded the second position in overall prioritization. Within this dimension, respondents preferred training to be held during or directly after school and perceived school vacations, before school, and weekends as negative training times.

Other considerations important to the participants were the format of the instruction, if credit was offered and if tuition was charged. Zirkel instituted this study because he saw more emphasis on inservice training but less planning done to make it effective.

The major goal of this inservice program was similar to the subjective evaluation presented in Bedford's In-service Education Committee's report (32:27): "Teachers became significantly more aware of the necessity for involving pupils more in learning, and for

individualizing instruction to this end."

Knight and Smith (18) used a team of subject matter and media specialists to research the best way to teach the effective use of media to teachers by exploring four approaches: mechanical, philosophical, simulated experience and authentic experience. The mechanical approach, simply making teachers aware of the equipment and how to use it, did not "insure or even particularly maximize, their use in the classroom" (18:29). The philosophical approach had as its main objective to provide sufficient evidence to demonstrate the desirability of using media and to enable teachers to develop their own rationale. "The course developed into a 'typical education course,' and was considered in terms of the goals which had been established, extremely unsuccessful" (18:30). The simulated approach involved the participants using media based on stated objectives in a simulated classroom situation (18:30).

The procedure seemed to motivate students toward learning more about the utilization of media in order to present their particular simulated experience to the class. The authentic experience approach required teachers to diagnose actual children according to needs, after which they were to provide a learning situation, using media, within the framework of those needs.

This approach combined the mechanical and philosophical ones and required the participants to work with those in the Educational Media Center. The participants became guides rather than sources for all learning. Although working with the team was threatening to some teachers at first, their "attitude toward the effectiveness of the team teaching situation was overwhelmingly in favor of this experience" (18:30).

Planning a successful inservice program was a concern of Kathleen P. Hopkins' Masters Project (12) about an inservice course to promote visual literacy. Her review of the literature included some guidelines presented by Ben Harris. Harris indicated that a good program should have clear objectives, structured learning objectives and evaluation criteria for feedback and revision. Such ideas were amplified by Nancy Polette who mentioned these five criteria necessary to successful instructional media training (27 :3)

1. Determination of workshop procedures and content must be a cooperative endeavor of all educators involved.
2. The material presented must be relevant and applicable to the particular teaching-learning situation of the conferees.
3. Provision must be made for immediate use of the materials or information presented.
4. Provision must be made for active involvement of participants.
5. Released time from daily teaching duties is essential for creating a receptive audience.

In general, the planning of inservice programs follows the same procedures inherent in instructional design plus some considerations peculiar to teachers' situations.

This review of the literature is the backbone of the following inservice program. Its design and content incorporate wherever possible the ideas presented in the review of the literature.

Chapter 3

COURSE DESIGN

The creation of Media Effectiveness Training began with the need for the Tolt teachers to improve their use of instructional media as discussed in Chapter 1. The Review of Related Literature presented both educational theory and research to support the effective use of instructional media and the choice of an inservice program to promote such an end. The following rationale adds to the justification of this inservice program.

Course Rationale

No educator can argue with the idea presented in this Chinese proverb: "I hear, and I forget; I see, and I remember; I do, and I understand." People learn best by doing and instructional media can often provide that experience. Edward McNulty has stated, "Multimedia calls forth a gut level reaction. It is an experiential rather than an informational form of communication" (22:58). In addition to this idea, there are several documents which give a rationale for employing media in the schools.

The Board Policies of the Lower Snoqualmie Valley School District indicate a need for instructional media. The introduction to the instructional materials section states that, to achieve the goal of providing each student with the opportunity to learn, "the freedom to read, to view, to explore and interpret meaning through various media is imperative"

(2:Policy 4600).

Public Law 95-561 provides further rationale. According to the U.S. Department of Health, Education and Welfare, this law "emphasizes the importance of media in elementary and secondary school instruction and the involvement of librarians, media specialists, and teachers, and other professional staff in the selection and coordination of instructional materials" (35:1).

Preparation and Implementation

After formulating the initial idea of this project, the writer took steps to insure the inservice program was not developed in a vacuum.

Development of the Inservice Program

When this project was in the formative stages, care was taken to inform and involve others in its design. The Superintendent was included in the initial discussion of the project and he contributed the information that the content of approximately four inservice afternoons would be left to the teachers. The Principal was very supportive (Appendix C) and he suggested several ways it could be implemented, including through some faculty meetings. A sampling of teachers I contacted, including the president of the association, were also supportive of the plan. The responses of these people provided encouragement to continue with the project.

Further development occurred as the review of literature continued. More emphasis was placed on performance objectives and the selection of instructional media as a result. Also, care was taken to insure that the inservice program would not turn into a "typical education course" (18).

Practical application would have to be stressed. Thus involving others and reviewing the literature provided the foundation of this project.

Implementation

The inservice program is designed to be flexible in its implementation. The following lessons can be grouped together for longer presentations or held one at a time. I suggest, if the faculty attends weekly meetings, to hold a lesson after each one. The teachers would already be present and would likely not be opposed to spending an additional fifteen to thirty minutes. The weekly lessons would insure continuity plus give teachers time to complete assignments and engage what they learn in their own classes. Also, the strain on the Learning Resource Center's limited facilities would be more evenly distributed than with several lessons combined into longer meetings.

Unit Plans

This section of the Course Outline contains the actual lesson plans of the inservice program. Since they will be used to teach from, the format of this section reflects practicality and convenience.

Format

This section begins with an overview of the terminal performance objectives and their corresponding enabling objectives. The domain(s) of each are mentioned along with which lesson numbers are focused around that particular objective. Each lesson begins with an outline which states enabling objectives, sequence of teacher and learner activities, the instructor's instructional media required to teach the lesson, and how the learners are to be evaluated. The page after each lesson outline gives detailed notes designed to guide the instructor through each lesson by giving the specific information for presentation. Following the Instructor's Notes are examples of the instructional media employed in the lesson.

As a convenience, the entire Unit Plans section is laid out in a horizontal format so that the reader will not have to turn the book different directions as the plans are executed. Efforts have been made to contain all essential information within the respective lessons to save the time and effort of looking through the entire project to find a discussion question, transparency, or the like.

Definitions

For the sake of brevity some words and phrases have been shortened so the information could fit on the outline form and, in some cases, enabling objectives have been shortened to fit on the outline form. The reader should consult previous lessons for the full wording.

Participants. This is meant to stand for the phrase, "Each of the participating Tolt teachers"

Objective. This word usually refers to performance objective, but, depending on context, could also mean terminal performance objective or enabling objective.

Attend. This always means "pay attention to," not "be present."

Numerals and letters. Terminal performance objectives are signified by Roman numerals. Their enabling objectives have the same Roman numeral followed by a capital letter in parentheses indicating which of the enabling objectives it is for that particular terminal performance objective. Arabic numbers represent the lesson number and, when followed by a lower case letter in parentheses, indicate the instructional media for that lesson.

Comments

These lessons are designed to last between fifteen and thirty minutes, depending on the amount of participant interaction. Most of the class time is used for demonstration and the participants do the assignments largely outside of class time. Consequently, the Learner Activities column doesn't show much activity. Student produced media is not included in the media column because it is something the instructor has no direct

control over.

The Evaluation Method column only contains a comment when the enabling objective has been fully accomplished and measured, usually in the form of checking the participant off the teacher's record book for completing the assignment. There are no minimum quality standards for these assignments; the idea is to get the participants to experience producing and using the instructional media and, as long as something is produced, credit is given. All records are kept by the instructor and at the end of the year will help evaluate the success of the program as well as each individual participant. The participant(s) doing the best job will receive an Instructional Media Promotion Award at the year's end.

The promotion of instructional media will not stop after the fourteenth lesson. Just as the instructor plans on being available to help participants while the inservice program is in operation, he will continue to give his time during the remainder of the year. Faculty meetings will be used to remind participants of their progress on enabling and terminal performance objectives and other examples of instructional media will be shared with teachers at appropriate times.

COURSE DESIGN

Unit Plans

Lessons

Effective Media Training
Performance Objectives

- I. Each of the participating Tolt teachers will demonstrate ability to use all functions of the Learning Resource Center's media equipment in classroom situations at least twice during the school year without wasting class time or damaging hardware or software. (psychomotor, cognitive, affective)
 - A. Participants will demonstrate operational mastery of the Singer 16mm projector by showing selected portions of a film to a class of their choice. (psychomotor, cognitive) Lesson 2, 6
 - B. Participants will demonstrate the operation of either the rear-screen Dukane, the classroom Dukane, or the filmstrip projector in a class at least once by the end of the school year. (psychomotor, cognitive) Lesson 11, 12, 13
 - C. Participants will list during the last lesson the instructional media equipment available in the Learning Resource Center. (cognitive) Lesson 1, 13 14
 - D. Participants will, given a list of overhead projector uses, check off or add ways they've employed in the past by the start of Lesson 5.
- I. D. (cognitive) Lesson 4, 5
- E. Participants will demonstrate the use of a slide or sound-slide projector either in a classroom situation or to the Library Media Specialist once during the school year. (psychomotor, cognitive) Lesson 6, 7, 8
- F. Participants will use the Kodak Visual-maker at least once to produce a set of 20 slides and show them to the faculty by the end of the year. (psychomotor, cognitive, affective) Lesson 8
- G. Participants will videotape a classroom activity and play a portion of it back to the faculty sometime during this school year. (psychomotor, cognitive) Lesson 9, 10
- H. Participants will demonstrate operational mastery of the Bell and Howell 16mm projector by showing a film on it to a class by the end of this year. (cognitive, psychomotor) Lesson 10
- I. Participants will demonstrate use of a microfiche reader to the instructional media specialist by the end of the school

- I. year. (psychomotor, cognitive) Lesson 10, 11
- J. Participants will use the dry mount press to produce a laminated and a mounted project and show them to the library media specialist by the end of the school year. (psychomotor, cognitive) Lesson 12, 13
- II. Each of the participating Tolt teachers will state once during this inservice program two reasons for employing instructional media. (cognitive) Lesson 11, 12, 14
- A. Participants will list in the last lesson the media equipment available in the Learning Resource Center. (cognitive) Lesson 1, 11, 14
- B. Participants will write and submit by the end of the lesson two of the presented reasons for using instructional media. (cognitive) Lesson 2
- C. Participants will list in their notebook two reasons and/or advantages for using overheads. (cognitive) Lesson 4, 14
- III. Each of the Participating Tolt teachers will use media in a new way at least twice in classroom situations by the end of the school year. (affective, cognitive) Lesson 7
- III. A. Participants will keep a notebook containing at least 20 ways they observe instructional media being utilized during this inservice program. (cognitive) Lesson 1, 6, 14
- B. Participants will share with others and record in their notebook one successful utilization of instructional media they've experienced. (cognitive, affective) Lesson 3, 8, 10, 12, 13, 14
- C. Participants will give oral feedback to the instructor on the accuracy of Record of Instructional Media Use 1979-80 by the end of Lesson 5. (cognitive, affective) Lesson 3, 4
- D. Participants will demonstrate to others the new use of a self-produced transparency of their choice once during the inservice program. (psychomotor, cognitive, affective) Lesson 4, 5, 6, 7, 8, 9
- E. Participants will record in their notebooks at least two advantages slides have over other media by the end of the inservice program. (cognitive) Lesson 7, 8, 14
- F. Participants will start a file of ideas, photos, and photo locations for future slide programs in their notebooks and have at least 20 entries by the end of the year. (cognitive, affective) Lesson 7, 14

- III. G. Participants will record in their notebooks two uses for the opaque projector by the end of this inservice program. (cognitive)
Lesson 11, 12, 14
- IV. Each of the participating Tolt teachers will write and share with other participants once during this inservice program a lesson plan demonstrating how performance objectives aid in selecting appropriate instructional media. (cognitive) Lesson 6, 11, 12, 13, 14
- A. Participants will state one component of writing performance objectives sometime during the next five lessons. (cognitive)
Lesson 1, 2, 4, 5
- B. Participants will write on a transparency an example of a performance objective from a subject they are now teaching and submit it at the start of Lesson 4. (cognitive)
Lesson 3, 4
- C. Participants will write a performance objective, select and produce the appropriate instructional media to teach it with and present it to other participants sometime during the inservice program. (cognitive, psychomotor) Lesson 5, 6, 7, 8, 9, 10, 11
- V. Each of the participating Tolt teachers will employ instructional media in the content of at least one class during the school year to the extent that it becomes an equal alternative to the more traditional oral and written forms. (affective) Lesson 12
- A. Participants will present or have the library media specialist present to their class at least one lesson on how students can use instructional media by the end of the second trimester. (cognitive, affective)
Lesson 14
- B. Participants will give students in at least one class during the school year the opportunity to use instructional media for grade credit in place of a written or oral assignment. (affective) Lesson 7, 8, 9, 10, 11
- VI. Seventy-five percent of the Tolt teachers will support faculty-created inservice programs by actively participating in at least half of the Media Effectiveness Training lessons. (affective, cognitive, psychomotor) Lesson 14
- A. Seventy-five percent of the Tolt teachers will attend each lesson. (affective)
Lessons 1-16

VI. B. Seventy-five percent of the Tolt teachers will work at least once on their own time with the instructor applying the inservice program content. (affective, psychomotor)
Lesson 2, 7, 9, 12, 13

Enabling Objectives

LESSON 1

- III(A) Participants will keep a notebook containing at least 20 ways they observe instructional media being utilized during this inservice program. (cognitive)
- IV(A) Participants will state one component of writing performance objectives sometime during the next five lessons. (cognitive)
- I(C) Participants will list in the last lesson the media equipment available in the LRC. (cognitive)
- VI(A) Seventy-five percent of the Tolt teachers will attend each lesson. (affective)
- II(A) Participants will write on a transparency and submit at the start of the next lesson one reason for employing instructional media. (cognitive)
- III(D) Participants will demonstrate the new use of a transparency of their choice at least once during this in-service program. (psychomotor, cognitive)

EO Number	Instructor Activities	Learner Activities	Instructional Media	Evaluation Method
III(A)	Introduce and present multi-media show	Attend	1(a) "Using Your Tolt Learning Resource Center"	
III(A)	Lead discussion: media's effect on the message	Respond, attend; take notes		
IV(A)	Distribute ditto of inservice TPOs and discuss	Attend	1(b) Ditto TPOs	
I(C), V(A)	Distribute syllabus ditto	Attend	1(c) Ditto syllabus	
VI(A)	Discuss participant's responsibilities using transparencies	Attend	1(d) Chinese proverb and 1(e) responsibility transp.	
VI(A)	Request roll card from each participant	Write name on card and submit	1(f) 3x5" cards	Count cards
II(A), II(D)	Assignment: answer in one sentence on a transparency "Why use media?"	Attend, gather materials, do assignment for next lesson	1(g) Supply of markers and acetate	
	Dismiss class			

LESSON 1

Instructor's Notes

Introduction

1. Welcome to inservice program.
2. Main goal: To promote the effective use of instructional media by working with the teachers.
3. View the multimedia presentation as an example of instructional media. Look for the intended message and how effectively it was presented.

Discussion Questions

1. What was the message you received from the presentation?
2. What other messages were included?
3. How does a multimedia presentation like this affect the viewer?

4. Can you think of any changes you would make in the presentation?
5. How might you use a multimedia presentation in your class?

Inservice TPOs

1. Any questions or comments over these goals?
2. Notice the form of the performance objectives. What elements are in each?
3. What advantages do you see in writing and using such objectives? Any disadvantages?

Assignment

1. Due at the start of Lesson 2.

LESSON 1

Terminal Performance Objectives

Ditto 1(b)

- I. Each of the participating Tolt teachers will demonstrate ability to use all functions of the Learning Resource Center's media equipment in classroom situations at least twice during the school year without wasting class time or damaging hardware or software. (psychomotor, cognitive, affective)
- II. Each of the participating Tolt teachers will state once during this inservice program two reasons for employing instructional media. (cognitive)
- III. Each of the participating Tolt teachers will use media in a new way at least twice in classroom situations by the end of the school year. (affective, cognitive)
- IV. Each of the participating Tolt teachers will write and share with other participants once during this inservice program a lesson plan demonstrating how performance objectives aid in selecting appropriate instructional media. (cognitive)
- V. Each of the participating Tolt teachers will employ instructional media in the content of at least one class during the school year to the extent that it becomes an equal alternative to the more traditional oral and written forms. (affective, cognitive)
- VI. Seventy-five percent of the Tolt teachers will support faculty-created inservice programs by actively participating in at least half of the Media Effectiveness Training lessons. (affective, cognitive, psychomotor)

LESSON 1

Inservice Program Syllabus

Ditto 1(c)

Lesson 1. Introduction, multimedia show "Using Your Tolt Learning Resource Center," course overview, participant's responsibilities

Lesson 2. Writing performance objectives, rationale for using instructional media, operating the Singer 16mm projector

Lesson 3. Last year's use of instructional media, writing performance objectives

Lesson 4. Writing performance objectives, overhead projector medium, uses for overheads

Lesson 5. Selecting media, producing thermal and hand-written transparencies, overlays, elements of design

Lesson 6. Transparency masking techniques, filing, scheduling overheads, performance objectives, selecting media

Lesson 7. Sound-slide shows, operating the slide projector with a carousel, new slide programs, performance objectives

Lesson 8. Using slide programs, operating the Visualmaker, cameraless slides, stack loader, slide sorter

Lesson 9. Operating the VTR, camera work, shooting scripts, performance objectives

Lesson 10. Operating the Bell & Howell 16mm projector, performance objectives and films, film sources and scheduling

Lesson 11. Using the microfiche readers, periodicals on microfiche, ERIC documents, operating the opaque projector

Lesson 12. Operating the filmstrip projectors, performance objectives, ordering kits, previewing

Lesson 13. Uses for the dry mount press, laminating and dry mounting, assignment presentations

Lesson 14. Review, assignment presentations, scheduling class media lessons, final evaluation

PLATE 1

Transparency 1(d)

I hear, and I forget.

I see, and I remember.

I do, and I understand.

Old Chinese Proverb

LESSON 1

Participants' Responsibilities
Transparency 1(e)

WHAT YOU'RE GETTING YOURSELF
INTO

Commitment to use what you learn

Active participation

Discussions

Lesson ideas

Written work

Media production

WHAT YOU WILL BE GETTING
OUT OF IT

Improved teaching effectiveness

Confidence in using media

Inservice growth

Enabling Objectives

LESSON 2

- I(A) Participants will demonstrate operational mastery of the Singer 16mm projector by showing selected portions of a film to a class of their choice. (psychomotor, cognitive)
- II(B) Participants will write and submit by the end of the lesson two of the presented reasons for using instructional media. (cognitive)
- IV(A) Participants will state one component of writing performance objectives sometime during the next five lessons. (cognitive)
- VI(A) Seventy-five percent of the Tolt teachers will attend each lesson. (affective)
- VI(B) Seventy-five percent of the Tolt teachers will work at least once on their own time with the instructor applying the inservice program content. (psychomotor, affective)

EO Number	Instructor Activities	Learner Activities	Instructional Media	Evaluation Method
I(A)	Place laminated set of directions on projector cover Review Lesson 1	Attend	2(a) Laminate paper master 2(e) Ditto 1(e)	Check those submitting transp.
II(B)	Collect transparencies, project and discuss	Attend, respond	Transparencies 1(g)	
IV(A), II(B)	Distribute EO/Response ditto and discuss	Read ditto, attend, respond	2(b) Ditto EO/Response	Count no. present
II(B), I(A)	Introduce and show two selected portions of film	View film	2(c) "To Help Them Learn"	
VI(A)	Take roll during film	Be present	Roll cards 1(f)	
II(B)	Review film with discussion, take notes on overhead	Respond, attend, take notes	2(d) Clear acetate	
I(A)	Demonstrate how to operate Singer projector, project transparency of directions	Attend	2(e) Transparency of operating instructions	Check dittos
II(B)	Collect EO/Response dittos	Write and submit two reasons for media use	2(b)	
IV(A)	State preview of Lesson 3 and dismiss class	Attend		Checklist
I(A), VI(B)	Monitor practice on Singer	Volunteers practice operating Singer		

LESSON 2

Instructor's Notes

Review of Lesson 1

1. What were the main points of the last lesson?
2. Project transparency 1(e). Can anything be added to it?

Discussion of Transparency Objectives

1. Project 1(g) briefly and ask class to summarize the main ideas.
2. How would you record any of these examples?

Introduction to Film

1. "To Help Them Learn" is available on free loan: Association of Media Producers, 1701 L. Street, N.W., Suite 515, Washington, D.C. 20036.
2. What are some of the stated reasons for using instructional media?
3. Note the technique of editing a film to show a portion of it.
4. What are some reasons a teacher might want to edit a film?

Showing the Film

1. Determine portions to show when previewing. (3½ min. into film to 7½ min.--interviews, historical uses, more interviews; 14½ min. to 16 min.--uses in science, math)
2. Place strips of paper in reels to mark sections for viewing.
3. Use Singer projector.

Review of Film

1. What are some reasons for using instructional media?
2. Select two of the reasons and write them on the EO/Response ditto.

Preview Lesson 2

1. Next we'll discuss how to write performance objectives.
2. Think about how you've used instructional media in the last year.

LESSON 2

EO/Response
Ditto 2(b)

Enabling Objectives

III(A) Participants will keep a notebook containing at least 20 ways they observe instructional media being utilized during this inservice program. (cognitive)

IV(A) Participants will state one component of writing performance objectives sometime during the next five lessons. (cognitive)

I(C) Participants will list in the last lesson the media equipment available in the LRC. (cognitive)

VI(A) Seventy-five percent of the Tolt teachers will attend each lesson. (affective)

II(A) Participants will write on a transparency and submit at the start of the next lesson one reason for employing instructional media. (cognitive)

III(V) Participants will demonstrate the new use of a transparency of their choosing at least once during this inservice program. (psychomotor, cognitive)

Your Name:

Directions Write at least two reasons for using instructional media which were presented during the lesson.

LESSON 2

Singer Projector Operating Instructions
Transparency 2(e)

OPERATING INSTRUCTIONS

PREVIEW FILM--Determine which portions to show

FOLLOW INSTRUCTIONS--Printed on inside cover of projector

ROCK FILM--Take up slack before putting in project mode

SKIP SEGMENTS--Put projector in load mode

VIEW FILM--Make sure the lever is all the way up in the project mode

Enabling Objectives

LESSON 3

- I(A) Participants will demonstrate operational mastery of the Singer 16mm projector by showing selected portions of a film to a class of their choice. (psychomotor, cognitive)
- III(B) Participants will share with other participants (and record in their notebooks) past examples of successful media use. (cognitive)
- III(C) Participants will give oral feedback to the instructor on the accuracy of Record of Instructional Media Use 1979-80 by the end of Lesson 5. (affective)
- VI(A) Seventy-five percent of the Tolt teachers will attend each lesson. (affective)
- IV(B) Participants will write on a transparency an example of a performance objective from a subject they are now teaching and submit it at the start of Lesson 4. (cognitive)

EO Number	Instructor Activities	Learner Activities	Instructional Media	Evaluation Method
I(A)	Review Lesson 2 by questioning and projecting 2(d)	Attend, respond	Transparency 2(d)	
III(B)	Discuss how teachers have used instructional media	Attend, respond, record own responses		Self-evaluation
III(C)	Project Record of Instructional Media Use 1979-80	Read	3(a) Transparency of media use	Checklist
VI(A)	Take roll	Continue reading 3(a)	Roll cards 1(f)	Count no. present
III(C)	Answer questions about 3(a) Introduce the need for performance objectives	Question, comment Attend		
IV(B)	Project transparency and explain the ABCD method, write example	Attend, question	3(b) Transparency of ABCD method of performance objectives	
IV(B)	Assignment: write your own objective on a transparency	Write performance objective for Lesson 4	Acetate 1(g)	
	Preview Lesson 4, dismiss	Attend		

LESSON 3

Instructor's Notes

Review Lesson 2

1. What are the steps necessary to follow when operating the Singer to show a portion of a film?
2. What are some examples of films from our catalog that are appropriate to show portions from?
3. What are some reasons for employing the film medium? Instructional media in general?

Discussion

1. How many used in their classes last year at least half the instructional media available in the LRC?
2. What are the media available?
3. Select certain media and question the class how they were used.

Media Use 1979-80

1. Teachers' names remain confidential.

2. Explain key and how to read the chart.
3. Ask teachers to try to identify their own record.
4. What does the overall record say about the individual equipment and the teachers' use of it?
5. Is the record accurate?
6. Each teacher will have the opportunity to see and challenge personal record. See me by the end of Lesson 5.

Introduction of Performance Objectives

1. Give an example illustrating how not using performance objectives can lead to a poor selection of media.
2. POs are not only the key to effective media selection, they also help in evaluation.

LESSON 3

Instructor's Notes (Cont.)

PO Example

1. Have teachers construct a PO as I write it on transparency.
2. Have them identify its component parts.

Assignment

1. On a transparency, write a PO for a class you are currently teaching.
2. These are due at the start of Lesson 4. They will be projected and discussed.

Preview Lesson 4

1. In what ways have I used the overhead to date?
2. We'll identify the POs that could use the overhead to achieve them.

LESSON 3

Record of Instructional Media Use 1979-80
Transparency 3(a)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	\bar{X}	
16mm proj.	C	A	B	D	A	A	A	C	A	C	A	A	C		A		C	B	D		A	C	C	A	C+ 2.6	
Filmstp/ Slide		A	A	B	A	A	A	B	B	C	A	A		C	A		D		D		C	D	C		C 2.3	
Overhd proj.	A	C	A	A	C	A	A	A		A	A	A	C	A					D	A		D			C 2.2	
Tape Recdr.		D	A	A	A			A	A	A				D		B			C						D 1.3	
Dry mount	A	A				C			D				A			C	C	D		C		D	C		D 1.0	
VTR	D	C	D	C	D		C			D						A	D	C	D			D			D- .8	
Opaque proj.	D			D					D				B	B	D	D									E .5	
Micro- fiche	A	D																D							E .3	
Tape prod.		D	D											D			D								E .2	
Slide prod.	A														D		D								E .1	
\bar{X}	C 2.0	C- 1.9	C- 1.7	D+ 1.5	D+ 1.5	D+ 1.4	D+ 1.4	D 1.3	D 1.3	D 1.3	D 1.2	D 1.2	D 1.1	D 1.1	D 1.0	D 1.0	D .8	D .7	E .6	E .6	E .6	E .6	E .6	E .6	E .4	

A = 21- applications, B = 20-11, C = 10-4, D = 3-1, E = no use

Average teacher grade = D (1.1)

LESSON 3

ABCD's of Performance Objectives
Transparency 3(b)

A B C D's OF PERFORMANCE OBJECTIVES

AUDIENCE

BEHAVIOR

CONDITIONS

DEGREE

- III(C) Participants will give oral feedback to the instructor on the accuracy of Record of Instructional Media Use 1979-80 by the end of Lesson 5. (cognitive, affective)
- IV(B) Participants will write on a transparency an example of a performance objective from a subject they are now teaching and submit it at the start of Lesson 4. (cognitive)
- II(C) Participants will list in their notebook two reasons and/or advantages for using overheads. (cog.)
- III(D) Participants will demonstrate to others the new use of a self-produced transparency of their choice once during the inservice program. (psychomotor, cognitive, affective)
- I(D) Participants will, given a list of overhead projector uses, check off or add ways they've employed in the past by the start of Lesson 5. (cognitive)
- IV(A) Participants will state a perf. obj. component sometime during the next five lessons. (cognitive)

EO Number	Instructor Activities	Learner Activities	Instructional Media	Evaluation Method
VI(A) III(C), IV(A) IV(B)	Take roll Review Lesson 3 using questions Collect transparencies of objectives, project, discuss	Respond, attend Attend, respond	Roll cards 1(f) Transparency 3(a)	Count no. present Checklist Check those submitting transparencies
II(C)	Introduce use of overheads	Attend, take notes	4(a) Advantages transparency	
III(D)	Discuss some uses of overhead medium, give examples	Attend	4(b) Silhouette ex.	
I(D)	Lecture on overhead techniques, distribute ditto, assign checklist	Attend	4(c) Ditto with checklist	
IV(C)	Assign writing performance objective for which overhead is an appropriate medium	Attend, respond		
IV(A)	Preview Lesson 5	Attend, respond		Checklist

LESSON 4

Instructor's Notes

Lesson 3 Review

1. Before projecting transparency 3(a), ask which media were used most, least last year.
2. Project 3(a) and ask for additional observations, comments.
3. What are some reasons for using performance objectives?
4. What are some components of performance objectives?

Discussion of Participants' Objectives

1. Select certain ones and ask which medium would be most appropriate to achieve that objective.
2. Select certain ones and examine for content. Are the A, B, C, and D present?

Introduction to Use of Overheads

1. Read quote from Sewell and Moore's research: In conclusion, the results of the present study seem to suggest that if comprehension is the

1. (cont.) only goal of instruction, the less expensive printed text is just as effective as the more expensive cartoon-embellished text or audio-visual presentation. If, however, there is a concern for student enjoyment or self-reported helpfulness of the presentation while learning the information, there is some support for the value of the cartoon-embellished text or audio-visual presentation" (34:46).
2. Clayton Chance's research of the effect of employing 200 transparencies in a descriptive geometry course: The transparency groups did significantly better on the final test and course grade than the control group; the faculty members agreed on the desirability of using transparencies; their use saved an average of 15 minutes a class period; students overwhelmingly preferred using transparencies (24:392). Cited by Moldstad.

Silhouette Use of Overhead

1. Put silhouettes on stage of State of Washington, Kansas and ask class to identify (23).
2. What other courses could use silhouette identification?

LESSON 4

Instructor's Notes (Cont.)

3. Have football coach place Xs and Os on projector stage to illustrate a play to be used in the next game (23).

Uses of the Overhead Medium

1. Ditto 4(d) mentions sequential build-up. Research by Maddox and Loughran (20:90) presents an argument in favor of creating transparencies during the course of the lecture: "The sequential build-up of diagrams simplified the task of copying and, since oral and visual exposition were synchronized, led to better understanding. But the greatest advantage was that it gave the class enough time to take notes." The researchers suggest that if prepared transparencies are used, teachers should "discipline themselves to wait until the class has had time to record them."
2. Ditto 4(d) mentions using the overhead to reduce an image to standard paper size (35:23): Tape the large image to a wall and illuminate with a bright light like a slide projector. This will cast an image on the projector stage which can then be focused with the lens in the

2. (cont.) normal way. The size can be controlled by moving the overhead. Put a paper or ditto or transparency on the stage, shield it with a piece of cardboard between it and the original, and trace the image.

Overhead Techniques Lecture

1. Screen placement--avoid keystoneing and ambient light.
2. Projector placement--keep it low, make sure all students have an unobstructed view of the screen.
3. Have it set up in advance--check framing and focus.
4. Don't jar the overhead while the lamp is hot.
5. Keep stage and lens clean.
6. Review troubleshooting tips.

LESSON 4

Instructor's Notes (Cont.)

Lesson 5 Preview

1. Ask what are some components of writing performance objectives.
2. What are some benefits to using them?

Assignment

1. The performance objective you write should be selected to use the overhead to accomplish it. You will be producing one or more transparencies based on it, so choose one you can actually use in your teaching.

LESSON 4

Advantages of Overhead Medium
Transparency 4(a)

ADVANTAGES OF OVERHEAD MEDIUM

Teacher faces class

Room completely lighted

Transparencies can convey a single concept or sequence

Pace is controlled by teacher

Transparencies are permanent

Projectors are dependable, easy to operate

LESSON 4

Use of the Overhead
Ditto 4(c)

Check the applications or techniques you have used.

Name:

Applications

Teaching Techniques

- 1. To explain and reinforce distributed ditto
- 2. For silhouette illustration and identification
- 3. As a chalk board
- 4. For display of student writing
- 5. As a testing medium
- 6. For student use in projects and assignments
- 7. To demonstrate phenomena such as a magnetic field or mixing colors
- 8. To enlarge a drawing, map, design, or picture
- 9. To reduce a drawing, map, design, or picture

- 1. Control attention by turning overhead off and on
- 2. Pointing (laying pen on stage)
- 3. Masking and revealing
- 4. Progressive overlays
- 5. Sequential build-up
- 6. Emphasizing ideas by underlining, adding color, writing a key word, etc.

Enabling Objectives

LESSON 5

- VI(A) Seventy-five percent of the Tolt teachers will attend each lesson. (affective)
- IV(A) Participants will state one component of writing performance objectives sometime during the next five lessons. (cognitive)
- IV(C) Participants will write a performance objective, select and produce the appropriate instructional media to teach it with and present it to other participants sometime during the inservice program. (cognitive, psychomotor)
- I(D) Participants will, given a list of overhead projector uses, check off or add ways they've employed in the past by the start of Lesson 5. (cognitive)
- III(D) Participants will demonstrate to other participants the new use of a self-produced transparency of their choice once during the inservice program. (psychomotor, cognitive, affective)

EO Number	Instructor Activities	Learner Activities	Instructional Media	Evaluation Method
VI(A) IV(A), IV(C) IV(C)	Take roll Review Lesson 4 using questions Distribute and project media qualities and their relation to objectives	Attend, respond, read assigned objectives Attend	Roll cards 1(f) 5(a) Media Qualities ditto	Count no. present Checklist
I(D)	Collect and share information on ditto 4(d) using overhead	Submit completed checklist, attend	5(b) Transparency of ditto 4(d)	Checklist
III(D), IV(C)	Project example of thermal transparency and demonstrate production	Attend	5(c) Plot Chart transparency	
III(D), IV(C)	Project example of handwritten transparency with overlays, demonstrate production techniques	Attend	5(d) Tolt LRC transparency	
III(D), IV(C)	Distribute and discuss elements of design	Attend	5(e) Elements of Design ditto	
III(D)	Assign production of a transparency to show to other participants	Produce transparency based on stated objective		

LESSON 5

Instructor's Notes

Review Lesson 4

1. Name some components of performance objectives.
2. Read class POs and discuss. Why is the overhead medium appropriate for those POs?

Thermal Transparency Production

1. Prepare master. Use soft lead pencil, India ink or xerox copy.
2. Do not use strike-over correction tape or liquid paper--mistakes will burn through.
3. Demonstrate Secretary.
4. Color with Vis a Vis or Sharpie colored transparency film pens.
5. Mount and mask.

Elements of Design

1. Review which elements are most common?
2. Which are most important when creating transparencies?

Assignment

1. You must have a stated PO which your transparency is based on.
2. Examples will be projected and critiqued by the class.

LESSON 5

Media Qualities
Ditto 5(a)

	Large Group	Small Group	Indv.	Color	B & W	Sound	Viewing Cond.	Equip.	Portable	Editable
Film										
VTR										
Slide										
Filmstrip										
Transparency										
Opaque										
Graphics										
Microfiche										
Audio tape										
Print										
Models										
Realia										

LESSON 5

Plot Chart (Scrambled)
Transparency 5(c)

HORT
WALKER

HORT
WALKER

HORT
WALKER

PLATE 2

Transparency 5(d)

TOLT
LEARNING
RESOURCE
CENTER

USE YOUR
LEARNING
RESOURCE
CENTER

LESSON 5

Elements of Design
Ditto 5(e)

Design

1. Simplicity
2. Unity
3. Emphasis
4. Formal Balance
5. Informal Balance

Visual Tools

1. Line
2. Shape
3. Space
4. Texture
5. Color

- III(D) Participants will demonstrate to others the new use of a self-produced transparency of their choice once during the inservice program. (psychomotor, cognitive, affective)
- VI(A) Seventy-five percent of the Tolt teachers will attend each lesson. (affective)
- IV(C) Participants will write a performance objective, select and produce the appropriate instructional media to teach it with and present it to other participants. (cognitive, psychomotor)
- I(E) Participants will demonstrate the use of a slide or sound-slide projector either in a classroom situation or to the Library Media Specialist once during the school year. (psychomotor, cognitive)
- III(A) Participants will keep a notebook containing at least 20 ways they observe instructional media being utilized during this inservice program. (cognitive)

EO Number	Instructor Activities	Learner Activities	Instructional Media	Evaluation Method
III(D)	Review Lesson 5 by showing transparency examples and discussing	Attend, present transparencies, discuss	Transparency 5(c) 6(a) Original Sequence	Display, checklist
VI(A)	Take roll during presentation		Roll cards 1(f)	Count no. present
III(D), IV(C)	Explain masking techniques, filing transparencies and scheduling of overheads	Attend		
III(D), IV(C)	Example and demonstration of transfer letters on transparency	Attend	6(b) Winner transparency	
IV	Review performance objectives and the selection of media	Attend, respond	Transparency 3(a)	
IV	Use participant's objective and illustrate selection procedure	Attend, respond	Clear transparency	
IV(C)	Ask for discussion of advantages of the slide medium	Respond		
I(F), III(A)	Preview Lesson 7 by presenting sound-slide show	Attend	6(c) Arts and Crafts sound-slide show	

LESSON 6

Instructor's Notes

Review Lesson 5

1. Have participants project their transparencies.
2. Relate transparencies to PO.
3. Discuss production techniques with each.
4. Comment on design elements.

Transparency Techniques

1. Use backing sheet for simple revelation.
2. Write lecture notes on backing sheet.
3. Sliding masks and trap door masks.
4. How to use masks during a lecture.
5. Mounting for stability with thermal transparencies.

Filing

1. File under class or subject area.

2. Keep files in order--review periodically.
3. Can be stored in file cabinet with mounts.

Preview Lesson 7

1. Think of a PO which would employ a sound-slide show.
2. What other uses are there for the slide medium?

LESSON 6

Plot Chart (Original)
Transparency 6(a)

MORR
WALKER

MORR
WALKER

8-6

LESSON 6

Plot Chart (Original)
Transparency 6(a)

7-2

MORT
WALKER

7-15

MORT
WALKER

PLATE 3

Transparency 6(b)



- IV(C) Participants will write a performance objective, select and produce the appropriate instructional media to teach it with and present it to other participants. (cognitive, psychomotor)
- III(D) Participants will demonstrate the new use of a self-produced transparency. (psychomotor, cog., aff.)
- I(E) Participants will demonstrate the use of a slide projector. (psychomotor, cognitive)
- III(F) Participants will start a file of ideas, photos, and photo locations for future slide programs in their notebooks and have at least 20 entries by the end of the year. (cognitive, affective)
- V(B) Participants will allow student media productions as part of their grade. (cognitive, affective)
- III(E) Participants will record in their notebooks at least two advantages slides have over other media by the end of the inservice program. (cognitive)
- VI(B) Seventy-five percent of the teachers will work on their own time with instructor. (cog., psychom.)

EO Number	Instructor Activities	Learner Activities	Instructional Media	Evaluation Method
IV(C), III(D)	Review Lesson 6 with questions and presentations of transparencies	Respond and present transparencies		Display, checklist
I(E)	Present sound-slide show, demonstrate operation of equipment, relate production steps	Attend	Sound-slide show 6(c)	
VI(A)	Take roll during show	Attend	Roll cards 1(f)	Count no. present
I(F), I(E)	Distribute ditto of production steps	Attend	7(a) Ditto Production Steps	
IV(C)	Request example performance objectives using slides, discuss with notes on overhead	Respond, attend	Clear acetate	
V(B), III	Distribute ditto of new slide programs, discuss use	Attend, respond	7(b) Ditto New Slide Programs	
III(E)	Project and discuss advantages of slide medium	Attend	7(c) Transparency Advantages of Slides	
I(F)	Preview Lesson 8, dismiss	Attend		
VI(B)	Monitor practice	Volunteers practice use of equipment		Checklist

LESSON 7

Instructor's Notes

Review Lesson 6

1. What are some advantages of the slide medium?
 2. State two possible POs for the slide show presented last lesson.
 3. Try to spot production techniques as transparencies are shown.
 4. What elements of design were employed?
2. How many have allowed students credit for presenting or producing media?
 3. What are some examples of the instructional media they've used?
 4. Consider the advantages of the slide medium. Think of a slide program you could produce to use in a class you're teaching.

Uses for the Slide Medium

1. As a record--class projects, etc.
2. To present visual information--science, social studies, art.
3. As part of a multimedia show or student project.

Preview Lesson 8

1. In what ways have you used commercial slide programs?

LESSON 7

Production Steps

Ditto 7(a)

1. Express your idea
2. Develop performance objectives
3. Select the medium
4. Prepare an outline
5. Write the script
6. Plan the photo session
7. Take the pictures
8. Have film processed
9. Edit the pictures
10. Plan the narration
11. Record narration and sound effects
12. Trial run
13. Revise, prepare study guide
14. Use, continue evaluation and revision

LESSON 7

New Slide Programs Ditto 7(b)

Death Valley and Scottie's Castle. An extraordinary tale of daring and adventure awaits you in this beautiful and startling set of Death Valley. (40 slides, cassette)

Petrified Forest and the Painted Desert. In this presentation you will find a faithful series of reproductions covering the area from every vantage point. (40 slides, cassette)

Rocky Mountain National Park. You will see many different animals, giant snow capped peaks, beautiful mountain lakes, dense forests, immense ranges of rugged peaks, for this area is known as the backbone of the North American continent. (40 slides, cassette)

Everglades National Park. The variety of things that make up this area, both flora and fauna. (40 slides)

Gettysburg. A marvelous, spine tingling story of the battle of Gettysburg that shaped this nation's destiny. (40 slides, cassette)

The National Historical Wax Museum. Discover an intriguing and permanent record of the great events that shaped our nation. (40, cas.)

The Story of King Arthur. This story was photographed and the script was written with the cooperation of the British Tourist Authority. (40, cas.)

Our Universe. See and hear all about galaxies, star clouds, holes in space, pulsars, quasars. (40, cas)

Search for Landscape Material. This program was created for all of us that dabble with the brush. Done by famous artist William Palluth. (40, cas.)

Bryce and Zion National Park. Exciting tour of these famous parks. Great beauty and variety. (40, cas.)

Grand Canyon National Park. You will get a real education about the greatest slash on the face of the earth. (40, cas.)

LESSON 7

New Slide Programs (Cont.)

Glacier National Park. Glaciers, mountains, wildlife. True Medicine and the Sun Road are among the highlights. (40, cas.)

Olympic National Park. A complete tour of this enormous wilderness area in the Pacific Northwest. (40, cas.)

Sequoia, Kings Canyon National Park. Animals of all kinds, various groups of the world's largest trees. (40, cas.)

Yellowstone National Park. Covers every portion of the park, intermixed with all of the fantastic wildlife. (40, cas.)

Yosemite National Park. You will take the most complete tour of this great park that is possible. (40, cas.)

Story of Mount Lassen National Park. The only active volcano area in the U.S. (sic) See last eruption. Shot over a period of years. (40, cas.)

Nineteen National Monuments, Historical Sites, and Recreation Areas in the West. (50)

Seattle, Olympia Park, North Cascades National Park, and the Washington Coast. (50)

Masterpieces in the Louvre. Works of David, Delacroix, Flemand, Fouquet, Van der Heist, Mets, Paussin, Tenlers, and Van der Heyden. (50)

Birds of North America. (36)

Sunset, Moonrise, and Storm. Sunrise from Tennessee to Lake Superior, sunsets in Arkansas, Illinois, Nebraska and Texas, Lightning over the Rockies. (20)

One Moment Please. The real thing from the Nickelodeon era, between reel and intermission slides. (17)

LESSON 7

Advantages of Slide Medium
Transparency 7(c)

ADVANTAGES OF SLIDE MEDIUM

Full range of photographic techniques (stop action, depth of field, microphotography, etc.)

Slide sequence can be easily changed (include test questions, update material, selective review, etc.)

Pace is controlled by teacher

Slides can be pulsed to cassette sound track

Enabling Objectives

LESSON 8

- III(E) Participants will record in their notebooks two advantages of slides. (cognitive)
- III(D) Participants will demonstrate the new use of a self-produced transparency. (psychom., cog., aff.)
- IV(C) Participants will write a performance objective, select and produce the appropriate instructional media to teach it with and present it to other participants. (cognitive, psychomotor)
- V(B) Participants will allow student media productions as part of their grade. (cognitive, affective)
- III(B) Participants will share with others and record in their notebook one successful utilization of instructional media they've experienced. (cognitive, affective)
- I(F) Participants will use the Kodak Visualmaker at least once to produce a set of 20 slides and show them to the faculty by the end of the year. (psychomotor, cognitive, affective)
- I(E) Participants will demonstrate the use of a slide projector. (psychomotor, cognitive)

EO Number	Instructor Activities	Learner Activities	Instructional Media	Evaluation Method
VI(A) III(E), III(D), IV(C)	Take roll Review Lesson 7 using questions, allow presentation of transparencies, other media	Attend, present assignments, discuss	Roll cards 1(f)	Count no. present Display, checklist list
V(B) III(B)	Note some educational uses for slides on transparency Ask how teachers have used commercial slide programs	Attend Respond, attend	Clear transparency	Self-evaluation
V(B)	Present ditto and discuss student uses for new slides	Attend	8(a) Ditto Student Slide Presentations	
I(F), I(E)	Demonstrate Visualmaker	Attend		
I(E), V(B)	Discuss and give examples of cameraless slides, demonstrate stack loader	Attend	8(b) Write-on slides and others	
I(E), V(B)	Demonstrate slide sorter	Attend	8(b)	
III(B)	Preview Lesson 9, dismiss	Attend		Checklist
VI(B)	Monitor practice	Volunteers practice use of equipment		Checklist

LESSON 8

Instructor's Notes

Review Lesson 7

1. Outline the steps for producing a sound-slide show.
2. Critique transparencies. POs, production techniques, elements of design.

Visualmaker

1. Always check first to see that you have enough film and all batteries are alive.
2. Organize your materials so you shoot all the pictures together which require the same lens (copy stand).
3. Use masks for a neater job.
4. Take batteries out of camera and put Visualmaker in case when finished.

Cameraless Slides

1. Write-on slide. Use transparency marker, fine point, or pencil.
2. Try mimeograph stencils or color lift encased in plastic slide mount.(41).

3. A visual can be scratched on an opaque slide.

Examples of Student Projects with Slides

1. Adopt a new slide program as part of a project. Students must teach with it, not just show it.
2. Adapt one or more slide shows by combining, using selected slides, creating own sound track.
3. Chronicle a class, such as art, PE, woodshop. Use at open house.

Preview Lesson 9

1. What were some of the uses you observed in the multimedia show for the VTR?
2. How have you used the VTR before in your class?

LESSON 8

Evaluating Student Slide Presentations

Ditto 8(a)

1. Organization--does the program follow a logical sequence?
2. Originality--are the slides edited or is it simply a presentation of a commercial program?
3. Objectives--are there stated performance objectives?
4. Photography--are quality and composition good?
5. Narration--is technical quality good, are slides in sync with narration?
6. Presentation--is it practiced, is equipment prepared in advance?

- III(D) Participants will demonstrate to others the new use of a self-produced transparency of their choice once during the inservice program. (psychomotor, cognitive, affective)
- IV(C) Participants will write a performance objective, select and produce the appropriate instructional media to teach it with and present it to other participants. (cognitive, psychomotor)
- I(G) Participants will videotape a classroom activity and play a portion of it back to the faculty sometime during this school year. (psychomotor, cognitive)
- VI(A) Seventy-five percent of the Tolt teachers will attend each lesson. (affective)
- V(B) Participants will give students in at least one class during the school year the opportunity to use instructional media for grade credit in place of a written or oral assignment. (affective)
- VI(B) Seventy-five percent of the teachers will work on their own time with instructor. (cog., psychom.)

EO Number	Instructor Activities	Learner Activities	Instructional Media	Evaluation Method
III(D), IV(C)	Review Lesson 8 using questions, allow for presentation of media	Attend, present media assignments		Checklist
I(G)	Demonstrate the operation of the VTR	Attend	9(a) Blank videotape	
I(G)	Discuss the elements of good camera work	Attend, volunteers tape, view on monitor		
I(G)	Distribute ditto Shooting Script	Attend, read ditto	9(b) Ditto Shooting Script	
VI(A)	Take roll as script is read		Roll cards 1(f)	Count no. present
V(B)	Discuss and take notes on overhead student uses of VTR	Attend, respond	9(c) Clear transparency	
I(G), V(B)	Discuss equipment scheduling	Attend		
I(G), V(B)	Project transparency and distribute ditto of VTR care	Attend	9(d) transparency and ditto Care of VTR	
IV(C)	Assign list two objectives requiring VTR	Write in notebook		
I(G), VI(B)	Assign volunteers to videotape operation of B&H projector to show next lesson	Volunteer		
I(G), VI(B)	Dismiss, monitor practice	Volunteers practice using Shooting Script		Checklist

LESSON 9

Instructor's Notes

Review Lesson 8

1. What are some good sources for finding photos for slide program?
2. Comment on presentation of assignments.
3. Give some suggested criteria for grading media projects (same ones you would use with traditional ones): Structure, accuracy, neatness, form, plus appropriateness of medium.
2. For feedback in role-playing situations.
3. As feedback in simulations such as speeches, reports.
4. As feedback in real situations like sports, teaching.
5. For motivational purposes.

Elements of Camera Work

1. Keep the camera steady--use a tripod.
2. Practice your shots before you actually film them.
3. Vary the camera moves and positions.
4. Use an extension mike, if possible.

Uses for VTR

1. Use it to demonstrate camera composition.

Assignment

1. Have volunteers tape complete operational procedure of running the Bell & Howell, from set up to take down.
2. Have them take turns being camera person, talent, etc. Make several takes back-to-back.

LESSON 9

Shooting Script
Ditto 9(b)

- | | | | | |
|----|----|------|---|---|
| 1. | 5 | sec. | CU of title card;
"SOME FILMMAKING
CONSIDERATIONS" | |
| 2. | 35 | sec. | LS
SLOW ZOOM IN

ZOOM OUT/ DOLLY
IN | Hello. My classmates and I are here to illustrate a few techniques you may want to consider before making your first movie. First our camera-person will demonstrate a few camera moves. You have been experiencing a zoom in, which is not actually done with a camera movement since it is done with a special lens. Zoom out. Here is a dolly in, accomplished by the camera being moved closer to the subject. However, keeping the camera stable is difficult. Now for a cut |
| 3. | 4 | sec. | LS | to a long shot |
| 4. | 4 | sec. | MS | a medium shot |
| 5. | 4 | sec. | CU | a close up |
| 6. | 4 | sec. | LOW ANGLE MS | a low angle shot |
| 7. | 10 | sec. | HIGH ANGLE CU
BOOM TO FS/ RACK
FOCUS TO CLASS | a high angle shot (Turns to face camera)
a boom to a flat shot and a rack focus |
| 8. | 25 | sec. | MS TALENT/ PAN TO
CLASS/ TILT DOWN
CUT TO CU TALENT | Two other camera moves are pans (pause) and tilts. (lays on floor)
How do you use camera moves and angles in filming a sequence? Well, that's the creative part of filmmaking. Here's an example to get you thinking, though. |
| 9. | 10 | sec. | LS | Here's an unimaginative film of someone leaving a room. (Talent walks to, opens door, and leaves room, closing door behind.) |

LESSON 9

Shooting Script (Cont.)

- | | | | | |
|-----|---|------|-------------------------------|--|
| 10. | 2 | sec. | LS | Why not like this? (Talent standing) |
| 11. | 2 | sec. | MS | (Head turns toward door) |
| 12. | 2 | sec. | MS OF DOOR | |
| 13. | 4 | sec. | MS TRUCKING | (Talent walks toward door) |
| 14. | 3 | sec. | LOW ANGLE MS | (Talent stops) |
| 15. | 2 | sec. | LOW ANGLE CU | (Talent looks at door knob) |
| 16. | 2 | sec. | HIGH ANGLE CU OF
DOOR KNOB | |
| 17. | 2 | sec. | MS | (Talent extends hand towards door) |
| 18. | 3 | sec. | CU OF KNOB | (Talent grasps knob and turns it) |
| 19. | 3 | sec. | MS OF TALENT
LEAVING | (Talent exits) |
| 20. | 2 | sec. | MS FROM BEHIND | (Talent leaving) |
| 21. | 2 | sec. | CU DOOR JAMB | (Door closes) |
| 22. | 9 | sec. | ZOOM IN FROM MS | That's one example of how to use a series of camera moves and positions.
One more hint before I close: Plan your movies and use a script. |
| 23. | 5 | sec. | CU OF SCRIPT/
FADE OUT | Happy shooting! |

LESSON 9

Care of the VTR
Ditto 9(d)

1. Only let people who have been checked out on operating the VTR use it.
2. Never point the camera at a bright object such as the sun.
3. Don't set equipment where it could fall or people could trip over it or the cords.
4. Make sure that the tripod is stable and the camera is on it securely.
5. Never force anything on the equipment if it doesn't work easily.
6. Never leave equipment unguarded and return it as soon as finished.

Enabling Objectives

LESSON 10

- I(G) Participants will videotape and replay a classroom activity by the end of the year. (psychom., cog.)
- I(H) Participants will demonstrate operational mastery of the Bell and Howell 16mm projector by showing a film on it to a class by the end of this year. (cognitive, psychomotor)
- VI(A) Seventy-five percent of the Tolt teachers will attend each lesson. (affective)
- IV(C) Participants will produce media based on a performance objective. (cognitive, psychomotor)
- III(B) Participants will share a successful experience with instructional media. (cognitive, affective)
- V(B) Participants will allow student media productions as part of their grade. (cognitive, affective)
- I(A) Participants will successfully operate the Singer 16mm projector in class. (psychomotor, cognitive)
- I(I) Participants will demonstrate use of a microfiche reader to the Inst. Media Spec. by the end of the school year. (cognitive, psychomotor)

EO Number	Instructor Activities	Learner Activities	Instructional Media	Evaluation Method
I(G), I(H)	Review Lesson 9 by playing and discussion VTR program	Videotape demonstration of operating B&H projector, attend		Checklist
I(H)	Have volunteers set up B&H and project film	Volunteers project and rest attend	10(a) "American Time Capsule"	Checklist
VI(A) IV(C), III(B) V(B)	Take roll Discuss a typical objective which would employ this film, what successful uses of films have been done	View film Attend, respond	Roll cards 1(f)	Count no. present
I(A), I(I)	Describe film sources and scheduling	Attend	10(b) ESD 121 Film Catalog and 10(c) WSL microfiche cat.	
I(I)	Preview Lesson 11 by projecting microfiche	Attend	10(c) WSL catalog	
I(H)	Dismiss, monitor practice	Volunteers practice on B&H		Checklist

LESSON 10

Instructor's Notes

Review Lesson 9

1. What camera angles and moves are used?
 2. Which are most effective? Why?
 3. Have volunteers explain any problems they came across in taping.
 4. What is the single most important thing to remember about threading the Bell & Howell?
(trimming the leader)
2. Washington State Film Library. Explain use of subject and title indexes, how to fill out order card. Allow about one week for confirmations and/or orders to arrive.
 3. King County Films. Order through Carnation branch.
 4. With all film ordering try to schedule as far in advance as possible.

Film Medium Objectives

1. They should require motion, sound, color, special effects--the attributes of this particular medium.
2. Contrast to typical slide POs.

Film Sources and Scheduling

1. ESD 121. Explain how to use subject index. Review filling out order form. Film orders due by Wednesday at noon.

Enabling Objectives

LESSON 11

- VI(A) Seventy-five percent of the Tolt teachers will attend each lesson. (affective)
- II(A) Participants will list the media equipment available in the Learning Resource Center. (cognitive)
- IV(C) Participants will produce media based on a performance objective. (cognitive, psychomotor)
- I(I) Participants will demonstrate use of a microfiche reader to the instructional media specialist by the end of the school year. (cognitive, psychomotor)
- V(B) Participants will allow student media productions as part of their grade. (cognitive, affective)
- III(G) Participants will record in their notebooks two uses for the opaque projector by the end of this inservice program. (cognitive)
- I(B) Participants will demonstrate the operation of either the rear-screen Dukane, the classroom Dukane, or the filmstrip projector in a class at least once by the end of the school year. (psychom., cog.)

EO Number	Instructor Activities	Learner Activities	Instructional Media	Evaluation Method
VI(A) II(A), II	Take roll Review Lesson 10 using questions, project media use transparency	Attend, respond	Roll cards 1(f) Transparency 3(a)	Count no. present Checklist
IV(C), IV	Allow for presentations of lessons, etc.	Present, attend, respond		Checklist
I(I)	Demonstrate use of microfiche reader, portable reader and reader/printer	Attend	11(a) example periodical on microfiche	
V(B)	Distribute ditto of periodicals on microfiche, discuss student use	Attend	11(b) Microfiche Periodicals ditto	
I(I)	Give example of ERIC document available from free source	Attend	11(c) ED 151026	
III(G)	Discuss operation and use of the opaque projector	Attend	11(d) School textbook	
I(B)	Preview Lesson 12 by asking what are the advantages and disadvantages of filmstrips	Attend, respond		
I(I)	Dismiss, monitor practice	Volunteers practice on readers		Checklist

LESSON 11

Instructor's Notes

Review Lesson 10

1. Relate the steps in operating the Bell & Howell.
2. What are some POs which employ films as the appropriate medium?
3. What are your sources for films?

4. Project student papers and have students critique, make up acceptable standards, etc. (1)

ERIC Documents and Other Sources

1. Research Coordinating Unit: Call 753-5672 and they will duplicate any ERIC document and send it to the school for no cost.
2. North West Regional Education Lab: Call (503) 248-6923 for "Catalog of New Materials for Administrators, Teachers, Linkers, and Learners."

Uses for Opaque Projector

1. Enlarging maps, drawings, etc.
2. Modify newspaper, magazine art to create posters (13).
3. Opaque projection strip (1).

LESSON 11

Microfiche Periodicals in LRC
Ditto 11(b)

- | | |
|---------------------|---------------------------------|
| 1. Consumer Reports | 7. Psychology Today |
| 2. Cycle | 8. Road and Track |
| 3. Field and Stream | 9. Rolling Stone |
| 4. Newsweek | 10. Science News |
| 5. People | 11. Skiing |
| 6. Plays | 12. U.S. News and World Reports |

Enabling Objectives

LESSON 12

- III(G) Participants will record two uses for the opaque projector. (cognitive)
- I(B) Participants will demonstrate the operation of either the rear-screen Dukane, the classroom Dukane, or the filmstrip projector in a class at least once by the end of the school year. (psychom., cog.)
- V(C) Participants will employ instructional media in a test situation with at least one of their classes sometime during the school year and report it to the library media specialist. (cognitive, aff.)
- III(B) Participants will share a successful experience with instructional media. (cognitive, affective)
- VI(A) Seventy-five percent of the Tolt teachers will attend each lesson. (affective)
- I(J) Participants will use the dry mount press to produce a laminated and a mounted project and show them to the library media specialist by the end of the school year. (psychomotor, cognitive)
- VI(B) Seventy-five percent of the teachers will work on their own time with instructor. (cog., psychom.)

EO Number	Instructor Activities	Learner Activities	Instructional Media	Evaluation Method
III(G), II	Review Lesson 11 using questions, project Chinese proverb transparency	Attend, respond	Transparency 1(d)	
I(B)	Distribute advantages and disadvantages of filmstrips	Attend	12(a) Ditto Pros and Cons of Filmstrips	
I(B)	Demonstrate the operations of the three types of filmstrip projectors	Attend	12(b) Kit containing sound filmstrip	
IV, V(C)	Request and write on transparency objectives for which filmstrips would be appropriate, include testing	Respond, attend	12(c) Clear acetate	
I(B)	Explain how to order kits, previewing	Attend		
III(B), V	Discuss examples of how students have used filmstrips	Respond, attend		Checklist
IV	Allow for presentations, evaluate	Present assignments, attend, discuss		Checklist
VI(A)	Take roll during presentation		Roll cards 1(f)	Count no. present
I(J)	Preview Lesson 13 by showing laminated Read poster	Attend	12(d) Laminated Read poster	
I(B), VI(B)	Dismiss, monitor practice	Volunteers practice working projectors		Checklist

LESSON 12

Instructor's Notes

Review Lesson 11

1. What are some uses for the opaque projector?
2. How does this Chinese proverb relate to the use of instructional media?
3. What are the advantages of filmstrips over slides?

Teaching Technique

1. Preview your sound filmstrips and note the questions you want your students to find the answers to. These can be written on a transparency. Stop the filmstrip periodically and ask or project the questions and have the students write the answer, then continue on. Dayton and Schwier (5) have researched the effect of post questions inserted into slide or filmstrip programs and discovered that student retain more of the specified information for final exams.

Previewing

1. Show location of catalog files organized by subject headings.

2. I will order the materials for you on preview and take care of all the paperwork.

Uses for Filmstrips

1. Have students prepare own narration.
2. Have students select, preview, introduce, and teach a filmstrip.
3. Have students critique filmstrips.
4. Quiz students by flashing frames on screen very briefly (use a card over the lens for this).
5. Prepare study guides or other materials (dittoed map, chart, etc.) to be presented with the filmstrip.

Preview Lesson 13

1. Remind participants to work on their project assignments to be presented during the last two lessons.

LESSON 12

Pros and Cons of Filmstrip Medium
Ditto 12(a)

Advantages

1. Teacher controls the pace.
2. The full range of photographic techniques is available (stop action, depth of field, micro-photography, etc.)
3. The sequence cannot get out of order.
4. The filmstrip can have sync narration.
5. The filmstrip's small size lends to easy storage.

Disadvantages

1. The filmstrip cannot be easily edited or modified.
2. Filmstrips can scratch and damage easily.
3. Filmstrip production requires special equipment.

PLATE 4

Poster 12(d)

Read.

Enabling Objectives

LESSON 13

- I(B) Participants will demonstrate the operation of either the rear-screen Dukane, the classroom Dukane, or the filmstrip projector in a class at least once by the end of the school year. (psychom., cog.)
- VI(A) Seventy-five percent of the Tolt teachers will attend each lesson. (affective)
- III(B) Participants will share a successful experience with instructional media. (cognitive, affective)
- I(J) Participants will use the dry mount press to produce a laminated and a mounted project and show them to the library media specialist by the end of the school year. (psychomotor, cognitive)
- I(C) Participants will list during the last lesson the instructional media equipment available in the Learning Resource Center. (cognitive)
- VI(B) Seventy-five percent of the Tolt teachers will work at least once on their own time with the instructor applying the inservice program content. (affective, psychomotor)

EO Number	Instructor Activities	Learner Activities	Instructional Media	Evaluation Method
I(B)	Review Lesson 12 by showing portion of a new multimedia kit, discuss	Attend, respond	13(a) New multimedia kit	
VI(A) III(B)	Take roll during presentation Discuss ways students have used dry mount press, give examples of uses	Attend, respond	Roll cards 1(f) 13(b) Basketball statistics, 13(c) Tolt teacher articles, 13(d) library card chart, 13(e) basketball play board	Count no. present
I(J)	Demonstrate operation of press for laminating and dry mounting	Attend	13(f) Supplies	
IV	Allow for presentations, discuss and evaluate	Present, attend, discuss		Checklist
I(C)	Preview Lesson 14 by showing transparency of media use	Attend	Transparency 3(a)	
I(J), VI(B)	Dismiss, monitor practice	Volunteers practice on dry mount press		Checklist

LESSON 13

Instructor's Notes

Review Lesson 12

1. As you view this filmstrip, what are some POs that would use it?
2. Review the procedure for obtaining new sound filmstrip programs.
3. Share non-print budget break-down--indicate how much money is available for each department.

Preview Lesson 14

1. Have notebooks and all assignments completed by start of period.
2. Note instructional media available in LRC (on transparency 3(a)).

Uses for Dry Mount Press

1. Photo-Lit poster. Have students cut and laminate magazine pictures onto railroad board to illustrate some verse (7).
2. Have students laminate collection of advertisements to illustrate elements of persuasion.
3. Try making slides using the laminator as in the color-lift process to illustrate an idea (41).
4. Have photo and art students dry mount their projects.

PLATE 5

Dry Mount Press Examples 13(b, c)

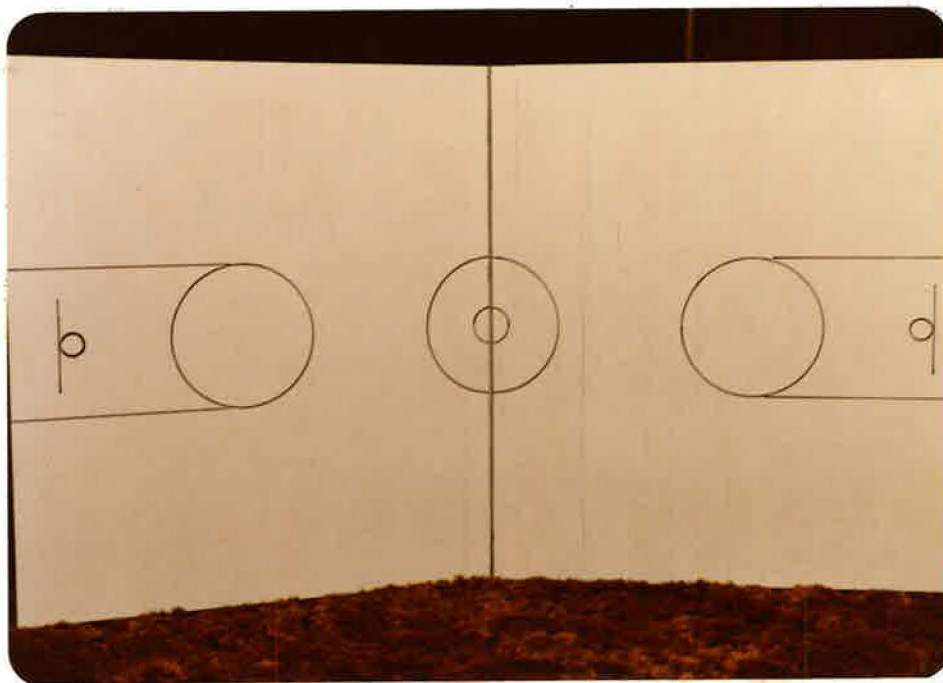
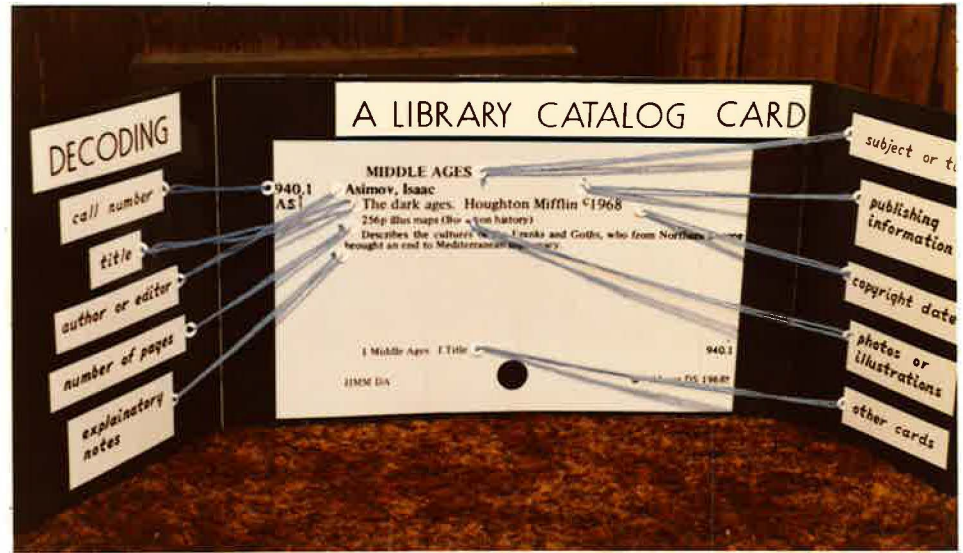


PLATE 6

Dry Mount Press Examples 13(d, e)



- III(A) Participants will keep a notebook containing at least 20 ways they observe instructional media being utilized during this inservice program. (cognitive)
- V(A) Participants will present or have the library media specialist present to their class at least one lesson on how students can use instructional media by the end of the second trimester. (cog., aff.)
- VI(A), I(C), II(A), II(C), III(A), III(B), III(E), III(F), III(G) Refer to Effective Media Training Performance Objectives (preceeding Lesson 1).

EO Number	Instructor Activities	Learner Activities	Instructional Media	Evaluation Method
III(A) IV II V(A) VI(A), I(C) II(A), II(C), III(A), III(B), III(E), III(F), III(G) VI	Review entire program by presenting multimedia show Allow presentation of remaining assignments, evaluate Request reasons for using instructional media Explain scheduling lessons Take roll, collect notebooks Distribute inservice evaluation ditto End of Effective Media Training program	Attend, respond Present, attend, respond Respond Attend Submit notebooks for evaluation Respond	Multimedia show 1(a) 14(a) Ditto Inservice Program Evaluation	Checklist Checklist Checklists, tally Tally

LESSON 14

Instructor's Notes

Inservice Program Review

1. As you view "Using Your Learning Resource Center," consider appropriate POs, selection of media, production techniques. Discuss after showing.

Final Points

1. "There has been a tendency to teach concepts using visuals but to use written tests to evaluate the learning. It is preferable to use a visual mode of testing to determine whether the participants have grasped the concepts taught" (26:22).
2. If you do not have the time to produce a media program, have students do parts of it for you as assignments--good for them, good for you.
3. If any teachers are interested in incorporating visual literacy into our curriculum as a class, Media Now program is available--includes funding (14).

Inservice Program Evaluation

1. No names necessary.
2. Please put in my teacher's box by the end of next week.

LESSON 14

Inservice Program Evaluation
Ditto 14(a)

1. I attended ____ of the 14 lessons.
2. As a result of these lessons, I have used _____
_____ in my teaching.
3. As a result of these lessons, my students have used _____
_____ my classes.
4. I would like to have had more information about _____

5. Too much time was devoted to _____

6. This inservice program demanded a) too much work, b) not enough work, c) about the right amount of work.
7. The lesson lengths were a) too short, b) too long, c) just about right.
8. The time and place of the lessons a) were all right, b) should have been changed to _____

9. If I were designing this inservice program, I would stop _____

I would start _____

I would continue _____

10. Additional comments:

COURSE DESIGN

Evaluation

The lessons will be taught during the 1980-81 school year. During that time records will be kept by the instructor for evaluation purposes.

Inservice Content Evaluation

Two instruments will be used for the evaluation of the inservice program content. The record of how well the participants accomplished both the enabling and terminal performance objectives will be kept in a standard teacher's record book. At the end of the school year, a tally will be made of how many teachers accomplished each performance objective, giving one indication of how successful the program was.

Another measurement instrument will be the "Record of Instructional Media Use 1979-80." The same form (Transparency 3(a)) will be used to record each teacher's use of the media during the 1980-81 year. A comparison of the two will yield more data about the effectiveness of the inservice program content.

Inservice Program Evaluation

After the last lesson, the participants will be asked to anonymously respond in writing using the "Inservice Program Evaluation" (Ditto 4(a)). This questionnaire is designed to evaluate the format of the lessons. Hopefully, administrators and teachers will be able to benefit from this feedback and design future inservice programs to operate at maximum efficiency.

Chapter 4

SUMMARY AND SUGGESTIONS FOR FURTHER STUDY

Summary

The purpose of this course was to improve instructional media use at Tolt Junior-Senior High School by designing an inservice program developed expressly for that population. A review of related literature assisted in developing the course design which included six terminal performance objectives instructed through fourteen lessons. The format developed was an inservice program based on considerations expressed in the review of the literature. I produced examples of media for each lesson to illustrate the use and production of the instructional media available at Tolt. Evaluation tools were also developed for the field testing scheduled for the 1980-81 school year.

Suggestions for Further Study

During the development of this project, several suggestions for further study became apparent. These are listed below.

1. Evaluate and refine this inservice program after the field testing and course evaluation are completed.
2. Develop a comprehensive inservice program which would include all instructional media, not just what is available at Tolt.
3. Develop and field test a course about instructional media for students using a programmed instruction format.

APPENDIX A

Learning Resource Center
Questionnaire

How often do you use the following A-V equipment?

	Daily	Weekly	Occasion- ally	Seldom	Never
Film projector	0	4	4	1	1
Videotape	0	0	4	0	6
Record player	1	1	0	4	4
Cassette player/recorder	1	3	4	0	2
Reel to reel recorder	0	1	0	0	9
Filmstrip projector	1	2	4	0	3
Slide projector	0	2	1	1	6
Overhead projector	5	1	1	0	3
Opaque projector	0	0	3	2	5
Maps, globes, etc.	1	3	2	0	3
Other			1 (microprojector)		

APPENDIX B

Tolt Learning Resource Center
Evaluation (4/30/80)

The following report focuses on the materials, equipment, facilities, and personnel guidelines presented in SPI's "Standards and Guidelines for Learning Resources Programs." Hopefully, this can be used for the annual report required by WAC 180-46-240. In most cases, Tolt Learning Resource Center was compared to the guidelines stated for developing programs, not the basic or advanced guidelines.

Guidelines	Tolt	Summary
1. Books: 15/student, 480 students = 7,200 volumes	To be submitted	?
2. Newspapers: 1 local, 1 national, 2 metropolitan	2 local, 2 national, 2 metropolitan	+
3. Periodicals: 70	66	-
4. Cataloged AV items: 1600	211	-
5. Vertical file collection	yes	ok
6. Professional collection	yes	ok
7. Access to 1500 films	yes (ESD 121)	ok
8. 8 color TV receivers*	none	-
9. 2 color VCR ensembles*	3 B&W monitors, no VCRs	-
10. 1 portable VTR ensemble*	yes	ok
11. 6 16mm projectors*	4	-
12. 6 super 8 projectors	1 regular 8 projector	-
13. 11 overhead projectors	9	-
14. 1 microreader/printer*	yes	ok
15. 5 microreaders*	4	-
16. 1 microprojector*	yes	ok
17. 9 slide projectors*	3	-

Tolt LRC Evaluation (Cont.)

18.	10 filmstrip projectors*	5	-
19.	20 tape recorder/players*	8	-
20.	1 audio tape programmer*	yes	ok
21.	3 record players*	4	+
22.	2 AM-FM receivers*	none	-
23.	Opaque and spirit duplicating	yes	+
24.	Drymount, laminating, hand-lettering, graphic design, sign press	no sign press service	-
25.	Thermal copying, write-on supplies, color lift, diazo	no diazo process	-
26.	Photos, super 8 movies, darkroom, copying, editing, animation	photos only	-
27.	Cassette recording, sync pulse, sound mixing, sound studio, stereo multi-image programs	no studio, sound mixing, stereo multi-image	-
28.	Video B&W studio, distribution	B&W VTR and camera only	-
29.	Model-building capacity and supplies	limited	ok
30.	Library seating space (15% of enrollment): 72 students, 2,880 sq. ft.	50 students, 2,025 sq. ft.	-
31.	Space for circulation, storage, repair, production, conferences, office functions: 3,500 sq. ft.	1,200 sq. ft. (not including Title I room)	-
32.	Radio/TV studio, photo darkroom	none	-
33.	1.5 F.T.E. cert. library media sp.	1.0 F.T.E.	-
34.	1.5 F.T.E. non-cert. personnel	1.0	-

Tolt LRC's program does meet or exceed the State Guidelines in some areas. However, it falls short in a majority of instances. My priorities for immediate attention would include maintaining the suggested number of books, purchasing AV equipment (especially VCRs, super 8 equipment, projectors), improving production facilities and studio room, planning for additional room. The remaining shortcomings can then be worked towards.

Appendix C

TOLT PRINCIPAL'S ENDORSEMENT

August 8, 1980

To whom it may concern:

I would like to take this opportunity to strongly endorse Bob Davis's plan to provide some inservice work entitled, "Media Effectiveness Training", for the Tolt teaching staff as part of his work towards his masters degree.

Mr. Davis has indicated to me that the inservice will encompass such things as opportunities for teachers to develop media use in the classroom, proper selection of materials, writing and implementing performance objections and demonstration techniques. Throughout this process the teachers will have the opportunity to become aware of what various media services are at their disposal.

We have a relatively modern resource media center and part of our school goals are for the teachers to use that center for enriching classroom instruction. Therefore, I strongly support Mr. Davis's plan and I plan on providing opportunities for Mr. Davis to meet with the staff and carry out the proposed inservice.

Sincerely,

Charles Kheriaty, Principal
Tolt Jr/Sr High School

me

BIBLIOGRAPHY

1. Battle Creek Board of Education. Instructional Materials Ideas: Let's Use Them. Battle Creek, Mich., September, 1962.
2. Board of Directors Lower Snoqualmie Valley School District. Board Policy. February, 1980.
3. Cavert, C. Edward. An Approach to the Design of Mediated Instruction. Washington, D.C.: The Association for Educational Communication and Technology, 1974.
4. Dale, Edgar. Audio-Visual Methods in Teaching. New York: Dryden Press, 1954.
5. Dayton, Deane K., and Richard A. Schwier. "Effects of Postquestions on Learning and Learning Efficiency from Fixed-Pace, Fixed-Sequence Media." Education Communication and Technology Journal, 27:103-113, Summer, 1979.
6. Dwyer, Francis M. A Guide for Improving Visualized Instruction. State College, PA: Learning Services, 1972.
7. Eckhardt, Ned. "Pop Media." Media and Methods, September 1977, pp. 32-33.
8. Gerlach, Vernon S. and Donald P. Ely. Teaching and Media: A Systematic Approach. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1971.
9. Good, Carter V., ed. Dictionary of Education. New York: McGraw-Hill Book Co., 1973.
10. Grady, Michael P. "Students Need Media for a Balanced Brain." Audio-visual Instruction, November, 1976, pp. 46-48.
11. Hart, Lavon G. "The District Level Media Manager as a Communicator." DEMM Newsletter. Spring, 1979, pp. 14-15.
12. Hopkins, Kathleen P. An Inservice Course for the Promotion of Visual Literacy (Masters project report, Central Washington University, 1979).
13. Hullstrom, Ruth. "Use Opaque Projector." Medium, May, 1977, p. 27.
14. Irvine, Bob. "The Quest Finds Acceptance in Washington Schools." Medium, Spring, 1980, pp. 2-6.

15. Kemp, Jerrold E. Instructional Design: A Plan for Unit and Course Development. Belmont, CA: Fearon Publishers, Inc., 1977.
16. _____. Planning and Producing Audiovisual Materials. New York: Harper and Row, 1980.
17. _____. "Which Medium?" Audiovisual Instruction, December, 1971, pp. 13-15.
18. Knight, Melvin E. and Dennis L. Smith. "Teaching the Effective Use of Media." Educational Technology, 9:29-30, January, 1979.
19. Le Clercq, Angie. "The AV Connection: Increasing Cooperation between Classroom and Library." Media and Methods, May/June, 1979, pp. 34-37.
20. Maddox, H. and R.J. Loughran. "Illustrating the Lecture: Prepared Diagrams vs. Built-up Diagrams." AV Communication Review, 25:1, Spring, 1977.
21. McConnell, John Terrence. "If the Medium Fits, Use It!" Selected Media for Learning: Readings from Audiovisual Instruction. Washington, D.C.: AECT, 1974. pp. 22-26.
22. McNulty, Edward. "Multimedia on a Shoestring Budget." Media and Methods, April, 1979, pp. 58-62.
23. Midgley, Thomas Keith. "Silhouette Lessons from Out of the Shadows." Medium, Summer, 1979, pp. 10-12.
24. Moldstad, John A. "Selective Review of Research Studies Showing Media Effectiveness: A Primer for Media Directors." AV Communication Review, 22:387-407, Winter, 1974.
25. Office of Libraries and Learning Resources. Aids to Media Selection: Students and Teachers. Washington, D.C.: U.S. Department of Health, Education and Welfare, September, 1979.
26. Oxford, Jacquelinm and David Moore. "Can Teachers Learn to Cope with Our Visual Society?" Audiovisual Instruction, May, 1979, pp. 21-22.
27. Polette, Nancy. In-Service: School Library/Media Workshops and Conferences. Metuchen, N.J.: Scarecrow Press, Inc., 1973.
28. Rankowski, Charles A. and Minaruth Galey. "Effectiveness of Multimedia in Teaching Descriptive Geometry." Educational Communication and Technology Journal, 27:114-120, Summer, 1979.
29. Reilly, Vera E. "Teachers' Views of Inservice Education: A Question of Confidence." Phi Delta Kappan, 57:126-27, October, 1975.

30. Rovet, Joanne F. "Can Audio-Visual Media Teach Children Mental Skills?" (paper presented at the American Educational Research Association Annual Meeting, San Fransico, April, 1976).
31. Rutherford, William L. "Preferences of Elementary Teachers for Preservice and In-Service Training in the Teaching of Reading." Journal of Educational Research, 67:271-75, February, 1974.
32. Sabella, Anthony C. "Procedure for Creating a Media Environment to Help Change Teacher Role from Disseminating Information to Guiding Independent Learners." U.S., Educational Resources Information Center, ERIC Document ED 037 818, June, 1969.
33. Salomon, Gavriel. "The Language of Media and the Cultivation of Mental Skills." U.S., Educational Resources Information Center, ERIC Document ED 145 808, June, 1977.
34. Sewell, Edward H. and Roy L. Moore. "Cartoon Embellishments In Informative Presentations." Educational Communication and Technology Journal, 28:39-46, Spring, 1980.
35. State Committee for Educational Media and Technology. Instructional Media Curriculum Guide. Oklahoma State Department of Education, 1972.
36. Stewart, Donald K. "A Learning-Systems Concept as Applied to Courses in Education and Training." Educational Media: Theory Into Practice. Columbus, Ohio: Charles E. Merrill, 1969.
37. Thomas, R. Murray and Sherwin G. Swartout. Integrated Teaching Materials. New York: Longman, Green and Co., Inc., 1960.
38. Vlcek, Charles. "Instructional Development" (overhead transparency, Central Washington University).
39. _____. "Instructional Development through a Systematic Approach" (paper for Central Washington State College Audiovisual Division, 1973).
40. _____. "Writing Performance Objectives" (Information Sheet #1, Instructional Development Course, Central Washington University).
41. Wiseman, Robert. "A No-Camera Slide Program." Media and Methods, January, 1977, pp. 63-64.
42. Wolcott, Harry F. "Concomitant Learning: An Anthropological Perspective on the Utilization of Media." Educational Media: Theory Into Practice. Columbus, Ohio: Charles E. Merril, 1969.
43. Zirkel, Perry A. "Assessing Teachers' Preferences Regarding In-Service Education." The Clearing House, 52:328-333, March, 1979.