The purpose of this study is to develop minicourses in educational media for presentation to inservice teachers through the "week-end college" system at Trenton State College. The minicourses were developed primarily through consultation with experts in the field of educational media and administrators at Trenton State College. In addition to the consultations, an analysis of introductory courses in educational media was made. This analysis involved (1) the division of the introductory course objectives into minicourses, (2) the identification of specific educational media competencies, (3) the activities required of the student for developing the competencies, (4) the teaching strategies to be employed, and (5) the methods of evaluation. Three minicourses were developed through this study, each involving 15 classroom contact hours and one semester hour of course credit: (1) Instructional Materials Production and Utilization; (2) Utilization of Projection Equipment; and (3) Utilization of Recording Equipment. Each minicourse was developed according to the course outline format required by the college for the development of all new courses: course description, specific objectives, outline of course, teaching methods, bibliography, basic requirements, evaluation of course, and new course data sheet. The planned procedures for instructional implementation of the minicourses were determined thorough an analysis, a detailed outline for each minicourse, that divides the course into competency modules with specific objectives, activities, and methods of evaluation was developed. Outlines and competency modules are given for the three minicourses. (DMT)
THE DEVELOPMENT OF MINICOURSES IN EDUCATIONAL MEDIA FOR INSTRUCTIONAL
TEACHER EDUCATION AT TRENTON STATE COLLEGE

CURRICULUM DEVELOPMENT

by

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CLUSTER COORDINATOR

A PRACTICUM PRESENTED TO NOVA UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF DOCTOR OF EDUCATION

NOVA UNIVERSITY
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U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
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INTRODUCTION

During the summer session of 1975, the Dean of Educational Services at Trenton State College held several meetings with college administrators and faculty for the purpose of discussing various types of non-traditional programs and courses that could be designed to meet the needs of the post-college-age individual. Although the major emphasis of the meetings was the "new student," particular attention was given to the inservice teacher.

These meetings also led to the planning of a "week-end college" system as an approach for offering the programs and courses to these students. This "week-end college" approach, which is presently employed by New York University, Pennsylvania State University, LaSalle College and the University of Cincinnati, would have a particular appeal to individuals who find it difficult or impossible to attend class during regular school days or evenings.¹

In addition to meeting the educational needs of these students who are locked out of regularly scheduled classes because of family and professional responsibilities, the Dean of Educational Services pointed out other advantages to the "week-end college" approach. Students could take courses that vary in credit from 1 to 3 semester hours and that are designed to meet specific needs and interests. For example, portions of present courses could be developed and assigned the appropriate amount of credit and class contact time that is consistent with sound academic practice.² This would lead to the development of several minicourses or short courses in a number of disciplines. Such minicourses or short courses would then permit the

¹Letter from the Dean of Educational Services to Deans, Directors and Department Chairpersons, August 11, 1975.
²Ibid.
student to take a portion of a course in a short period of time without spending the complete semester taking a course in which only a portion of the content and competencies really meets his or her needs. Therefore, a student could take a minicourse in a particular discipline and complete the course over a period of 3 or 4 Friday evening and Saturday class sessions. The appeal for such courses involves relevance to needs, less money required for tuition payments at one time, less commitment of time from family and professional responsibilities, less traveling time and expenses, and the ability to complete a 1 credit minicourse of intensive study in a short period of time.

This appeal applies to many courses presently offered in educational media through the Division of Continuing Education since the students that generally enroll in the educational media courses presently offered are inservice teachers. Many of these teachers have indicated through course evaluations at the end of a semester that certain portions of the course should be discontinued and other portions should be expanded. However, the suggestions generally differed in 3 and sometimes 4 areas of the course content and competencies. Also, these inservice teachers have expressed that it is difficult for them to take many of the courses in educational media because of conflicts between class schedules and professional responsibilities. This, therefore, indicates that minicourses in educational media offered through the "week-end college" approach would have particular appeal to inservice teachers.

Therefore, the purpose of this study was the design and implementation of minicourses in educational media that would meet the specific needs of inservice teachers. The minicourses were planned for presentation through the "week-end college" system.
BACKGROUND AND SIGNIFICANCE

The inservice teacher education market for minicourses in educational media at Trenton State College is abundant in New Jersey. The reason for this abundance is that the State does not require a formal course in educational media as part of its undergraduate teacher preparation programs in secondary education. As a result, the State Colleges in New Jersey, for the most part, graduate secondary education majors without any significant experience in the use of educational media. This practice is contrary to the views of New Jersey secondary school principals and academicians at Trenton State College as indicated by a recent study of educational media competencies for secondary school teachers. The study, which was designed to obtain evidence that a formal course in educational media should be required of all secondary education majors at Trenton State College, surveyed 324 New Jersey secondary school principals and 220 academicians at Trenton State College. The respondents to the questionnaire from both groups (68 percent of the principals and 35 percent of the academicians) rated 7 educational media competencies as having "great importance" for prospective secondary school teachers. Also, from 8 different academic approaches, they viewed a 3 credit introductory course as the best academic approach for developing educational media competencies in prospective teachers.

Although the results of this study support the preparation of secondary education majors in the area of educational media competencies, the required state-wide change in the curriculum will take a great deal of time. Such a change may also require additional studies. In the meantime, many secondary education majors will continue to graduate and take teaching positions only

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to find that they are not prepared to function effectively with educational media techniques. These new teachers, along with their colleagues who have been teaching for a few years, will find it necessary to return to college for training in educational media techniques. Without such training, they will find it difficult to teach media oriented students within the junior and senior high schools that employ instructional systems approaches to teaching.

These inservice teachers in New Jersey make up one part of the market for minicourses in educational media. Since the teacher preparation curriculum in secondary education at the Pennsylvania State Colleges produces similar needs in many secondary education teachers, the market is also available in eastern Pennsylvania, particularly in Bucks County. Finally, the market also includes elementary teachers of both States who either missed the educational media course that is required for certification and/or who need or wish further study in the field.

The use of minicourses in inservice teacher education and higher education in general is not new. Nor is it confined to higher education. Minicourses are also being used in the elementary and secondary levels of education.

Arthur Roberts and Robert Gable have defined minicourses as short-term courses that are offered for less than one semester. They also stated that the origins of the minicourse can be traced to the widespread student unrest at the end of the 1960's and the demand for more curriculum relevance. This statement about the origins of minicourses in formal education has merit.

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However, minicourses really are not new or recent in utilization. They may be new perhaps to schools and colleges, but they are not new to industry and the military. Ransom Beers reminds us that manufacturers have conducted short seminars for their sales representatives and other employees, and that the armed services employed minicourses of many kinds for rapid training during times of war. And yet, ironically, the value of this efficient method of education has begun to be recognized only recently.5

It is ironic that a student can select four variations of coffee from an ordinary vending machine, but when he enters a classroom he may receive instruction identical to that of several hundred other students. An obvious fact of life is that people exhibit great diversity in backgrounds, interests and capacities. Yet our educational system is made up of large blocks of content called courses and with little or no provision to break the lockstep of time, content or instructional procedure.6 However, a great deal of progress has been made in breaking this lockstep with large blocks of course content, and this progress has occurred at all levels of education through the use of minicourses.

In a paper presented at the 58th Convention of the National Association of Secondary School Principals in Atlantic City, New Jersey, Albert Oliver stated that in the past decade, the minicourse has appeared on the educational scene as an alternative with much curriculum potential. The term "minicourse" appears in a wide variety of possibilities. Some schools use a "free-form"


approach; i.e., courses or experience usually planned with students but carrying no academic credit. In terms of credit courses, the most common practice is to offer quarter courses that are usually 9 or 10 weeks in length. Colleges and a few secondary schools plan an interim in which short-term courses of intensive study may be chosen and which may or may not relate to the student's regular program. The use of the minicourse offering is justified on the grounds that such courses capitalize on the interests of the learner, utilize the interests and strengths of the teacher, increase the scope of the curriculum, tie the school and community closer together and allow experiments with course offerings.

The advantages of the minicourse are numerous for the students, teachers and the curriculum. A curriculum consisting of minicourses is usually far broader than the traditional form of curriculum and it offers the opportunity for challenging, in-depth study in many areas. Aside from the cognitive advantages, Roberts and Gable have pointed to "choice" as the key word in the affective domain. Students choose minicourses in which they are interested and can pick what they really need or want to know and skip that which is unnecessary. This is a natural selection process, and it is healthy for the curriculum because students literally vote for curriculum development when they make their choices.

Through minicourses, students have the opportunity to study with many different teachers, and if a course is failed, it requires repeating only a quarter of a semester's work rather than a full semester or year. The


8 Roberts and Gable, op. cit., p. 621-622.
minicourse can broaden the students' experience and give them the opportunity to do things that they normally could not do. Teachers also have a rare opportunity with minicourses since most college and university education is based on highly specialized courses. By specializing in one course, teachers have an opportunity to display their talents rather than merely "cover" large blocks of general material. Not only can they utilize their subject matter competency, they can also select courses that reflect their special interests. Thus for students and teachers alike, the opportunity to "do their thing" is there, but without the flubbiness that this catch phrase often connotes, since the structure and rigor of a subject matter field are still maintained.9

A study of depth versus breadth teaching in American history provided research findings supportive of the minicourse concept. The study, which compared student achievement in minicourses and traditional courses in American history, found that students may be taught either in depth or breadth without lowering academic achievement.10 In a similar study, it was found that students enrolled in a minicourse social studies curriculum showed a significant improvement in attitude toward the teacher's performance in comparison to students enrolled in a traditional program.11

Sylvester Kohut has stated that a minicourse program within a high school social studies curriculum is a refreshing alternative to the traditional one-year course. He cites the Jersey Shore Senior High School in

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9Ibid.


11Sylvester Kohut, Jr., "A Comparison of Student Achievement and Retention on Subjective Versus Objective Examinations in the Social Studies as Influenced by Different Instructional Patterns" (Unpublished Doctoral Dissertation, The Pennsylvania State University, 1971).
Jersey Shore, Pennsylvania as an example. In the 1970-71 school year, this school initiated a social studies minicourse program which was funded under Title III and administered by the Pennsylvania State Department of Education. As a result of this project, the new curriculum consists of 40 nine-week courses for students in grades ten through twelve. Dr. Kohut said that while school boards throughout the country tighten their moneybelts because of the financial crisis, the minicourse design stands out as a unique innovation for it actually lowers expenditures. At a time when educators are seeking new models and practical innovations, the minicourse program represents an organizational innovation worthy of consideration.  

In his work with the poorly motivated student and the low achiever, Ransom Beers found that the minicourse in science and mathematics can make it possible to achieve equality of educational opportunities, and it can be done at a much lower cost than by our present antiquated system. Mr. Beers made these statements as a result of teaching short courses or minicourses in science and mathematics for a period of six years.

The minicourse curriculum is designed to be relevant and responsive to the changing needs and interests of the students. Its success depends upon a high degree of flexibility, adaptability and creativity in terms of both students and teachers. It provides the opportunity for students to "open doors" and to explore and evaluate areas of learning apart from the more probaic demands of the classic curriculum. It is a logical corollary of flexible scheduling, individual study and personalized instructional emphasis now being stressed in the current world of education. Perhaps most important

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is the fact that the minicourse gives the student a direct say in terms of what is really relevant.

A twelve-week minicourse program in language arts has been successfully utilized for more than 5 years at Plumb High School which is a suburban Pittsburg, Pennsylvania school of 1,300 students. The program was initiated in order to permit academically oriented students much latitude in choosing electives of value; to create better learning attitudes by permitting the students some form of choosing courses; and to permit a teacher to instruct courses in his areas of primary strength and interest. As a result of the minicourses, there has been an increase in participation in the language arts program and the students have a wider variety of courses from which to choose. Furthermore, the minicourses have provided the students with an intensified course of study within a teacher's area of strength and interest, and they have permitted more frequent changes of both subject and personnel for students and teachers. The minicourses have also helped to educate the students to adjust to a rapidly changing society by providing them with opportunities to react and adjust to a greater variety of situations. Finally, it was found that the students needs and interests can be better met because of the flexibility in course selections.

As a result of dissatisfaction with the two-year United States history program in the high school at Westfield, New Jersey, a major revision was undertaken that resulted in the development of 22 minicourses in United States history. At the end of the first year of the program a questionnaire was

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used with 106 senior class members in an effort to evaluate the minicourse program. Among the various items on the questionnaire, the students were asked to state what they liked or disliked about the program, whether they felt any differently toward the study of social studies than before, and whether grades were higher or lower than in the past. The results of the study indicated that (1) most students selected courses because of the title and description provided, (2) nearly every student in all ability groups said that changing teachers caused no difficulty and that the change to a number of teachers over the year aided them in some way, (3) a number of students found the different techniques and methods of teachers interesting, (4) the students felt better able to become acquainted with their teachers, and (5) many students found classes less boring. The study also showed that the majority of students felt more positive toward the study of social studies, and they found courses more interesting, stimulating and learning easier. It was also found that grades were 32 percent higher for females while 59 percent remained the same and 9 percent of the females found grades to be lower. The pattern for males was similar to the females with 38 percent receiving higher grades, 7 percent remaining the same and 15 percent receiving lower grades. An overall rating of the program found that 75 percent of the females and 79 percent of the males rated the program above average or excellent. All of the results of the study were positive enough to continue the program and they supported the feelings of the staff members that the minicourse concept is an improvement over the previous system.16

Various junior high schools in Michigan have employed minicourses in an attempt to recapture student interest that was lost due to a "locked-in"

instructional program. The principals and faculty developed micro-mini units based on a wide range of student interest with strong emphasis on "hands-on" activities. Depending on the size of the school, the number of micro-mini units developed and offered ranged from 25 to 70. A report of the program indicated that although a few of the micro-mini units were not successful, the principals and faculty had never seen a program of educational value that "turned-on" students like this program. They said that the students looked forward to the courses and that the discipline problems were almost nonexistent. They also felt that the micro-mini units added something new to the program and they recommended such an approach to any junior high school.17

In Winnetka, Illinois, The New Trier East High School offers 253 minicourses according to Mrs. Mary McGuire who serves as the school's director of instructional services. The minicourses are offered in the following areas:18

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The results of a survey conducted by the NEA Research Division found

that 1 school district in 4 offer minicourses. Nearly 1 in 5 districts offer minicourses at the high school level, about 1 in 10 at the middle or junior high school level, and 1 in 25 districts offer minicourses at the elementary level. Although this survey did not include colleges and universities, there is some evidence in current literature that minicourses are being utilized in higher education, particularly in preservice and inservice teacher education.

In 1969, at Purdue University, it was decided that the content of botany and zoology courses should be reorganized into smaller units of information called minicourses. Under the direction of Dr. Postlethwaite, each minicourse was designed to cover a reasonable coherent segment of subject matter, and each minicourse was developed through a written set of objectives suitable for testing the student's mastery of the concepts included in the course. No rigid guidelines were established as to length or teaching strategy. Primarily, the limits of each minicourse were determined by good judgment much as one decides how to divide a book into chapters. Approximately 30 minicourses were identified for each course and several of these minicourses covered subjects common to both botany and zoology. The botany and zoology courses, which had previously been two distinct 4 credit hour courses now had become a pool of minicourses divided into 4 categories that included (1) plant minicourses, (2) animal minicourses, (3) common minicourses, and (4) optional minicourses. Dr. Postlethwaite said that, as a result of the minicourses, the hopes of the botany and zoology students have been nearly all realized. Perhaps more important, however, is the potential of the minicourse concept for providing new ways of going to college and for assisting with equal opportunity edu-

cation and continuing education. Dr. Postlethwaite also stated that the minicourse may be used in conventional college settings or in learning centers through auto-tutorial systems. However, they may be employed, Dr. Postlethwaite feels that the major task now is to produce the quantity and quality of minicourses necessary to accommodate the current needs of students and to devise the additional administrative procedures required to make such programs available on a broad scale.20

In the area of teacher education, a number of minicourses for use in preservice and inservice training have been developed, tested and made available commercially by the Far West Laboratory for Educational Research and Development in San Francisco, California. The minicourses, which are identified by number, are available on a variety of areas and cover approximately 200 instructional skills for teachers. For the most part, these minicourses were designed as self-instructional teacher training packages.21

As mentioned above, these minicourses had been rigorously tested by the Far West Laboratory before being released for production and national distribution. One such field test involved the Chicago public schools. As a result of the field test, Ms. Angeline Caruso, District Superintendent, who had a role in the testing, stated that the minicourse is the most effective form of inservice teacher training she had ever seen.22

The results of an independent test on Minicourse 18, which was developed by the Far West Laboratory, was reported by Darryl Strickler at the 19th Annual Meeting of the International Reading Association in New Orleans in

20Postlethwaite, op. cit., p. 529


in May, 1974. The minicourse, which was designed to improve teacher effectiveness in aiding children in their acquisition of reading decoding skills, was used with 14 inservice and 19 preservice teachers in the test. Seven inservice teachers and 9 preservice teachers were trained with the minicourse and the remaining 17 subjects served as a control group. The results of the test indicated that training with Minicourse 18 contributed significantly to the development and refinement of behaviors related to teaching reading decoding skills. Also, the minicourse training appeared to have provided the teachers with a more systematic approach to teaching reading decoding skills.23

In a similar study, the Far West Laboratory's Minicourse 4 on interaction analysis was used to train teachers in the use of Ned Flander's system of interaction analysis as an approach to improving teacher behavior in teaching. The results of the study indicated that Minicourse 4 appeared to be at least equal to if not better than the usual procedures used to teach the Flander's System, and it influenced teachers toward a change in behavior which involved a more indirect teaching approach.24

In reference to the Far West Laboratory's Minicourses, Beatrice Ward has stated that they can help inservice and preservice teachers achieve a degree of independent, self-directed learning. The minicourses lend themselves to application in a highly individualized, self-directed approach to preparation for teaching. However, they may also be employed in more directed situations and still provide teachers with a substantial degree


of responsibility for their own learning and for evaluating their own progress toward acquiring improved teaching skills.\textsuperscript{25}

The development of minicourses in educational media that could be presented through the "week-end college" system would add a new dimension to inservice teacher education at Trenton State College. The total approach would provide new avenues for inservice teachers who, heretofore, have been unable to continue their education in educational media due to course schedules that conflict with their family and professional responsibilities. By providing minicourses of short duration through the "week-end college" system, the inservice teacher would be able to develop competencies in various areas of educational media quickly and without making major commitments for the duration of the semester.

The advantages of the minicourse approach through the "week-end college" system seem to have great value for inservice teacher education at Trenton State College. Therefore, the focus of this study was the development of minicourses in various areas of educational media for presentation through the "week-end college" system.

**PROCEDURES**

The nature of this study required procedures that included consultations with experts in the field of educational media at Trenton State College. Faculty members who teach educational media courses and other members of the Media Communication Science Department were consulted in an effort to determine the areas of educational media that should be developed into minicourses for the purpose of meeting the specific needs of inservice teachers.

College administrators were also consulted concerning the scheduling of the minicourses for presentation through the "week-end college system"
and the awarding of course credit. The final administrative procedures involved consultations with the Academic Affairs Committee of the School of Education. This committee was consulted in an effort to receive approval for offering the new minicourses through the "week-end college system."

Twenty-seven major figures were involved in the consultations and they are listed below according to their status within the college:

**Administrators**

- Dean of Educational Services
- Dean of the School of Education
- Director of the Center for Media and Technology

**Academic Affairs Committee - School of Education**

- Professors (2)
- Associate Professors (6)
- Assistant Professors (6)
- Instructors (2)

**Faculty Members - Media Communication Science Department**

- Associate Professors (2) Includes Department Chairperson
- Assistant Professors (6)

In addition to these consultations, an analysis of the introductory course in educational media was made in order to develop the various minicourses. This analysis involved (1) the division of the introductory course objectives into minicourse segments, (2) the identification of the specific educational media competencies that would make up the objectives of each minicourse, (3) the activities that would be required of the student for developing the competencies of the minicourses, (4) the teaching strategies that would be employed, and (5) the methods for student evaluation.

**RESULTS: THE MINICOURSES**

The development of minicourses in educational media for inservice teacher education at Trenton State College received strong support. All of the professionals that were consulted strongly favored the development of the mini-
courses for presentation through the "week-end college system," and their professional advice provided direction for the immediate planning, organizational development and instructional implementation of the minicourses.

The minicourses were developed through a segmentation of the introductory course in educational media which carries 3 semester hours of credit and involves 45 classroom contact hours. The selection of this course for segmentation into the minicourses was based on the course content and its relevance to the needs of inservice teachers as experienced by faculty members who taught the course for several years.

Since this introductory course involves 3 major areas of educational media that are important to the inservice teacher, the logical approach to segmentation resulted in 3 minicourses. This segmentation will permit each minicourse to cover 1 major area of educational media within 15 classroom contact hours and to carry 1 semester hour of credit. The titles of these minicourses were derived from the 3 major areas of the introductory course. Therefore, the titles of the minicourses are (1) Instructional Materials Production and Utilization, (2) Utilization of Projection Equipment, and (3) Utilization of Recording Equipment.

Each minicourse, as outlined below, was developed according to the course outline format required by the college for the development of all new courses. The outlines were presented to the Media Communication Science Department, the appropriate college administrators and the Academic Affairs Committee for approval in the following form:

MINICOURSE OUTLINE

INSTRUCTIONAL MATERIALS PRODUCTION AND UTILIZATION

1 Semester Hour
I. COURSE DESCRIPTION

This course is designed to help the student develop competencies in the production and utilization of various types of instructional materials.

Prerequisite: None

II. SPECIFIC OBJECTIVES

A. To learn to produce a 3M transparency.
B. To learn to produce a 3M thermal spirit ditto master.
C. To learn to produce a 3M picture lamination.
D. To learn to produce a diazo transparency.
E. To learn to produce a color-lift transparency.
F. To learn to produce wet and dry mounted pictures.
G. To learn to produce various types of display materials.
H. To learn graphic techniques.
I. To learn to produce photographic slides through the use of the Kodak Ecktagraphic Slide Kit.
J. To learn the utilization techniques of the produced materials.

III. OUTLINE OF COURSE

A. 3M Production Process
B. Diazo Transparency Process
C. Color-Lift Transparency Process
D. Wet and Dry Mounting Picture Process
E. Display Materials and Techniques
F. Graphic Techniques
G. Photographic Slides
H. Utilization Techniques

IV. TEACHING METHODS

A lecture and demonstration-practice laboratory approach will be employed with the supplemental use of self-instructional video cassettes.
V. BIBLIOGRAPHY

Required:


References:


VI. BASIC REQUIREMENTS

The student will be required to demonstrate competencies in the production and utilization of the instructional materials by submitting a sample product for each production technique covered in the course.

VII. EVALUATION OF COURSE

The student's produced materials will be evaluated and a final written examination will be administered. In addition, the student will submit an evaluation of the course.

NEW COURSE DATA SHEET

Department: MEDIA COMMUNICATION SCIENCE

Course Title: INSTRUCTIONAL MATERIALS PRODUCTION AND UTILIZATION
First three digits of number:  MCS 471

Semester hours: 1

Class meetings: 5 three-hour meetings (3 Friday evenings and 2 Saturday meetings)

Course Description

This course is designed to help the student develop competencies in the production and utilization of various types of instructional materials.

Prerequisite

None

Circle appropriate description(s)

- major required
- minor required
- liberal studies
- open to election by non-majors
- major option
- minor option
- professional
- support for other major(s)

Course(s) to be eliminated (if any)

None

New faculty or facilities required

None

How does this course contribute to the objectives of your program?

This minicourse will provide the inservice teacher with the opportunity to develop competencies in the specific areas of producing and utilizing instructional materials without taking the complete introductory course in educational media. Also, the student will be able to complete the course without making commitments for the duration of a semester.

MINICOURSE OUTLINE

UTILIZATION OF PROJECTION EQUIPMENT

1 Semester Hour

I. COURSE DESCRIPTION

This course is designed to help the student develop competencies in the handling and operation of projection equipment. The projection equipment
includes a variety of 16mm motion picture projectors, filmstrip, slide overhead and opaque projectors.

Prerequisite: None

II. SPECIFIC OBJECTIVES

A. To learn to operate the Bell and Howell, Singer Graflex and International 16mm motion picture projectors.

B. To learn to operate the Kodak Carousel 2" x 2" slide projector.

C. To learn to operate the Viewlex and Singer Graflex 35mm filmstrip projectors.

D. To learn to operate the Bessler opaque projector.

E. To learn to operate the Bessler, Century and Portascribe overhead projectors.

F. To learn the proper techniques of handling and caring for all types of film and other projection material.

III. OUTLINE OF COURSE

A. Sixteen millimeter motion picture projectors and film

B. Slide projectors and photographic slides

C. Opaque projectors and materials

D. Overhead projectors and transparencies

IV. TEACHING METHODS

A lecture and demonstration-practice-laboratory approach will be employed with the supplemental use of self-instructional video cassettes.

V. BIBLIOGRAPHY

Required:


References:


Erickson, Charlton W. *Fundamentals of Teaching With Audiovisual Technology*.

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VI. BASIC REQUIREMENTS

The student will be required to demonstrate competencies in the handling and operation of projection equipment and concomitant materials.

VII. EVALUATION OF COURSE

The student will be evaluated through a proficiency performance test on each piece of projection equipment. In addition, the student will take a final written examination, and will complete an evaluation of the course.

NEW COURSE DATA SHEET

Department: MEDIA COMMUNICATION SCIENCE

Course Title: UTILIZATION OF PROJECTION EQUIPMENT

First three digits of number: M C S 4 7 2

Semester hours: 1

Class meetings: 5 three-hour meetings (3 Friday evenings and 2 Saturday meetings)

Course Description

This course is designed to help the student develop competencies in the handling and operation of projection equipment. The projection equipment includes a variety of 16mm motion picture projectors, filmstrip, slide, overhead and opaque projectors.

Prerequisite

None
How does this course contribute to the objectives of your program?

This minicourse will provide the inservice teacher with the opportunity to develop competencies in the specific area of projection equipment without taking the complete introductory course in educational media. Also, the student will be able to complete the course without making commitments for the duration of a semester.

MINICOURSE OUTLINE

UTILIZATION OF TAPE RECORDING EQUIPMENT

1 Semester Hour

I. COURSE DESCRIPTION:

This course is designed to help the student develop competencies in the handling and operation of tape recording equipment. The tape recording equipment includes a variety of reel to reel and cassette tape recorders. In addition, the student will learn various recording techniques.

Prerequisite:  None

II. SPECIFIC OBJECTIVES

A. To learn to operate a variety of reel to reel tape recorders which include the Newcombe, Wollensak, Revere, and Sony models.

B. To learn to operate a variety of cassette tape recorders which include the Avid, Sony and Panasonic models.

C. To learn a variety of recording techniques which include

1. simple microphone recording
2. electronic patch recording from a variety of sound units
3. narration recording with musical background
4. electronic mixing box recording technique

D. To learn the techniques of editing and splicing recording techniques.
E. To learn basic techniques of maintaining and troubleshooting recording equipment and tape.

III. OUTLINE OF COURSE
A. Reel to reel tape recorders
B. Cassette tape recorders
C. Recording tape and the electronic principles of tape recording
D. Recording techniques
E. Editing and splicing recording tape
F. Maintenance and troubleshooting of equipment and materials

IV. TEACHING METHODS
A lecture and demonstration-practice laboratory approach will be employed with the supplemental use of self-instructional video cassettes.

V. BIBLIOGRAPHY

Required:


References:


VI. BASIC REQUIREMENTS

The student will be required to demonstrate competencies in the handling and operation of tape recording equipment and concomitant materials. In addition, the student will submit a tape recording that includes all the recording techniques covered in the course.

VII. EVALUATION OF COURSE

The student will be evaluated through a proficiency performance test on each piece of tape recording equipment. In addition, the student's prepared tape will be evaluated and the student will take a final written examination. An evaluation of the course will also be submitted by the student.

NEW COURSE DATA SHEET

Department: MEDIA COMMUNICATION SCIENCE

Course Title: UTILIZATION OF TAPE RECORDING EQUIPMENT

First three digits of number: MCS 474

Semester Hours: 1

Class Meetings: 5 three-hour meetings (3 Friday evenings and 2 Saturday meetings)

Course Description

This course is designed to help the student develop competencies in the handling and operation of tape recording equipment. The tape recording equipment includes a variety of reel to reel and cassette tape recorders. In addition, the student will learn various recording techniques.

Prerequisite

None

Circle appropriate description(s)

--major required --minor required --liberal studies --open to election by non-majors
Course(s) to be eliminated (if any)
None

New faculty or facilities required
None

How does this course contribute to the objectives of your program?
This minicourse will provide the inservice teacher with the opportunity to develop competencies in the specific area of tape recording without taking the complete introductory course in educational media. Also, the student will be able to complete the course without making commitments for the duration of a semester.

These minicourses received the necessary approval for presentation through the "week-end college system," and they were submitted to the Dean of Educational Services for scheduling and publication for the Spring semester of 1976.

RESULTS: INSTRUCTIONAL IMPLEMENTATION OF THE MINICOURSES

The planned procedures for instructional implementation of the minicourses were determined through an analysis of the behavioral objectives of each course. As a result of this analysis, a detailed outline for each minicourse was developed that divides the minicourse into competency modules with objectives, activities and methods of evaluation. Copies of these minicourse outlines will be presented to the students during the first class meeting. The outlines will be used by the instructor for teaching the course and by the students for developing the objectives of each competency module. The outlines will be presented in the following form:

Minicourse Competency Outline
Course Title: Instructional Materials Production and Utilization
Course Number: M C S 4 7 1
Semester Hours: 1

Competency Module A: 3M Transparency Production Process

1. Objectives: The student will be able to
   a. identify and acquire the materials necessary for making a 3M transparency
   b. arrange the materials in the correct position for making the transparency
   c. set the exposure control of the 3M Copy Machine to the correct position for making the transparency
   d. insert the arranged materials into the input slot of the 3M Copy Machine for immediate production of the transparency
   e. remove the produced transparency and its master materials from the output slot of the 3M Copy Machine

2. Activities: to develop the objectives of the competency module, the student will
   a. observe a teacher demonstration of the complete 3M Transparency production process
   b. obtain video cassette # 11 from the Media Center
   c. take the video cassette to Wet Study Carrel Station # 11 in the Self-Instructional Laboratory
   d. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
   e. after viewing the cassette in its entirety one or more times, the student will then acquire the necessary materials from the Expendable Materials Office of the Media Center and use the materials with the 3M Copy Machine provided in the carrel and produce a 3M transparency. The student should continue to view the cassette during competency execution, if necessary, by stopping, starting and/or rewinding the cassette.

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will submit a 3M transparency to the instructor for competency evaluation. When all competency modules of the minicourse have been completed, the student will take a final written examination that covers the cognitive areas of the competency module.

Competency Module B: 3M Thermal Spirit Master Production Process

1. Objectives: The student will be able to
   a. identify and acquire the materials necessary for making a 3M
Thermal Spirit Master

b. arrange the materials in the correct position for making the thermal spirit master
c. set the exposure control of the 3M Copy Machine to the correct position for making the thermal spirit master
d. insert the arranged materials into the input slot of the 3M Copy Machine for immediate production of the thermal spirit master
e. remove the produced thermal spirit master and concomitant materials from the output slot of the 3M Copy Machine

2. Activities: to develop the objectives of the competency module, the student will

a. observe a teacher demonstration of the complete 3M Thermal Spirit Master production process
b. obtain video cassette # 12 from the Media Center
c. take the video cassette to Wet Study Carrel Station # 12 in the Self-Instructional Laboratory
d. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
e. after viewing the cassette in its entirety one or more times, the student will then acquire the necessary materials from the Expendable Materials Office of the Media Center and use the materials with the 3M Copy Machine provided in the carrel and produce a 3M Thermal Spirit Master. The student should continue to view the cassette during competency execution if necessary, by stopping, starting and/or rewinding the cassette.

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will submit a 3M Thermal Spirit Master to the instructor for competency evaluation. When all competency modules of the mini-course have been completed, the student will take a final written examination that covers the cognitive areas of the competency module.

Competency Module C: 3M Thermal Lamination Production Process

1. Objectives: The student will be able to

a. identify and acquire the materials necessary for laminating a picture with the 3M Lamination Process
b. arrange the materials in the correct position for laminating a picture
c. set the exposure control of the 3M Copy Machine to the correct position for laminating the picture
d. insert the arranged materials into the input slot of the 3M Copy Machine for immediate laminating of the picture
e. remove the laminated picture and concomitant materials from the output slot of the 3M Copy Machine

2. Activities: to develop the objectives of the competency module, the student will
a. observe a teacher demonstration of the complete 3M Thermal Lamination Production Process
b. obtain video cassette # 13 from the Media Center
c. take the video cassette to Wet Study Carrel Station # 13 in the Self-Instructional Laboratory
d. insert the video cassette into the playback unit and view the cassette in its entirety for further development of the total concept of the competency
e. after viewing the cassette in its entirety one or more times, the student will then acquire the necessary materials from the Expendable Materials Office of the Media Center and use the materials with the 3M Copy Machine provided in the carrel and produce a 3M laminated picture. The student should continue to view the cassette during competency execution if necessary, by stopping, starting and/or rewinding the cassette.

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will submit a 3M laminated picture to the instructor for competency evaluation. When all competency modules of the mini-course have been completed, the student will take a final written examination that covers the cognitive areas of the competency module.

**Competency Module D: Diazo Transparency Production Process**

1. Objectives: the student will be able to

a. identify and acquire the materials necessary for making a diazo transparency
b. arrange the materials in the correct position for the exposure process of diazo transparency production
c. place the arranged materials on the platen carrier of the Diazo Proto Printer which is the device used for the exposure process of producing a diazo transparency
d. insert the platen carrier, with arranged materials in place, into the Diazo Proto Printer
e. set the exposure control of the Diazo Proto Printer to the correct position to automatically begin exposure process
f. remove the diazo film and concomitant materials from the Diazo Proto Printer at termination of exposure
g. develop the diazo film in the ammonia fume development device

2. Activities: to develop the objectives of the competency module, the student will

a. observe a teacher demonstration of the complete Diazo Transparency Production Process
b. obtain video cassette # 14 from the Media Center
c. take the video cassette to Wet Study Carrel Station # 14 in the Self-Instructional Laboratory
d. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
e. After viewing the cassette in its entirety one or more times, the student will then acquire the necessary materials from the Expendable Materials Office of the Media Center and use the materials with the Diazo Proto Printer provided in the carrel for the exposure process with the diazo film. At the completion of this exposure process, the student will then develop the diazo film by inserting it into the ammonia development device. The student should continue to view the cassette during competency execution if necessary, by stopping, starting and/or rewinding the cassette.

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will submit a diazo transparency to the instructor for competency evaluation. When all competency modules of the mini-course have been completed, the student will take a final written examination that covers the cognitive areas of the competency module.

Competency Module E: Lift Transparency Production Process

1. Objectives: the student will be able to

a. identify and acquire the materials necessary for making a lift transparency
b. differentiate between magazine pictures that can be produced into lift transparencies and those that cannot be used for that purpose
c. place the pressure sensitive adhesive acetate onto the magazine picture and apply the required pressure
d. place the picture, with acetate in place, into the required solution in order to separate the paper from the acetate which then contains the picture image
e. remove the clay residue from the acetate after separation from the paper
f. dry the lift transparency in final preparation for projection of the picture

2. Activities: to develop the objectives of the competency module, the student will

a. observe a teacher demonstration of the complete Lift Transparency Production Process
b. obtain video cassette # 15 from the Media Center
c. take the video cassette to Wet Study Carrel Station # 15 in the Self-Instructional Laboratory
d. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
e. After viewing the cassette in its entirety one or more times, the student will then acquire the necessary materials from the Expendable Materials Office of the Media Center and use the materials in the carrel for producing the lift transparency. The student should continue to view the cassette during competency execution if necessary, by stopping, starting and/or rewinding the cassette.
3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will submit a lift transparency to the instructor for competency evaluation. When all competency modules of the mini-course have been completed, the student will take a final written examination that covers the cognitive areas of the competency module.

Competency Module F: Wet and Dry Picture Mounting Processes

1. Objectives: the student will be able to
   a. identify and acquire the materials necessary for making a wet mounted picture
   b. apply rubber cement to the appropriate areas of the picture and mounting board surface
   c. make placement of the picture on the mounting board surface after the rubber cement has dried
   d. remove excess rubber cement from the mounting board surface after the picture has been mounted
   e. identify and acquire the materials necessary for making a dry mounted picture
   f. arrange the picture and dry mounting tissue in the correct position for mounting the picture
   g. set the temperature control of the tacking iron to the correct position and use the tacking iron to adhere the dry mounting tissue to the picture
   h. place the picture with the dry mounting tissue onto the mounting board and use the tacking iron to adhere a section of the dry mounting tissue to the mounting board
   i. set the temperature control of the dry mounting press to the correct position for mounting the picture
   j. insert the materials into the dry mounting press and lower the lid of the press into position for mounting the picture
   k. raise the lid of the dry mounting press and remove the mounted picture

2. Activities: to develop the objectives of the competency module, the student will
   a. observe a teacher demonstration of the complete Wet and Dry Picture Mounting Processes
   b. obtain video cassette # 16 from the Media Center
   c. take the video cassette to Wet Study Carrel Station # 16 in the Self-Instructional Laboratory
   d. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
   e. after viewing the cassette in its entirety one or more times, the student will then acquire the necessary materials from the Expendable Materials Office of the Media Center and use the materials and equipment provided in the carrel for producing the wet and the dry mounted pictures. The student should continue to view the cassette during competency execution if necessary, by stopping, starting and/or rewinding the cassette.
3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will submit a wet mounted picture and a dry mounted picture to the instructor for competency evaluation. When all competency modules of the minicourse have been completed, the student will take a final written examination that covers the cognitive areas of the competency module.

Competency Module G: Display Materials Production

1. Objectives: the student will be able to
   a. identify and acquire the materials necessary for making a display board
   b. identify the types of display board balance (arrangement of materials).
   c. produce a display board using formal balance
   d. produce a display board using informal balance

2. Activities: to develop the objectives of the competency module, the student will
   a. observe a teacher demonstration of the complete Display Production Process
   b. obtain video cassette # 17 from the Media Center
   c. take the video cassette to Wet Study Carrel Station # 17 in the Self-Instructional Laboratory
   d. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
   e. after viewing the cassette in its entirety one or more times, the student will then acquire the necessary materials from the Expendable Materials Office of the Media Center and use the materials in the carrel for producing a formal balanced display and an informal balanced display. The student should continue to view the cassette during competency execution if necessary, by stopping, starting and/or rewinding the cassette.

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will submit a formal balanced display and an informal balanced display to the instructor for competency evaluation. When all competency modules of the minicourse have been completed, the student will take a final written examination that covers the cognitive areas of the competency module.

Competency Module H: Graphic Techniques

1. Objectives: the student will be able to
   a. identify, acquire and use a variety of lettering methods for use in the production of instructional materials
   b. identify, acquire and use a variety of coloring methods for use in the production of instructional materials
   c. frame basic transparencies and also attach overlay transparencies
2. Activities: to develop the objectives of the competency module, the student will

a. observe a teacher demonstration of graphic techniques
b. obtain video cassette #19 from the Media Center
c. take the video cassette to Wet Study Carrel Station #19 in the Self-Instructional Laboratory
d. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
e. after viewing the cassette in its entirety one or more times, the student will then acquire the necessary materials from the Expendable Materials Office of the Media Center and use the materials in the carrel for producing graphic work on previously produced instructional materials as well as with the production of other instructional materials. The student should continue to view the cassette during competency execution if necessary, by stopping, starting and/or rewinding the cassette.

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will submit, to the instructor for evaluation, instructional materials with which a variety of lettering and coloring methods have been used. The student will also submit a framed transparency with at least 4 overlay transparencies. When all competency modules of the minicourse have been completed, the student will take a final written examination that covers the cognitive areas of the competency module.

Competency Module I: Kodak Ektographic Slide Kit

1. Objectives: the student will be able to

a. set up the copy stand of the Kodak Ektographic Slide Kit
b. attach the camera to the copy stand
c. insert the film into the camera and advance the film for photographing the visual
d. position the copy stand over the visual for taking the picture
e. insert the flash cube into the camera
f. press the shutter release for photographing the visual
g. advance the film for photographing the next visual and continue the process until the film has been completely used
h. remove the film from the camera

2. Activities: to develop the objectives of the competency module, the student will

a. observe a teacher demonstration of the Ektographic Slide Kit
b. obtain video cassette #19 from the Media Center
c. take the video cassette to Wet Study Carrel Station #19 in the Self-Instructional Laboratory
3. Insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency.

4. After viewing the cassette in its entirety one or more times, the student will then acquire the necessary materials from the Dependable Materials Office of the Media Center and use the materials and equipment in the carrel for producing slides with the Kodak Ektagraphic Slide Kit. The student should continue to view the cassette during competency execution if necessary, by stopping, starting and/or rewinding the cassette.

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will submit slides produced by using the Kodak Ektagraphic Slide Kit to the instructor for evaluation. When all competency modules of the minicourse have been completed, the student will take a final written examination that covers the cognitive areas of the competency module.

**Competency Module J: Utilization of the Self-Produced Instructional Materials**

1. Objectives: the student will be able to
   
   a. utilize the 3M Transparencies, Diazo transparencies and color-lift transparencies on overhead projectors
   b. utilize the 3M Spirit Ditto Master in conjunction with a 3M Transparency
   c. utilize laminated pictures and wet and dry mounted pictures on display boards and with opaque projectors
   d. utilize slides with the slide projector

2. Activities: to develop the objectives of the competency module, the student will
   
   a. observe a teacher demonstration of instructional materials utilization techniques
   b. obtain video cassette # 20 from the Media Center
   c. take the video-cassette to Wet Study Carrel Station # 20 in the Self-Instructional Laboratory
   d. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will then make arrangements with the instructor to discuss and demonstrate the utilization techniques of the module. After completing all competency modules of the minicourse, the student will take a final written examination that covers the cognitive areas of the competency modules.

**Minicourse Competency Outline**

Course Title: **Utilization of Projection Equipment**
Competency Module A: Bell and Howell 16mm Motion Picture Projector

1. Objectives: The student will be able to
   a. attach the feed-reel to the projector
   b. thread the film through the projector and attach the film to the take-up reel
   c. operate the controls which include the
      1. power and lamp switch control
      2. volume and tone control
      3. focusing control
      4. framing control
      5. forward and reverse projection control
      6. projector elevation control
   d. restore the upper and lower loops of the threaded film when smoothness of the projected image is lost and/or sound-film synchronization is lost
   e. rewind the film after projection and remove the reels

2. Activities: To develop the objectives of the competency module, the student will
   a. observe a teacher demonstration of the complete operation of the projector
   b. practice the operation of the projector after observing the demonstration
   c. obtain video cassette #1 from the Media Center
   d. take the video cassette to Wet Study Carrel Station #1 in the Self-Instructional Laboratory
   e. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
   f. after viewing the cassette in its entirety one or more times, the student will then use the practice film and projector provided in the carrel and again execute the competency objectives as presented by the cassette. The student should continue to view the cassette during competency execution, if necessary, by stopping, starting and/or rewinding the cassette

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will then make arrangements with the instructor for a proficiency performance test on the competency module. The test will involve the student in demonstrating the competency by projecting a film with the Bell and Howell 16mm motion picture projector and using the controls as necessary and upon request by the instructor. After completing all competency modules of the minicourse,
the student will take a final written examination that covers the cognitive areas of the competency modules.

**Competency Module B: Singer Graflex 16mm Motion Picture Projector**

1. Objectives: The student will be able to
   
   a. attach the feed-reel to the projector
   b. thread the film through the projector and attach the film to the take-up reel
   c. operate the controls which include the
      1. power and lamp switch control
      2. volume and tone control
      3. focusing control
      4. framing control
      5. forward and reverse control
      6. projector elevation control
   d. restore the upper and lower loops of the threaded film when smoothness of the projected image is lost and/or sound-film synchronization is lost
   e. rewind the film after projection and remove the reels

2. Activities: To develop the objectives of the competency module, the student will
   
   a. observe a teacher demonstration of the complete operation of the projector
   b. practice the operation of the projector after observing the demonstration
   c. obtain video cassette # 2 from the MeClia Center
   d. take the video cassette to Wet Study Carrel Station # 2 in the Self-Instructional Laboratory
   e. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
   f. after viewing the cassette in its entirety one or more times, the student will then use the practice film and projector provided in the carrel and again execute the competency objectives as presented by the cassette. The student should continue to view the cassette during competency execution, if necessary, by stopping, starting and/or rewinding the cassette

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will then make arrangements with the instructor for a proficiency performance test on the competency module. The test will involve the student in demonstrating the competency by projecting a film with the Singer Graflex 16mm motion picture projector and using the controls as necessary and upon request by the instructor. After completing all competency modules of the minicourse, the student will take a final written examination that covers the cognitive areas of the competency modules.
Competency Module C: International Self-Threading 16mm Motion Picture Projector

1. Objectives: The student will be able to
   a. attach the feed-reel and take-up reel to the projector
   b. insert the film into the automatic threading slot of the projector
   c. operate the controls which include the
      1. automatic threading power switch control that advances the film through the projector and attaches the film to the take-up reel
      2. projector power and lamp switch control
      3. volume and tone control
      4. focusing control
      5. framing control
      6. forward and reverse projection control
      7. automatic loop restoration control
      8. projector elevation control
   d. rewind the film after projection and remove the reel's

2. Activities: To develop the objectives of the competency module, the student will
   a. observe a teacher demonstration of the complete operation of the projector
   b. practice the operation of the projector after observing the demonstration
   c. obtain video cassette # 3 from the Media Center
   d. take the video cassette to Wet Study Carrel Station # 3 in the Self-Instructional Laboratory
   e. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
   f. after viewing the cassette in its entirety one or more times, the student will then use the practice film and projector provided in the carrel and again execute the competency objectives as presented by the cassette. The student should continue to view the cassette during competency execution, if necessary, by stopping, starting and/or rewinding the cassette

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will then make arrangements with the instructor for a proficiency performance test on the competency module. The test will involve the student in demonstrating the competency by projecting a film with the International Self-Threading 16mm motion picture projector and using the controls as necessary and upon request by the instructor. After completing all competency modules of the minicourse, the student will take a final written examination that covers the cognitive areas of the competency modules.

Competency Module D: Kodak Carousel 2" x 2" Slide Projector

1. Objectives: The student will be able to
a. place slides into the carousel slide tray
b. place the carousel slide tray on the projector and engage for projection
c. operate the controls which include the
   1. power and lamp switch control
   2. focusing control
   3. slide advance and reverse projection control
   4. zoom lens control
   5. remote control device for focusing, advancing and reversing the slide projection
   6. slide-select control
   7. projector elevation device

2. Activities: To develop the objectives of the competency module, the student will
   a. observe a teacher demonstration of the complete operation of the projector
   b. practice the operation of the projector after observing the demonstration
   c. obtain video cassette # 4 from the Media Center
   d. take the video cassette to Wet Study Carrel Station # 4 in the Self-Instruction Laboratory
   e. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
   f. after viewing the cassette in its entirety one or more times, the student will then use the practice slides and projector provided in the carrel and execute the competency objectives as presented by the cassette. The student should continue to view the cassette during competency execution, if necessary, by stopping, starting and/or rewinding the cassette

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will then make arrangements with the instructor for a proficiency performance test on the competency module. The test will involve the student in demonstrating the competency by projecting slides with the Kodak Carousel 2" x 2" slide projector and using the controls as necessary and upon request by the instructor. After completing all competency modules of the minicourse, the student will take a final written examination that covers the cognitive areas of the competency modules.

Competency Module E: Viewlex 35mm Filmstrip Projector

1. Objectives: The student will be able to
   a. thread the filmstrip through the projector
   b. operate the controls which include the
      1. power and lamp switch control
      2. advance and reverse filmstrip control
      3. focusing control
      4. framing control
      5. projector elevation control
2. Activities: To develop the objectives of the competency module, the student will

a. observe a teacher demonstration of the complete operation of the projector
b. practice the operation of the projector after observing the demonstration
c. obtain video cassette # 5 from the Media Center
d. take the video cassette to Wet Study Carrel Station # 5 in the Self-Instructional Laboratory
e. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
f. after viewing the cassette in its entirety one or more times, the student will then use the practice filmstrip and projector provided in the carrel and execute the competency objectives as presented by the cassette. The student should continue to view the cassette during competency execution, if necessary, by stopping, starting and/or rewinding the cassette.

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will then make arrangements with the instructor for a proficiency performance test on the competency module. The test will involve the student in demonstrating the competency by projecting a filmstrip with the Viewlex 35mm filmstrip projector and using the controls as necessary and upon request by the instructor. After completing all competency modules of the minicourse, the student will take a final written examination that covers the cognitive areas of the competency modules.

Competency Module F: Singer Graflex 35mm Filmstrip Projector

1. Objectives: The student will be able to

a. thread the filmstrip through the projector
b. operate the controls which include the
   1. power and lamp switch control
   2. advance and reverse filmstrip control
   3. focusing control
   4. framing control
   5. projector elevation control

2. Activities: To develop the objectives of the competency module, the student will

a. observe a teacher demonstration of the complete operation of the projector
b. practice the operation of the projector after observing the demonstration
c. obtain video cassette # 6 from the Media Center
d. take the video cassette to Wet Study Carrel Station # 6 in the Self-Instructional Laboratory
e. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
f. after viewing the cassette in its entirety one or more times, the student will then use the practice filmstrip and projector provided in the carrel and execute the competency objectives as presented by the cassette. The student should continue to view the cassette during competency execution, if necessary by stopping, starting and/or rewinding the cassette.

3. Evaluation: After completing the objectives of the competency module to his or her satisfaction, the student will then make arrangements with the instructor for a proficiency performance test on the competency module. The test will involve the student in demonstrating the competency by projecting a filmstrip with the Singer Graflex 35mm filmstrip projector and using the controls as necessary and upon the request by the instructor. After completing all competency modules of the minicourse, the student will take a final written examination that covers the cognitive areas of the competency modules.

Competency Module G: Bessler Opaque Projector

1. Objectives: The student will be able to
   
   a. insert opaque materials such as mounted pictures, pages of magazines and books and three-dimensional objects into the projector
   b. operate the controls which include the
      1. power and lamp switch control
      2. focusing control
      3. pointer light control
      4. projector elevation control

2. Activities: To develop the objectives of the competency module, the student will
   
   a. observe a teacher demonstration of the complete operation of the projector
   b. practice the operation of the projector after observing the demonstration
   c. obtain video cassette # 7 from the Media Center
   d. take the video cassette to Wet Study Carrel Station # 7 in the Self-Instructional Laboratory
   e. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
   f. after viewing the cassette in its entirety one or more times, the student will then use the mounted picture, magazine, book, three-dimensional object and the projector provided in the carrel and execute the competency objectives as presented by the cassette. The student should continue to view the cassette during competency execution, if necessary, by stopping, starting and/or rewinding the cassette.

3. Evaluation: After completing the objectives of the competency module to his or her satisfaction, the student will then make
arrangements with the instructor for a proficiency performance test on the competency module. The test will involve the student in demonstrating the competency by projecting various opaque materials with the Bessler opaque projector and using the controls as necessary and upon request by the instructor. After completing all competency modules of the minicourse, the student will take a final written examination that covers the cognitive areas of the competency modules.

**Competency Module III: Bessler, Century and Portascribe Overhead Projectors**

1. **Objectives:** With each overhead projector, the student will be able to
   
   a. place a transparency onto the projector in the correct position for projection
   b. operate the controls which include the
      1. power and lamp switch control
      2. focusing control
      3. image projection-elevation control

2. **Activities:** To develop the objectives of the competency module, the student will
   
   a. observe a teacher demonstration of the complete operation of the projector
   b. practice the operation of the projector after observing the demonstration
   c. obtain video cassette 1-8 from the Media Center
   d. take the video cassette to the Study Carrel Station 1-2 in the Self-instructional Laboratory
   e. insert the video cassette into the playback unit and view the cassette in its entirety for further development of understanding of the total concept of the competency
   f. after viewing the cassette in its entirety one or more times, the student will then use the transparency and projectors provided in the carrel and execute the competency objectives as presented by the cassette. The student should continue to view the cassette during competency execution, if necessary, by stopping, starting and/or rewinding the cassette

3. **Evaluation:** After completing the objectives of the competency module to his or her satisfaction, the student will then make arrangements with the instructor for a proficiency performance test on the competency module. The test will involve the student in demonstrating the competency by projecting a transparency with each of the three overhead projectors and using the controls as necessary and upon request by the instructor. After completing all competency modules of the minicourse, the student will take a final written examination that covers the cognitive areas of the competency modules.

**Minicourse Competency Outline**

**Course Title:** Utilization of Recording Equipment
Competency Module A: Newcombe, Wollensak, Revere and Sony Reel to Reel Tape Recorders

1. Objectives: With each reel to reel tape recorder, the student will be able to

   a. place the feed-reel and take-up reel onto the recorder
   b. thread the recording tape through the recorder
   c. insert the microphone for recording
   d. operate the controls which include the
      1. power control
      2. volume and tone control
      3. recording level control
      4. fast forward control
      5. rewind control
      6. playback control
      7. record control
      8. counter control

2. Activities: To develop the objectives of the competency module, the student will

   a. observe a teacher demonstration of the complete operation of the tape recorders
   b. practice the operation of the tape recorders after observing the demonstration
   c. obtain video cassette #10 from the Media Center
   d. take the video cassette to Wet Study Carrel Station #10 in the Self-Instructional Laboratory
   e. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
   f. after viewing the cassette in its entirety one or more times, the student should then use the feed-reel of tape and take-up reel with the recorders provided in the carrel and execute the competency objectives as presented by the cassette. The student should continue to view the cassette during competency execution, if necessary, by stopping, starting and/or rewinding the cassette.

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will then make arrangements with the instructor for a proficiency performance test on the competency module. The test will involve the student in demonstrating the competency by using the recording tape with each of the 4 tape recorders and employing the controls as necessary and upon request by the instructor. After completing all competency modules of the minicourse, the student will
Competency Module B: Avid, Sony and Panasonic Cassette Tape Recorders

1. Objectives: With each cassette tape recorder, the student will be able to

   a. place the cassette tape into the tape recorder
   b. insert the microphone for recording
   c. operate the controls which include the
      1. power control
      2. volume and tone control
      3. recording level control
      4. fast forward control
      5. rewind control
      6. playback control
      7. record control
      8. counter control

2. Activities: To develop the objectives of the competency module, the student will

   a. observe a teacher demonstration of the complete operation of the tape recorders
   b. practice the operation of the tape recorders after observing the demonstration
   c. obtain video cassette #9 from the Media Center
   d. take the video cassette to Wet Study Carrel Station #9 in the Self-Instructional Laboratory
   e. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
   f. after viewing the cassette in its entirety one or more times, the student should then use the cassette tape with the recorders provided in the carrel and execute the competency objectives as presented by the cassette. The student should continue to view the cassette during competency execution, if necessary, by stopping, starting, and/or rewinding the cassette.

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will then make arrangements with the instructor for a proficiency performance test on the competency module. The test will involve the student in demonstrating the competency by using a cassette tape with each of the 3 cassette tape recorders and employing the controls as necessary and upon request by the instructor. After completing all competency modules of the minicourse, the student will take a final written examination that covers the cognitive areas of the competency modules.

Competency Module C: Recording Techniques

1. Objectives: With all types of tape recorders, the student will be able to
a. use a variety of microphones
b. use electronic patch recording devices such as phone jack to
phone jack patch cords and phone jack to alligator clip patch
cords for recording from one sound unit to another
c. prepare narrative tape recordings with musical backgrounds for use
with slides and motion picture film presentations

2. Activities: To develop the objectives of the competency module, the student will

a. observe a teacher demonstration of the complete operation of the
tape recording techniques
b. practice the operation of the tape recording techniques after
observing the demonstration
c. obtain video cassette # 9a from the Media Center
d. take the video cassette to Wet Study Carrel Station # 9a in the
Self-Instructional Laboratory
e. insert the video cassette into the playback unit and view the
cassette in its entirety for further development of an under-
standing of the total concept of the competency
f. after viewing the cassette in its entirety one or more times
the student should then use the recording materials and the
recorders provided in the carrel and execute the competency
objectives as presented by the cassette. The student should
continue to view the cassette during competency execution, if
necessary, by stopping, starting and/or rewinding the cassette.

3. Evaluation: After meeting the objectives of the competency module
to his or her satisfaction, the student will then make
arrangements with the instructor for a proficiency per-
formance test on the competency module. The test will
involve the student in demonstrating the competency by
using microphones, patch cord devices and electronic
mixing boxes for preparing a tape recording. After
completing all competency modules of the minicourse, the
student will take a final written examination that covers
the cognitive areas of the competency modules.

Competency Module D: Editing and Splicing Recording Tape

1. Objectives: With all types of recording tape, the student will be
able to

a. splice tape for repairs and editing
b. use electronic erasing devices
c. prepare a final recorded product through the process of editing

2. Activities: To develop the objectives of the competency module, the student will

a. observe a teacher demonstration of the editing and splicing
techniques
b. practice the techniques after observing the demonstration
c. obtain video cassette # 9b from the Media Center
d. take the video cassette to Wet Study Carrel Station # 9c in the Self-Instructional Laboratory

e. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency

f. after viewing the cassette in its entirety one or more times, the student should then use the materials and the recorders provided in the carrel and execute the competency objectives as presented by the cassette. The student should continue to view the cassette during competency execution, if necessary, by stopping, starting and/or rewinding the cassette.

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will then make arrangements with the instructor for a proficiency performance test on the competency module. The test will involve the student in splicing, erasing and editing tape recordings. After completing all competency modules of the minicourse, the student will take a final written examination that covers the cognitive areas of the competency modules.

### Competency Module E: Maintaining and Troubleshooting Recording Equipment and Tape

1. Objectives: The student will be able to

   a. clean and repair all types of tape and cassettes
   b. clean and perform simple repairs on recording equipment such as the recording and playback heads.

2. Activities: To develop the objectives of the competency module, the student will

   a. observe a teacher demonstration of the maintenance and troubleshooting techniques
   b. practice the techniques after observing the demonstration
   c. obtain video cassette # 9c from the Media Center
   d. take the video cassette to Wet Study Carrel Station # 9c in the Self-Instructional Laboratory
   e. insert the video cassette into the playback unit and view the cassette in its entirety for further development of an understanding of the total concept of the competency
   f. after viewing the cassette in its entirety one or more times, the student should then use the materials and the recorders provided in the carrel and execute the competency objectives as presented by the cassette. The student should continue to view the cassette during competency execution, if necessary, by stopping, starting and/or rewinding the cassette.

3. Evaluation: After meeting the objectives of the competency module to his or her satisfaction, the student will then make arrangements with the instructor for a proficiency performance test on the competency module. The test will
involve the student in cleaning tape, removing broken tape in cassettes, correcting basic power and recording contact problems and cleaning recording and playback heads. After completing all competency modules of the minicourse, the student will take a final written examination that covers the cognitive areas of the competency modules.

When the minicourse competency outline is presented and introduced to the students during the first class meeting of a minicourse, a detailed explanation of and an orientation to the Self-Instructional Laboratory will also be made. This will provide the students with immediate instruction on the use of the video cassette playback units in the Self-Instructional Laboratory.

Upon completion of this orientation, instruction will begin with competency module A of the minicourse and continue through completion of the course. When the minicourse is completed, the students will be required to evaluate the course by using the standard departmental course evaluation form. The results of the evaluations will be used to make any necessary revisions in the course content, teaching methods, activities and evaluation techniques.

RECOMMENDATIONS

The results of this study permitted the following recommendations to be made:

A. The minicourses should be scheduled at various times throughout a semester in order for the student to complete, in any order, one, two or all three of the minicourses within a single semester if desired.

B. In addition to being offered during the regular semesters, the minicourses should also be scheduled during interim periods and during Summer sessions.

C. The minicourses should be scheduled to meet on 3 consecutive Friday
evenings and 2 consecutive Saturday mornings. The Friday meetings should be from 7 to 10 p.m. and the Saturday meetings should be from 9 a.m. to 12 noon.

D. Enrollment in any one of the minicourses should be limited to 20 students. This is necessary due to the teaching methods required for presenting "hands-on" experiences with the equipment and processes of the courses.

E. Consideration should also be given to offering the minicourses off-campus for groups that make such a request. This would require adjustments in the teaching methods, but it would add another advantage to the minicourse concept since groups of teachers within a school or school district could enroll in the course and receive instruction at their own school. This would also permit the minicourses to be presented as inservice workshops by the school or school district for which the teachers would receive academic credit.

By implementing these minicourses, the Media Communication Science Department of Trenton State College can:

A. Break the lockstep of time and course content that presently exists in the introductory course in educational media and thereby provide variety and choice to the inservice teacher.

B. Present courses of short duration that meet the needs of inservice teachers within a period of a few weeks.

C. Provide the inservice teacher with an opportunity for in-depth work and study in a single area of concentration that is devoid of content that is superfluous to his or her needs.

D. Provide the inservice teacher that takes more than one minicourse the opportunity to study various areas of educational media with different teachers.
E. Provide the inservice teacher with the opportunity to continue his or her education and professional enrichment without making major educational commitments that conflict with family and professional responsibilities.

F. Utilize the college facilities and resources during a time when academic activities are at a minimum and the availability of facilities and resources is plentiful.

G. Examine the value of the minicourse concept within its curriculum offerings and perhaps develop minicourses in other areas of educational media as a result of the examination.

H. Serve in an advisory capacity to other departments that may be interested in developing minicourses for use in the "week-end college" system.
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