This series of modules on utilization of instructional media materials is intended to help educators in the planning, development, and implementation phases of instruction. The goals of this package include the following objectives for the intern: a) regularly present new and pertinent material of varied media; b) coordinate media with her/his unit or lesson plan; c) promote achievement through the use of media; d) prepare students psychologically as well as physically for media utilization; and e) classify material according to instructional objectives. Listed are competency goal statements, prerequisites, and resources. Module 1, "Evaluation, Selection and Utilization of Instructional Media Materials," notes the time for completion of the module, prerequisites, objectives, enabling activities, and evaluation procedures. The following handouts are included with Module 1: Instructional Media Evaluation Criteria; Educational Media Objectives for Instructional Media Materials; Media Utilization Chart; and College Facilitator Criteria Checklist for Evaluation, Selection of Instructional Media Materials and Development of a Media Utilization Chart. Module 2 is "Utilization of Media within a Classroom"; listed are the time, prerequisites, objectives, enabling activities, and evaluation. The accompanying handout is the Cooperating Teacher, Team Leader, On-Site Instructor Criteria Checklist for Utilization of Instructional Media Materials and Media Utilization Chart. (JA)
ADAMS STATE COLLEGE
UTILIZATION OF INSTRUCTIONAL MEDIA MATERIALS
COMPETENCY-BASED APPROACH

Prepared for the
Adams State College
Teacher Corps Program

By
Gonzalo Roldan
Instructor
Adams State College

Lawrence T. Gomez, Director
Adams State College
Teacher Corps

Rocky DeMott
Program Development Specialist
Adams State College
Teacher Corps
Introduction

As the opportunity to use instructional media material increases, so does the number and variety of instructional media material increase. As the use, number, and variety of instructional media material increase, the problems of evaluation, selection, and utilization also increase. To assist you in utilizing instructional media material, these modules have been designed around the concept of evaluation by cognitive educational objectives, and indirectly by affective and psycho-motor educational objectives.

Systematic evaluation of instructional media material prior to its use requires that criteria be developed to overcome the tendency of individuals to lose sight of important long-, medium-, and short-range goals and objectives in the presence of day-to-day instruction. When the criteria (objective and subjective) for evaluating instructional media material are formulated and carried out by educators, a number of significant benefits are likely to result that are worth the time and effort involved. The underlying reasons for evaluation of instructional media material determine the nature of the benefits to be derived, but one of the main reasons is to search for ways of improving the teaching/learning process.

As you progress through these modules, the variety of enabling activities and learning experiences will range from researching to using instructional media materials in your classroom. You will
2. Many instructional media materials, when used in combination, greatly increase the possibility of achieving goals and objectives.

3. The instructional learning process can be enriched by using more extensively instructional media materials which are, or can be, made available.

4. Increasing the number and quality of instructional media material offers new possibilities for creativity and experimentation in teaching.

5. Increasing one's proficiency in his/her ability to evaluate and select instructional media material increases the proficiency in the utilization of such materials. Educator performance in teaching is dependent upon the quality of both the material and its use.
be required to integrate a variety of instructional media material from a variety of sources into a unit of study.

**Rationale**

How individuals use instructional media materials is dependent upon: (1) the individual himself/herself, (2) how much effort is extended in selecting and evaluating instructional media materials, (3) how well he/she has pre-planned the activity he/she wishes in his/her unit. No matter what the subject area, educators will find that how well students perform or achieve is dependent upon the individual, his plan, and the methods employed to carry out his/her plan.

The series of modules on utilization of instructional media material is, therefore, intended to help educators in the planning, development, and implementation phases of instruction. Interns using or working with these modules should find it to be a challenge in modifying existing ways of teaching. The content of these modules should be viewed as a transitional phase from existing ways of teaching to more challenging, experimenting ways. It should be noted that through the process of selecting and evaluating instructional media materials, educators become more informed about latest developments and more informative types of information.

The following principles should serve as guides to better understanding utilization of instructional media materials:

1. The wide variety of instructional media materials available makes it mandatory that educators be selective; the goals and objectives should determine an educator's choice and use of instructional media materials.
The project presented or reported herein was performed pursuant to a Grant from the U. S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U. S. Office of Education, and no official endorsement by the U. S. Office of Education should be inferred.
GOALS

This series of modules is designed for an intern to:

I. Present regularly new and pertinent media material of varied types from bulletins, catalogs, and resource center;

II. Skillfully and creatively coordinate a variety of media within her/his unit or lesson plans;

III. Promote achievement through the use of media;

IV. Prepare his/her students psychologically as well as physically for media utilization;

V. Readily classify material according to instructional objectives;

VI. Exhibit preparedness through confidence in and presentation of a variety of instructional material.

COMPETENCY GOAL STATEMENTS

Upon completion of this module the Teacher Corps intern will:

1. Evaluate a variety of instructional media material for a given unit of study;

II. Select a variety of instructional media material for a given unit of study;

III. Utilize a variety of instructional media material for a given unit of study;

IV. Develop a card catalog file of instructional media material for a given unit of study;

V. Develop a media utilization chart which utilizes the scope, continuity, and sequence of instructional media materials in relation to the stated objectives and content for a given unit of study;

VI. Develop an instructional media materials test that reflects the cognitive and affective behaviors desired from selected media materials.
Prerequisites

I. The intern must have completed a teaching-learning unit within one of the curricular areas of elementary social studies, physical education, music, art, mathematics, science, reading, or language arts.

II. The intern must have developed the skills necessary to operate the following audio/visual equipment. If the student does not have the necessary skills required to operate the following audio/visual equipment, he/she should go to the appropriate location (L.R.C., Media Center or ES Building Instructional Media Center) and spend the necessary time required for the mastering of:

A. Projectors - 16 & 8mm, filmstrip, overhead, opaque, slide, and film loop;

B. Audio - Tape, reel to reel, cassette, and record player;

C. Television - Video tape recorder, camera, and playback system.

Resources

Instructional media materials are available in the Learning Resource Center, Education and Social Science Media Center, Science and Math Labs, San Luis Valley and Visual Center and the local school districts. The intern should familiarize himself with the instructional media materials and especially the media materials catalogs at the above location.
EVALUATION, SELECTION AND UTILIZATION OF INSTRUCTIONAL MEDIA MATERIALS

Time

This module is designed to be completed within one week.

Prerequisites

The intern should consult the "Audiovisual Equipment Self-Instructional Manual" by Stanton G. Oates located in the Teacher Education Media Center, ES Building, Room 106, if he/she does not have the skills to operate the media equipment listed in the "prerequisites" of the preceding section in this series of modules.

The intern must have completed an acceptable teaching/learning unit in the curricular areas of elementary mathematics, science, social studies, language arts, music, or physical education before he/she begins this module.

Objectives

Upon completion of the enabling activities of this module the intern will:

1. Evaluate a variety of instructional media material for a given teaching/learning unit;

2. Select a variety of instructional media material for a given teaching/learning unit;

3. Develop a media utilization chart which visualizes the scope, continuity, and sequence of instructional media materials in relation to the stated objectives and content of a teaching/learning unit.

Enabling Activities

1. Make arrangements with college facilitator for a brief introductory class session.

2. Review your completed teaching/learning unit. Pay particular attention to the instructional stated objectives and content of this unit.
3. Review "Handout #1". This handout states the criteria you will use to evaluate instructional audio materials in relation to the stated objectives and the content and means of evaluation of your completed unit. Handout #1 also includes other criteria that is necessary to consider in the evaluation of instructional audio/visual materials.

4. Review Handout #2. Decide at which cognitive level the objective(s) of your completed teaching/learning unit have been written to attain. Also refer to the content of your teaching/learning unit.

5. Review the catalogs and media materials available at the previously stated resource areas in terms of the objectives and content of your teaching/learning unit.

6. Select those instructional materials which relate to the cognitive and affective behaviors you have stated in your objectives and which relate to the content you have included in your teaching/learning unit.

7. Preview the selected materials to evaluate the materials in terms of the stated objectives and content of your teaching/learning unit. Again, refer to "Handout 2" and ask yourself the questions stated in this handout. This will help you determine if the content of the instructional media materials you have selected actually lead to the attainment of your stated objectives.

8. After previewing the instructional media materials select only those materials which relate to the objectives and enrich the content of your teaching/learning unit.

9. Construct a "Media Utilization Chart" according to the directions and format of Handout #3. Submit to the college facilitator this chart when completed.

10. Review the college facilitator criteria checklist "Handout #4." The criteria checklist will inform you of the criteria and standards for your "Media Utilization Chart." Submit Handout #4 to the college facilitator along with your "Media Utilization Chart."

**Evaluation**

The intern must meet all the behavioral indicators listed in the criteria checklist (Handout #4) with a rating of "yes" as judged by the college facilitator.
INSTRUCTIONAL MEDIA EVALUATION CRITERIA

When evaluating-selecting and utilizing instructional media materials, select that (those) material which achieves that (those) educational objective(s) which you consider to be most important or want to emphasize.

1. Knowledge
2. Comprehension
3. Application
4. Analysis
5. Synthesis
6. Evaluation

When evaluating-selecting instructional media material, select the individual to whom you wish to expose the material to:

1. Student
2. Teacher
3. Both

When evaluating-selecting instructional media material, seek out information which is related to:

1. The development of a more effective means for achievement of objectives
2. Preconceived ideas
3. Related subjects
4. Cost
5. Educational value which justifies time
6. Time allocated for a subject area
7. Methods of storage which place undue restriction on its use
8. Materials that students generally use
9. Materials that teachers generally use
10. The media employed to convey the message
11. Graphic techniques
12. Graphic placement of information
13. Technical quality
14. Curriculum planning
15. Appropriate demands based upon student capacity to learn
16. The amount of information presented.
EDUCATIONAL MEDIA OBJECTIVES FOR INSTRUCTIONAL MEDIA MATERIALS

Media objectives for selection and evaluation of media materials leading to competencies in media utilization are based upon "Blooms Taxonomy of Educational Objectives." It must be remembered that although these objectives are cognitive, the affective domain and psychomotor domain are indirectly involved. These domains ultimately assist in producing learning.

When evaluating and selecting instructional media material ask yourself if this material has, provides, or considers objectives stated in your unit such as:

Knowledge

1. Isolated bits of information
2. Symbols with concrete referents
3. Chronological sequences
4. Patterns by which phenomena and ideas are organized
5. Specific information

Comprehension

1. Accuracy in information when it is translated from one to another
2. Summarization of major ideas
3. A recording of information specifics for interpretation
4. Extension of trends, ideas beyond given data

Application

1. Use of abstractions in particular way
2. Generalization about specific information which must be applied
Analysis

1. Identification of elements such that a hierarchy of ideas is made clear
2. Interaction between elements of information
3. Definite organizational structure to the information
4. Organizational structure to the information

Synthesis

1. Combines ideas, feelings, and/or behaviors
2. Development of a plan of work
3. Development of a set of abstract relations to classify particular data or phenomena
4. Propositions from symbolic representations

Evaluations

1. Logical accuracy
2. Reference to selected criteria
MEDIA UTILIZATION CHART

OBJECTIVE(S)  CONTENT  MEDIA ACTIVITIES
That which is to be accomplished or learned.  Information needed to accomplish objective.  Media which presents information needed to achieve objective.

DIRECTIONS

1. State the objectives of your teaching-learning unit.
2. State the information in phrases or single word form, necessary to accomplish each objective.
3. State the media and the information in phrases or single word form, found in the media material for each objective.
"COLLEGE FACILITATOR CRITERIA CHECKLIST FOR EVALUATION, SELECTION OF INSTRUCTIONAL MEDIA MATERIALS AND DEVELOPMENT OF A 'MEDIA UTILIZATION CHART'"

I. COMPETENCY GOAL STATEMENT:

The intern will develop a media utilization chart which visualizes the scope, continuity, and sequence of instructional media material in relation to the stated objectives and content for a given unit of study.

A. Indicators. The college facilitator should complete the following behavioral indicator checklist and rate "yes" or "no" for each behavioral indicator.

"EVALUATION AND SELECTION OF INSTRUCTIONAL MEDIA MATERIALS INDICATOR CHECKLIST"

1. The intern has stated his/her instructional objectives in precise behavioral (cognitive and/or affective terms) on the "Media Utilization Chart."

2. The intern has stated the conditions and standards for each instructional objective on the "Media Utilization Chart."

3. The intern has explicitly shown the scope, continuity, and sequence between the instructional objectives, content, and media activities on the "Media Utilization Chart."

4. The intern has evaluated and selected a variety of instructional media materials that relate to the stated objectives and content on the "Media Utilization Chart."
5. The intern has evaluated and selected instructional media materials which may hold the student's interest and attention.

B. **Context.** Written assignments given to college facilitator after evaluation and selection of instructional media materials.

C. **Criteria.** The intern must be given a rating of "yes" on all behavioral indicators listed on the "Evaluation and Selection of Instructional Audio Materials Indicator Checklist."

D. **Procedures.** The college facilitator uses a "yes" and "no" scale to rate the intern on each behavioral indicator.

E. **Operationalized statement.** After previewing instructional media materials at designated resource centers and evaluating and selecting instructional media materials related to the stated instructional objectives and content of a completed teaching/learning unit, the intern will develop an audio utilization chart which visualizes the scope, continuity, and sequence of instructional media materials when judged by the college facilitator with a rating of "yes" on all the behavioral indicators on the "Evaluation and Selection of Instructional Media Materials Indicator Checklist."
UTILIZATION OF MEDIA WITHIN A CLASSROOM

Time

This module is designed to be completed within one week.

Prerequisites

1. The intern should have completed all the enabling activities in Module 1 before preceding to this module.

2. The intern should consult with the cooperating teacher and college facilitator for approval of an acceptable teaching/learning unit in the curricular areas of mathematics, science, social studies, language arts, music, or physical education before he/she presents this module.

3. The intern must review his teaching/learning unit and physically and psychologically prepare his students for presentation of unit and instructional media materials.

Objectives

Given access to a classroom situation, the intern will utilize a variety of instructional media material for a given unit of instruction which:

1. Precisely relate various kinds of media to specific content or information as they are being utilized by both student and teacher.

2. Involve students in new and more efficient ways of learning in (a) large, (b) medium, (c) small group, and (d) individualized instruction.

3. Achieve the educational (cognitive) objective such as (a) knowledge, (b) comprehension, (c) application, (d) analysis, (e) synthesis, and (f) evaluation desired by the teacher/intern.

4. Relate to a selected verbal teaching strategy such as (a) lecturing, (b) summarizing, (c) explaining, (d) introducing, (e) clarifying, and (f) defining and/or opining.
5. Present quality and suitable content on the basis of (a) interest, (b) experience, (c) maturity, and (d) powers of comprehension.

Enabling Activities

1. Make arrangements to consult with cooperating teacher and college facilitator to review unit of instruction.

2. Make arrangements to instruct in a given classroom.

3. Schedule and prepare media materials in relation to utilization chart developed in Module 1.

4. Physically and psychologically prepare students for media presentation.

5. Prepare to guide students in the process of reacting to media experience:
   a. Formulate discussion questions.
   b. Identify and call for student action in relation to needs and objectives.
   c. Organize problem-solving projects in relation to media utilized.
   d. Arrange specific handout worksheets.

6. Schedule and prepare equipment prior to scheduled classroom period.

7. Organize individual and group instruction in which media is to be utilized.

8. Review with the cooperating teacher the criteria checklist. The criteria checklist will inform you of the criteria and standards for utilization. Before your presentation of a unit of instruction, submit criteria checklist (Handout #1) to cooperating teacher.

Evaluation

The intern will be evaluated by the cooperating teacher, team leader, or on-site instructor on the behavioral indicators listed on the criteria checklist (Handout #1) in this module. The intern must meet at least 70% of the behavioral indicators listed with a rating of "yes."
"COOPERATING TEACHER, TEAM LEADER, OR ON-SITE INSTRUCTOR CRITERIA CHECKLIST FOR UTILIZATION OF INSTRUCTIONAL MEDIA MATERIALS AND MEDIA UTILIZATION CHART"

I. COMPETENCY GOAL STATEMENT:

The intern will utilize a media utilization chart which visualizes the scope, continuity, and sequence of instructional media material in relation to stated objectives and content for a given unit of instruction. This chart will be the basis for preparation and utilization of instructional media material.

A. Indicators. The cooperating teacher, team leader, or on-site instructor should complete the following behavioral indicator checklist and rate "yes" or "no" for each behavioral indicator. This checklist should be completed by the cooperating teacher, team leader, or on-site instructor during the time the intern is in an on-going classroom situation.

"UTILIZATION OF INSTRUCTIONAL MEDIA MATERIALS INDICATOR CHECKLIST"

1. Were the students prepared physically (seating arrangements, projection arrangements, and lighting) in terms of physical comfort?  

   Yes  No

2. Were there a variety of media materials utilized to present content of the unit?  

   Yes  No

3. Were the various kinds of media utilized related to specific content or information?  

   Yes  No
4. Were the various kinds of media utilized in such a manner that students may use them as well as the teacher?  
5. Were the various kinds of media utilized in such a manner that only teachers could use them?  
6. Were the various kinds of media utilized in such a manner that only students could use them?  
7. Were the various kinds of media utilized efficiently in terms of size of group?  
8. Were the various kinds of media utilized in such a manner that cognitive behavior skills could be developed?  
   1. Knowledge  
   2. Comprehension  
   3. Application  
   4. Analysis  
   5. Synthesis  
   6. Evaluation  
9. Were the various kinds of media utilized in relation to some teaching strategy such as:  
   1. Lecturing  
   2. Summarizing  
   3. Explaining  
   4. Introducing  
   5. Clarifying  
   6. Defining  
   7. Opining  
10. Were the various kinds of media utilized in relation to:  
   1. Interest  
   2. Experience  
   3. Maturity  
   4. Power of comprehension  
11. Were the various kinds of media utilized in direct relation to teaching/learning unit?  
12. Were the various kinds of media utilized useful and important?
13. Were the various kinds of media utilized contributions to the stated needs, purposes, and objectives of the teaching/learning unit?  
   Yes  No

14. Were the various kinds of media utilized according to difficulty level?  
   ____  ____

15. Were the various kinds of media utilized in such a manner that the intern lent his assistance when necessary to clarify a point not adequately covered by the media?  
   ____  ____

16. Were the various kinds of media utilized in such a manner that they were used in vicarious experiences?  
   ____  ____

17. Were the various kinds of media utilized accurate, typical, and up-to-date?  
   ____  ____

18. Were the various kinds of media conveniently utilized during class time?  
   ____  ____

19. Were the various kinds of media utilized of good technical quality?  
   ____  ____

B. Context. On-going classroom situation.

C. Criteria. The intern must, on the given rating of "yes", achieve a minimum of 70% of all behavior indicators listed on the utilization checklist.

D. Procedures. The evaluator uses a "yes" or "no" scale to rate the intern on each behavioral indicator during the on-going classroom situation. Additional time may be given after the presentation of no longer than one-half hour.

E. Operationalized statement. Given access to an on-going, regularly scheduled classroom of students, the intern will prepare, schedule, and utilize media appropriate to
a teaching/learning unit. The utilization of various kinds of media must meet 70% of all stated behavioral indicators on the utilization checklist.