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A STUDY OF THE INSTRUCTIONAL MATERIAL SECTION
OF EDUCATION 333 AT EASTERN ILLINOIS UNIVERSITY
(TITLE)

BY

David D. Dowling

PLAN B PAPER

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE MASTER OF SCIENCE IN EDUCATION
AND PREPARED IN COURSE

Special Problems in Audio-Visual Education

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY,
CHARLESTON, ILLINOIS

1966
YEAR

I HEREBY RECOMMEND THIS PLAN B PAPER BE ACCEPTED AS
FULFILLING THIS PART OF THE DEGREE, M.S. IN ED.

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8/2/66
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CHAPTER I

INTRODUCTION

Statement of the Problem

Instructional materials was introduced in Education 333 entitled "The Instructional Task in the Secondary School" at Eastern Illinois University subsequent to the state teacher certification board specification that instructional materials should be included in preparation for teacher certification. The state certification board did not specify what material should be covered in the course or the method to be used in the instruction. It did specify that instructional materials should be part of the competence of every certified teacher.¹

A study has not been made to determine what was taught in the instructional materials covered in Education 333. The students' general knowledge and competency in the use of instructional materials as gained through this instruction has not been determined. Neither has the general attitude of the students toward the use of instructional materials as a part of their teacher preparation been considered.

¹Robert J. Brissenden, Report of the Committee on Rules and Regulations on Standard High School Certificate, p. 1.

Purpose

The purpose of this study was to determine the value and comprehensiveness of the instructional materials education as covered in Education 333. The study should provide information that would be of value in correcting any weaknesses that might be revealed.

Scope of the Study

This study was concerned only with what materials were covered in the instructional materials section of Education 333, what were the students' opinions of the instructional materials section, and what degrees of competency were developed in the use of instructional materials.

Method

Two questionnaires were used in this study. Questionnaire #1 was administered at the beginning of the quarter to all students enrolled in five sections of Education 333. This questionnaire was distributed by the instructors to their students. It was completed during the class period and returned to the instructor. The purpose of this questionnaire was to determine the students' knowledge of instructional materials and their attitude toward them.

Questionnaire #2 was administered at the end of the quarter after completion of the instructional materials section of Education 333. It was administered by the

instructors to their classes in the same manner as questionnaire #1. The purpose of questionnaire #2 was to determine what progress the students had made in their use of instructional materials and to note any changes in their attitude toward them. Suggestions were made by the students for improvement in the instructional materials section on this questionnaire.

A list of all materials covered in Education 333 was compiled through a discussion with the instructors and through observations of the classes. These materials were used in the questionnaires. Data from both questionnaires were compiled and analyzed, and recommendations were made for improvement of instructional materials education as offered in Education 333.

CHAPTER II

INSTRUCTIONAL MATERIALS EDUCATION AS OFFERED IN EDUCATION 333

Education 333 entitled "The Instructional Task in the Secondary School" is a basic methods course required of all students pursuing secondary education at Eastern Illinois University. The description of this course in the school bulletin is, "Secondary school teaching as a profession; the secondary curriculum; guidance in the secondary school; selection and use of instructional materials; the development of a secondary reading program."²

This study was concerned only with the instructional materials section of Education 333. It consisted of eight classroom hours of lecture and demonstration of both equipment and materials. The students in all five sections had four basic requirements which were as follows: (1) Attendance at all class meetings; (2) Ability to display a satisfactory fundamental knowledge of equipment operation; (3) Outside reading assignments in instructional materials; and (4) A satisfactory test grade on instructional materials.

Materials and Equipment: The materials and equipment covered during the eight class periods on instructional

²Eastern Illinois University Bulletin, Number 256, July, 1965, p. 190.

materials were as follows:

- 16 mm motion picture projector
- overhead projector
- opaque projector
- tape recorder
- record player
- automatic slide projector
- filmstrip and slide projector
- 8 mm single concept motion picture projector
- thermo copying machine
- spirit duplicating machine
- dry mounting materials
- wet mounting materials
- color lifting
- lettering devices
- bulletin boards
- flannel boards
- magnetic chalk boards

The overhead projector was presented in one demonstration and lecture period. Emphasis was placed on methods for using the overhead projector as a tool for better communication. The materials that are available in specific subject areas were used to show students how this method could be used in the teaching situation.

Methods in production of materials for the overhead projector were explained in another class period. Transparencies were prepared for the students with a thermo copying machine. The photocopying machine and the spirit duplicator were also demonstrated. The functions of these machines were discussed.

The preparation of dry mounting materials, color lifting, and wet mounting materials was presented in one session.

The students took an active part in the preparation of dry mounting materials during this session.

The 16 mm motion picture film was presented in a lecture and demonstration period. Techniques of 16 mm photography including montage, microphotography, time-lapse photography, and slow-motion photography were shown. Some of the advantages and disadvantages of 16 mm films were discussed. The importance of previewing films before showing in the classroom was stressed. Sources for educational films including how to order free and rental films and the use of film catalogs were discussed during this session.

Tape recordings and records were demonstrated to the classes. The flexibility of these instructional teaching materials and how they serve in the classroom were discussed. Some applications to specific subject areas were made during the lesson. A demonstration of monaural and stereo recordings was also presented.

Techniques in the use of slide and filmstrip projectors were presented in one class period. The slide and filmstrip projector and the automatic slide projector were demonstrated. There was a discussion on the advantages and disadvantages of teacher made slides and commercially produced slides. The technique of using a sound filmstrip with a particular lesson.

Bulletin boards were discussed in another class period. Physical characteristics of bulletin boards such as types, size, color, and materials used were presented. The advantages of a bulletin board and its potential as a source of information in the classroom was pointed out. The students were shown magnetic chalkboards and how to construct flannel boards during this presentation.

Film previewing and selection of materials for classroom use occupied one session. It was pointed out that all material selected should correspond with the lesson. The students previewed a 16 mm film during this session and were shown how to use the information they gained from it. Teacher-made film preview forms and Educational Film Library Association forms were used.

The final class period of the eight day instructional materials section was spent at the Eastern Illinois University Laboratory School where the students viewed the instructional materials center. The services offered and the purposes of the center were explained to the students. A language laboratory was demonstrated during their visit.

Summary

The eight-day period in instructional materials in Education 333 introduced the students to the numerous and varied media available to them as teachers. The session was not taught in an effort to make them specialists in

instructional materials. The students were offered basic comprehensive instruction in the materials and equipment they will use in their teaching.

The scope, length, and extensiveness of this instruction was not specified by the Illinois State Certification Board. The board stated only that instructional materials should be included for teacher certification. Education 333 offered at Eastern Illinois University met the Certification Board's requirements. The purpose of this study was to determine the knowledge and competency gained by the students in the use of instructional materials.

CHAPTER III

RESULTS OF THE SURVEY

At the beginning of the 1966 Spring Quarter at Eastern Illinois University, 136 students were enrolled in five sections of Education 333. Because of absences and students dropping the course, all of the 136 students were not used in this study. The first questionnaire was administered at the beginning of the quarter. It was completed and returned by 122 students. A sample of questionnaire #1 will be found in Appendix A. Questionnaire #2 was completed and returned by 116 students. A sample of this questionnaire will be found in Appendix B.

The questionnaire used in this survey had a two-fold purpose. The first purpose was to discover the students' attitudes toward instructional materials education as a part of their preparation for teaching. The second purpose was to determine the knowledge and competency gained by these students after a two-week period of instruction. Using a self-appraisal or self-rating method, each student rated his own competency in use and knowledge of the instructional materials section in Education 333.

The questionnaires were administered to five sections of Education 333. Questionnaire #1 was administered and returned by the students at the beginning of the two-week period of instruction in instructional materials. Questionnaire #2 was administered to all sections of Education 333 after the instructional materials section was completed.

Attitude of the Students Before Instruction

The general attitude of the students before and after the instructional materials section was sought in order to note any change in attitude brought about by this instruction. In question 1 of the first questionnaire the students were asked if they believed that instructional materials would be of value in their teacher education (see Table 1). One hundred fifteen students or 94.3 per cent replied yes, five or 4.1 per cent indicated no, and two or 1.6 per cent had no opinion. Question 5 of the same questionnaire asked the students whether or not they planned to use instructional materials in their future teaching on the basis of past experiences with these materials. The results indicated that ninety-nine students of 81.1 per cent believed they would use instructional materials in their future teaching, four or 3.3 per cent indicated they would not, and nineteen or 15.6 per cent did not know if they would use instructional materials. In question 8 the students were asked whether or not they believed this instruction would be of value in their

TABLE 1

ATTITUDES OF THE STUDENTS BEFORE INSTRUCTION

Question	Per Cent		
	Yes	No	No Opinion
Do you feel this section of instruction in instructional materials will be of value in your teacher education?	94.3%	4.1%	1.6%
On the basis of your own past experience, do you plan to use instructional materials in your teaching?	81.1%	3.3%	15.6%
Do you feel that instruction in instructional materials will be of value in your teaching position?	91%	9%	0
Do you think instruction in instructional materials should be included in Education 333?	89.3%	1.6%	9.1%

future teaching. One hundred eleven or 91 per cent indicated yes, while eleven or 9 per cent indicated no. In question 11 the students were asked if they believed that instruction in instructional materials should be included in Education 333. One hundred nine or 89.3 per cent indicated that it should be included, two or 1.6 per cent indicated it should not be included, and eleven or 9.1 per cent had no opinion. Question 6 asked the students about their own past experiences with instruction that included the use of instructional materials (see Table 2). Sixteen students or 13.1 per cent believed this type of instruction was "very valuable", eighty-two or 67.3 per cent indicated it was "valuable", twelve or 9.8 per cent indicated this instruction was "not valuable", and another twelve believed they possessed "insufficient basis for judgment".

TABLE 2
EVALUATION OF EXPERIENCES WITH
INSTRUCTIONAL MATERIALS

From your past experiences were the instructional materials used in your classes-

Very Valuable	Valuable	Not Valuable	Insufficient Basis For Judgment
13.1%	67.3%	9.8%	9.8%

From the results of the questions in questionnaire #1 concerning the students' general attitude towards instructional materials based on their own past experience, it seemed apparent that a favorable attitude was held. A high percentage, 94.3 per cent, of the students indicated the instruction in instructional materials would be of value to them as teachers. Only 3.3 per cent indicated they did not plan to use instructional materials in their teaching. Using past experience as a basis, 80.4 per cent of the students indicated that use of instructional materials was valuable. Less than 10 per cent of all students indicated that the use of instructional materials was not valuable to them as students. Since a large percentage of the students indicated that instructional materials would be of value to them in teaching, the results presented a large majority in favor of including instructional materials in Education 333. The general attitude of the students in this study, prior to any instruction in instructional materials, was favorable.

Attitude of the Students After Instruction

Questionnaire #2, administered after completion of the instructional materials section of Education 333, also questioned the students' attitudes toward instruction in instructional materials (see Tables 3 and 4). An attempt was made to determine whether or not there was a change in their attitude towards instructional materials.

TABLE 3

ATTITUDES OF THE STUDENTS AFTER INSTRUCTION

Question	Per Cent	
	Yes	No
Do you feel that instruction in instructional materials is valuable in preparation for teaching?	97.4%	2.6%
Do you feel that instructional materials will be of value in your teaching?	99.2%	.8%
Should a required course in instructional materials be included in the teacher education curriculum?	54.4%	45.6%

TABLE 4

LENGTH OF INSTRUCTION

Do you feel that a two-week period is sufficient time for instruction in instructional materials?		
Sufficient	Longer Period	Shorter Period
41.4%	56%	2.6%

The results of the second questionnaire indicated an increase in the number of students who believed that instruction in instructional materials was valuable in the preparation of teachers. One hundred thirteen students or 97.4 per cent believed this instruction was beneficial in the preparation of teachers. In questionnaire #2 one hundred fifteen or 99.2 per cent indicated that instructional materials would be of value in their future teaching, while only .8 per cent indicated it would not. This was a noticeable increase over the 91 per cent in questionnaire #1 who indicated that this instruction would be beneficial in their teaching.

Questionnaire #2 asked the students if they thought the two-week period, as presently offered in Education 333, was sufficient time for instruction in instructional materials. Forty-eight or 41.4 per cent answered yes, sixty-five or 56 per cent indicated that a longer period was necessary, and three or 2.6 per cent said that a shorter period of instruction would be sufficient. From these results as well as from individual comments submitted by the students, it seemed that they benefited from this instruction. A majority of the students also requested a longer period of instruction in instructional materials.

The second questionnaire also asked if a required course in instructional materials should be included in the teacher

education curriculum. Sixty-three of the students or 54.4 per cent said such a course should be required while fifty-three or 45.6 per cent indicated such a course should not be a requirement in teacher education.

The sections of Education 333 used in this study all displayed a very favorable attitude toward the instruction at the beginning and also at the completion of the instructional period. The students' general impression of the two-week period of instructional materials was one of satisfaction.

Knowledge and Competency of Materials Before Instruction

The second purpose of the questionnaire used in this study was to determine what knowledge and competency the students possessed in instructional materials before instruction and to determine what knowledge and competency, if any, was gained from the two-week period of instruction.

It was discovered in questionnaire #1 (see Table 5) that twenty-one students or 17.2 per cent had received some previous instruction in the use of instructional materials, and 101 or 82.8 per cent had received no instruction in the use of instructional materials previous to this course. It was evident that these classes contained a very large segment of students who possessed little or no knowledge of instructional materials.

TABLE 5

KNOWLEDGE AND COMPETENCY OF MATERIALS BEFORE INSTRUCTION

	Per Cent	
	Yes	No
Students with previous instruction in the use of instructional materials.	17.2%	82.8%
Students' use of instructional materials prior to Education 333:		
a. Dry Mounting Materials	10.7%	89.3%
b. Lettering Devices	48.4%	51.6%
c. Maps and Globes	78.7%	21.3%
d. Bulletin Boards	89.3%	10.7%
3. Flannel Boards	41%	59%

The results indicated that thirteen students or 10.7 per cent had used dry mounting materials, and 109 or 89.3 per cent had not used them. When asked about experience in using lettering devices, fifty-nine or 48.4 per cent indicated they had used various lettering devices, and sixty-three or 51.6 per cent indicated they had no experience with them. In regard to maps and globes, ninety-six or 78.7 per cent had used them, and twenty-six or 21.3 per cent had no experience with them. One hundred nine or 89.3 per cent had used bulletin boards, and thirteen or 10.7 per cent indicated they had not. When asked about flannel boards, fifty or 41 per cent said they had used them, and seventy-two or 59 per cent indicated they had not.

The students in all sections of Education 333 were asked to rate their ability to operate various pieces of equipment (see Table 6). The areas of proficiency in which they could rate themselves in operating equipment were as follows: excellent, average, weak, or no ability.

The results indicated that in the operation of a 16 mm projector, four students or 3.3 per cent rated themselves as excellent, twenty or 16.4 per cent indicated they were average, thirteen or 10.7 per cent indicated they were weak, and eighty-five or 69.6 per cent indicated they had no ability at all to operate a 16 mm projector.

TABLE 6

KNOWLEDGE AND COMPETENCY OF EQUIPMENT OPERATION BEFORE INSTRUCTION

Equipment	Per Cent			
	Excellent	Average	Weak	None
16 mm Motion Picture Projector	3.3%	16.4%	10.7%	69.6%
Overhead Projector	3.3%	35.2%	8.2%	53.3%
Opaque Projector	4.1%	21.3%	13.1%	61.5%
Tape Recorder	14.8%	44.2%	27%	14%
Record Player	37.7%	55.7%	2.5%	4.1%
Automatic Slide Projector	8.2%	21.3%	18.1%	52.4%
Filmstrip and Slide Projector	7.3%	35.3%	19.7%	37.7%
8 mm Single Concept Motion Picture Projector	4.1%	6.6%	9.8%	79.5%
Thermo Copying Machine	5%	14.8%	13.1%	67.1%
Spirit Duplicating Machine	9.8%	19.7%	24.6%	45.9%

In the operation of an overhead projector, four students or 3.3 per cent rated themselves as excellent, forty-three or 35.2 per cent indicated they were average, ten or 8.2 per cent rated themselves as weak, and sixty-five or 53.3 per cent indicated they had no previous experience with the overhead projector.

Five students or 4.1 per cent rated their ability to operate the opaque projector as excellent, twenty-six or 21.3 per cent rated themselves as average, sixteen or 13.1 per cent were weak, and seventy-five or 61.5 per cent indicated they had no knowledge about the use of an opaque projector.

In the operation of a tape recorder, eighteen students or 14.8 per cent rated their ability as excellent, fifty-four or 44.2 per cent indicated they were average, thirty-three or 27 per cent rated themselves as weak, and seventeen or 14 per cent indicated they had no experience with the operation of a tape recorder.

Forty-six students or 37.7 per cent rated their ability to operate a record player as excellent, sixty-eight or 55.7 per cent indicated they were average, three or 2.5 per cent were weak, and five or 4.1 per cent indicated they had no ability to operate a record player.

In the operation of an automatic slide projector, ten or 8.2 per cent rated themselves as excellent, twenty-six or 21.3 per cent indicated they were average, twenty-two or 18.1 per cent were weak, and sixty-four or 52.4 per cent indicated

they had no ability to operate an automatic slide projector.

In the operation of a filmstrip and slide projector, nine students or 7.3 per cent were excellent, forty-three or 35.3 per cent rated themselves as average, twenty-four or 19.7 per cent indicated they were weak, and forty-six or 37.7 per cent indicated they had no previous experience with a filmstrip or manual slide projector.

Five students or 4.1 per cent rated their ability to operate the 8 mm single concept motion picture projector as excellent, eight or 6.6 per cent were average, twelve or 9.8 per cent rated themselves as weak, and ninety-seven or 79.5 per cent indicated they had no experience with the 8 mm single concept motion picture projector.

In the operation of a thermo copying machine, six students or 5 per cent rated their ability as excellent, eighteen or 14.8 per cent were average, sixteen or 13.1 per cent indicated they were weak, and eighty-two or 67.1 per cent indicated they had no ability to operate a copying machine.

Twelve students or 9.8 per cent rated their ability to operate a spirit duplicating machine as excellent, twenty-four or 19.7 per cent indicated they were average, thirty or 24.6 per cent rated themselves as weak, and fifty-six or 45.9 per cent indicated they lacked any experience in operating the spirit duplicating machine.

The first questionnaire also inquired about the students' previous experience with instructional materials in the classroom in order to determine whether or not they had been taught with a number of instructional materials (see Table 7). Ninety-four students or 77.1 per cent indicated their instructors had used instructional materials, and twenty-eight or 22.9 per cent indicated that instructors in their previous classroom experiences had not used instructional materials in their presentations. Their responses to the various instructional materials based on previous classroom experience were as follows:

Motion Picture - One hundred eighteen students or 96.7 per cent indicated they had been in classes where this instructional material was used, and four or 3.3 per cent indicated they had not.

Overhead Transparencies - One hundred two or 83.6 per cent indicated they had been in classes where these were used, fifteen or 12.3 per cent indicated they had not, and five or 4.1 per cent did not know if this instructional material had ever been used in their classroom experiences.

Tape Recorder - Ninety-four students or 77.1 per cent were in classes where the tape recorder had been used, and twenty-eight or 22.9 per cent indicated this instructional material was never used in their classes.

Disc-Recordings (records) - One hundred or 81.9 per cent indicated records had been used in their classes, twenty-one

TABLE 7

INSTRUCTIONAL MATERIALS USED BY STUDENTS' INSTRUCTORS IN PREVIOUS CLASSES

Instructional Material	Per Cent		
	Yes	No	Do Not Know
Motion Picture	96.7%	3.3%	0
Overhead Transparencies	83.6%	12.3%	4.1%
Tape Recorder	77.1%	22.9%	0
Disc-Recordings (records)	81.9%	17.2%	.9%
Television	8.2%	90.2%	1.6%
Opaque Projector	55.7%	29.5%	14.8%
8 mm Single Concept Motion Picture Projector	17.2%	54.9%	27.9%
Chalk Board	96.7%	3.3%	0

or 17.2 per cent indicated they had not been used, and one student or .9 per cent indicated he did not know if records had ever been used in his classroom experience.

Television - This instructional material had been used in the classes of ten students or 8.2 per cent, 110 or 90.2 per cent said it had never been used in their classes, and two or 1.6 per cent indicated they did not know if television had been used as an instructional material in their classes.

Opaque Projector - Sixty-eight students or 55.7 per cent indicated the opaque projector had been used in their classes, thirty-six or 29.5 per cent indicated it had not been used, and eighteen or 14.8 per cent did not know if it had been used in their classes.

8 mm Single Concept Motion Picture Projector - Twenty-one students or 17.2 per cent indicated this instructional material had been used in their classes, sixty-seven or 54.9 per cent indicated it had not been used, and thirty-four or 27.9 per cent indicated they did not know.

Chalkboard - One hundred eighteen students or 96.7 per cent answered yes, and four or 3.3 per cent indicated it was never used in any of their classroom instruction.

The results of questionnaire #1 indicated that the students possessed little knowledge of instructional materials. Many students were aware of instructional materials through previous classroom experiences; however, a practical working knowledge of instructional materials was lacking.

Knowledge and Competency of Materials After Formal Instruction

The second questionnaire was used to determine the knowledge and competency in the use of instructional materials after the two-week period of instruction. This was determined through a self-appraisal rating form. Each student rated his knowledge of the instructional materials and his ability to operate the associated equipment. They rated their ability on one of four levels: excellent, average, weak, or no ability. The results of the students' self-appraisal of their own competency in using the instructional materials equipment after the period of formal instruction were as follows (see Table 8):

16 mm Projector - Nineteen of the students or 16.4 per cent rated their ability to operate this machine as excellent, eighty-nine or 76.6 per cent indicated they were average, seven or 6 per cent rated themselves as weak, and one student or .9 per cent indicated he had no ability to operate the 16 mm projector.

Overhead Projector - Twenty-six students or 22.4 per cent rated themselves as excellent, seventy-seven or 66.4 per cent indicated they were average, nine or 7.8 per cent rated their ability as weak, and four or 3.4 per cent indicated they could not operate an overhead projector.

Opaque Projector - Seventeen students or 14.7 per cent indicated their ability to operate this projector as excellent, sixty-five or 56 per cent rated themselves as average, twenty

TABLE 8

KNOWLEDGE AND COMPETENCY OF EQUIPMENT OPERATION AFTER INSTRUCTION

Equipment	Per Cent			
	Excellent	Average	Weak	None
16 mm Motion Picture Projector	16.4%	76.6%	6.1%	.9%
Overhead Projector	22.4%	66.4%	7.8%	3.4%
Opaque Projector	14.7%	56%	17.2%	12.1%
Tape Recorder	49.1%	46.6%	4.3%	0
Record Player	77.6%	22.4%	0	0
Automatic Slide Projector	23.3%	44.8%	20.7%	11.2%
Filmstrip and Slide Projector	36.2%	59.5%	4.3%	0
8 mm Single Concept Motion Picture Projector	11.2%	59.5%	20.8%	9.5%
Thermo Copying Machine	12.1%	31.9%	25.8%	30.2%
Spirit Duplicating Machine	21.6%	21.6%	28.4%	28.4%

or 17.2 per cent indicated they were weak, and fourteen or 12.1 per cent indicated they were unable to operate an opaque projector.

Tape Recorder - Fifty-seven students or 49.1 per cent rated their ability as excellent, fifty-four or 46.6 per cent indicated they were average in this operation, five or 4.3 per cent rated themselves as weak, and none said they could not operate a tape recorder after the instructional materials section.

Record Player - Ninety students or 77.6 per cent rated their ability to operate the record player as excellent, twenty-six or 22.4 per cent indicated they were average, and none in any of the sections rated themselves as weak or no ability in operating a record player.

Automatic Slide Projector - Twenty-seven students or 23.3 per cent indicated their ability to operate this machine was excellent, fifty-two or 44.8 per cent rated themselves as average, twenty-four or 20.7 per cent indicated they were weak, and thirteen or 11.2 per cent indicated they could not operate the automatic slide projector.

Filmstrip and Slide Projector - Forty-two students or 36.2 per cent rated themselves as excellent, sixty-nine or 59.5 per cent indicated they were average, five or 4.3 per cent indicated they were weak, and none said they could not operate the automatic slide projector.

8 mm Single Concept Motion Picture Projector - Twelve students or 11.2 per cent indicated their ability as excellent, sixty-nine or 59.5 per cent rated themselves as average, twenty-four or 20.8 per cent indicated they were weak, and eleven or 9.5 per cent indicated they had no ability to operate the 8 mm single concept motion picture projector.

Thermo Copying Machine - Fourteen students or 12.1 per cent rated themselves as excellent, thirty-seven or 31.9 per cent indicated their ability was average, thirty or 25.8 per cent rated themselves as weak, and thirty-five or 30.2 per cent indicated they were unable to operate the thermo copying machine.

Spirit Duplicating Machine - Twenty-five students or 21.6 per cent rated their ability to operate the spirit duplicating machine as excellent, twenty-five indicated their ability was average, thirty-three or 28.4 per cent indicated they were weak, and thirty-three indicated they could not operate the spirit duplicating machine.

The second questionnaire also asked if the students believed they could use instructional materials effectively in their teaching (see Table 9). The responses to this section were as follows:

Dry Mounting Materials - Eighty-eight students or 75.9 per cent believed they could use these materials effectively,

and twenty-eight or 24.1 per cent indicated they could not effectively use them in teaching.

Lettering Devices - Ninety students or 77.6 per cent indicated they could use these instructional materials effectively, and twenty-six or 22.4 per cent indicated they could not use them effectively in their teaching.

Maps and Globes - Seventy-six students or 65.5 per cent indicated they could use these instructional materials effectively in teaching, and forty or 34.5 per cent indicated they could not use them.

Bulletin Boards - One hundred five students or 90.5 per cent indicated they could use them effectively, and eleven or 9.5 per cent felt they could not use bulletin boards effectively.

Flannel Boards - Eighty-six of the students or 74.2 per cent indicated they could use them effectively, and thirty or 25.8 per cent indicated they could not use flannel boards.

TABLE 9
USING INSTRUCTIONAL MATERIALS EFFECTIVELY

	Per Cent	
	<u>Yes</u>	<u>No</u>
Dry Mounting Materials	75.9%	24.1%
Lettering Devices	77.6%	22.4%
Maps and Globes	65.5%	34.5%
Bulletin Boards	90.5%	9.5%
Flannel Boards	74.2%	25.8%

In the second questionnaire the students were also asked if they believed that the instructional material laboratory was helpful in developing competency in equipment operation (see Table 10).

TABLE 10
THE INSTRUCTIONAL MATERIAL LABORATORY AS A TEACHING DEVICE

	Per Cent	
	<u>Yes</u>	<u>No</u>
Do you feel that the instructional material laboratory was a helpful teaching device?	90.5%	9.5%

One hundred five students or 90.5 per cent indicated that it was beneficial, and eleven or 9.5 per cent indicated the instructional material laboratory was not helpful in developing competency in equipment operation.

Student Comments and Suggestions

Questionnaire #2 asked the students for suggestions for improvement of the instruction in instructional materials (see Table 11).

The results of this study indicated that the students rated lower in the use of copying machines and duplicating machines than other equipment included in the instructional material laboratory. Thirty-seven of the students suggested that new equipment be included in the instructional material laboratory in addition to the four kinds now available.

TABLE 11
STUDENT SUGGESTIONS FOR IMPROVEMENT OF INSTRUCTION

Suggestions	Frequency	Per Cent
Additional equipment should be included in the instructional material laboratory.	37	31.0%
The instructional material laboratory should be available at the time of the instruction.	12	10.3%
There should be more student participation in the classroom.	53	45.6%
There should be more practical application of materials.	49	42.2%
The instructional materials should be correlated more with specific subject areas.	18	15.5%

Another suggestion made by twelve students was that the instructional material laboratory should be available to them at the time they receive the instruction. The instructional material laboratory was not open for the students in two sections of Education 333 at the time of their instructional materials study.

In the responses by the students concerning dry mounting materials a difference in the methods of instruction used was noted. In the sections which included student participation

in the dry mounting process a larger percentage of the students indicated they could use dry mounting materials effectively in teaching than in those sections where the dry mounting process was demonstrated and no student participation was included.

This result corresponded with a suggestion made by fifty-three students who believed they would have benefited more from the instructional materials section if they had been allowed to participate in the production of materials covered in the instruction.

Forty-nine students suggested that more practical application of materials to use in the classroom should be presented in the instruction.

Another suggestion offered by eighteen students was that the instructional materials should have been correlated more with specific subject areas.

A Comparison of the Results of Questionnaire #1 and Questionnaire #2

In a comparison of both questionnaires used in this study, it was evident that before any instruction the students had limited knowledge of instructional materials. Of the total number of students in all five sections, 63.3 per cent indicated they had little or no knowledge of equipment operation, and 45.5 per cent indicated they had never used any of the instructional materials included in this study.

When the second questionnaire was administered to the students, 76.6 per cent rated themselves as excellent or average in equipment operation. This result was compared to 63.3 per cent of the students who indicated they had little or no knowledge of equipment operation at the beginning of the instruction.

The results of questionnaire #2 also indicated that 76.8 per cent of the students believed they could use instructional materials effectively in teaching. This was compared to 45.5 per cent of the students who indicated they had never used the materials before the instruction.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to determine the value and comprehensiveness of instructional materials education as presently offered at Eastern Illinois University in Education 333, The Instructional Task in the Secondary School. The study was also concerned with students' attitudes toward the use of instructional materials prior to and after completion of the two-week period.

The subjects used in this study were the students enrolled in five sections of Education 333 during the Spring Quarter of 1966. A total of 122 students filled out and returned questionnaire #1. This questionnaire was administered before formal instruction was given. Questionnaire #2 was administered after completion of the two-week period of study. The second questionnaire was completed by 116 students.

According to the results of this study, the students believed that the materials covered in the instructional materials section would be of value to them as teachers. Before the instruction was given, 91 per cent of the students indicated that they believed it would be of value to them in

teaching. After the instructional period, 99.2 per cent believed the instruction would be of value to them as teachers. This writer believes that the period of study in instructional materials was of great value to students. The instruction also fulfilled the need set aside for it in the teacher education curriculum.

The comprehensiveness of the instructional materials section of Education 333 was not as thorough as it would be if it were allotted to a longer period of time. This course did not propose to make the students specialists in the use of instructional materials. Instead, it was designed to give them a basic knowledge of the selection and use of various materials that are available to them as teachers. The instructional materials covered in the period of study were meeting the objectives set for the course.

The general attitude of the students toward instructional materials was very favorable before the course and even more favorable after the instruction. Sixty-five students or 56 per cent indicated they desired a longer period of time for instruction in instructional materials in order to cover some phases more thoroughly. The students also indicated that the instruction was a valuable part of their preparation for a career in teaching.

The knowledge and competency gained by the students in the use of materials and operation of equipment during the

two-week period of instruction was remarkably high. At the beginning of the course only twenty-one students or 17.2 per cent indicated they had any previous instruction in the use of instructional materials. After completion of the course, 76.8 per cent indicated they believed they could use instructional materials effectively in teaching.

Conclusions

It seems safe to conclude that instructional materials as offered in Education 333 is meeting the objectives set forth for the course. As outlined for the course of study, the students were instructed in the selection and use of instructional materials. The students gained considerably in both knowledge and competency in use of the instructional materials covered.

The value of this course of study can be seen in the progress made by the students during the two-week instruction period. There was a marked increase in the number of students who believed they could use instructional materials effectively in teaching.

At the beginning of the course, the results of questionnaire #1 indicated that a knowledge of the use of instructional materials was lacking in the students' background. The effectiveness was especially apparent when the results of questionnaire #2 were compared with the results of questionnaire #1. The indication was that the students possessed considerably

more knowledge of the various instructional materials at the end of the period of instruction than at the beginning. As indicated by these results, the instructional materials section was apparently adequate as offered in Education 333.

The students had a very good attitude towards instructional materials throughout the period of instruction. This favorable attitude seemed to have been an important influence in the accomplishments made by the students in instructional materials.

Recommendations

The results of this study suggest the following recommendations for improvement of instructional materials instruction as presently offered in Education 333:

(1) There should be more practical use of the materials in the instruction. This should include more student participation during classroom instruction.

(2) Additional equipment should be put in the instructional material laboratory in order to offer more than four kinds of equipment. This should include Xerox copying machines, thermo copying machines, and spirit duplicating machines.

(3) The instructional material laboratory should be available to all sections of Education 333 at the time the instructional materials section is taught.

(4) Additional instructional materials education should be included in the respective methods courses of the students in order to correlate the instructional materials more with specific subject areas.

(5) Students should be encouraged by their advisors to take Education 487, "Introduction to Audio-Visual Education". This would meet the needs of those who believe they should have more knowledge in instructional materials.

APPENDIX A

QUESTIONNAIRE #1

QUESTIONNAIRE #1

1. Do you feel this section of instruction in instructional materials will be of value in your teacher education?
_____YES_____NO_____NO OPINION
2. Have you had previous instruction in the use of instructional materials? _____YES_____NO
3. Do you plan to teach? _____YES_____NO If answer is No, what are your plans?_____
4. Have you been in any classes in which the instructor used a number of instructional materials? _____YES_____NO
5. On the basis of your own past experience, do you plan to use instructional materials in your teaching? _____YES_____NO_____DO NOT KNOW
6. From your past experience, were the instructional materials used in your classes? _____VERY VALUABLE_____VALUABLE_____NOT VALUABLE_____INSUFFICIENT BASIS FOR JUDGMENT.
7. Have you ever used any of the following instructional materials?
Dry Mounting Materials _____YES_____NO
Lettering Devices _____YES_____NO
Maps and Globes _____YES_____NO
Bulletin Boards _____YES_____NO
Flannel Boards _____YES_____NO

8. Do you feel that instruction in instructional materials will be of value to you in your teaching position?

_____ YES _____ NO

9. Have you had an instructor in the past use any of the following instructional materials in their classes?

YES NO DO NOT KNOW

	YES	NO	DO NOT KNOW
Motion Picture			
Overhead Transparencies			
Tape Recorder			
Disc-Recording (records)			
Television			
Opaque Projector			
Chalk Board			
8 mm Single Concept Motion Picture Projector			

10. On the following chart rate your ability to operate the equipment indicated below.

	EXCELLENT	AVERAGE	WEAK	NONE
Overhead Projector				
Opaque Projector				
Tape Recorder				
Record Player				
Automatic Slide Projector				
Filmstrip and Slide Projector				
8 mm Single Concept Motion Picture Projector				
16 mm Motion Picture Projector				
Thermo Copying Machine				
Spirit Duplicating Machine				

11. Do you think instructional materials should be included in Education 333? YES NO NO OPINION

APPENDIX B

QUESTIONNAIRE #2

QUESTIONNAIRE #2

1. Do you feel that instruction in instructional materials is valuable in preparation for teaching? YES NO
2. Do you feel that instructional materials will be of value in your teaching? YES NO
3. Did you feel that the instructional material laboratory was a helpful teaching device? YES NO
4. Do you feel that a two-week period is sufficient time for instruction in instructional materials? SUFFICIENT
 LONGER PERIOD NECESSARY SHORTER PERIOD NECESSARY
5. Should a required course in instructional materials be included in the teacher education curriculum? YES
 NO
6. Do you believe you can use the following instructional materials effectively in your teaching?

Dry Mounting Materials	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Lettering Devices	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Maps and Globes	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Bulletin Boards	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Flannel Boards	<input type="checkbox"/> YES	<input type="checkbox"/> NO

7. On the following chart rate your present ability to operate the equipment indicated below.

	EXCELLENT	AVERAGE	WEAK	NONE
Overhead Projector				
Opaque Projector				
Tape Recorder				
Record Player				
Automatic Slide Projector				
Filmstrip and Slide Projector				
8 mm Single Concept Motion Picture Projector				
16 mm Motion Picture Projector				
Thermo Copying Machine				
Spirit Duplicating Machine				

8. What suggestions for improvement in the instruction of instructional materials would you make?

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