

A STUDY OF INSTRUCTIONAL
MATERIALS AND THEIR USE BY
SELECTED ELEMENTARY STUDENT
TEACHERS IN THEIR STUDENT TEACHING
ASSIGNMENTS

Thesis for the Degree of Ed. D.
MICHIGAN STATE UNIVERSITY
LEON EVERETT NEEB
1972



This is to certify that the

thesis entitled

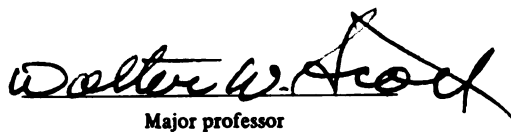
A STUDY OF INSTRUCTIONAL MATERIALS
AND THEIR USE BY SELECTED ELEMENTARY
STUDENT TEACHERS IN THEIR STUDENT
TEACHING ASSIGNMENTS

presented by

LEON EVERETT NEEB

has been accepted towards fulfillment
of the requirements for

ED.D. degree in Secondary Education
(Teacher Education)


Major professor

Date August 23, 1972

Q-7639



22
~~10/2/82~~ 2.80

PICKUP FAL 1982

A ~~05~~

ABSTRACT

A STUDY OF INSTRUCTIONAL MATERIALS AND THEIR USE BY SELECTED ELEMENTARY STUDENT TEACHERS IN THEIR STUDENT TEACHING ASSIGNMENTS

By

Leon Everett Neeb

The purpose of this study was to secure information relative to instructional materials taken and used by student teachers in their elementary student teaching assignments. It was designed to obtain answers to the following questions: 1. What instructional materials did student teachers bring, develop, or provide for the classroom during their student teaching assignment? 2. From what source did they receive information relative to these materials? 3. What was the value of the materials taken to the classroom? 4. Do the sources of materials, as stated by the students, compare favorably with the perceptions college personnel have when designating responsibilities for teaching of these items in the educational sequence prior to student teaching?

Questionnaires were used to obtain data from 136 selected student teachers, their supervising teachers, and 74 selected college personnel. Analysis of data secured from these participants indicated student teachers took many instructional materials to their student teaching assignments. Items listed most frequently were: 16mm films, film strips, supplemental text books, educational games, and

fiction books. These same students reported they received most information relative to instructional materials from the methods courses, with lesser amounts from the library or resource center and the audio-visual department. College personnel suggested students should learn of, or be informed of instructional materials from the methods courses, the library or resource center, and the pre-education courses.

Supervising teachers specified that over half of the instructional materials taken and used by student teachers had "great positive value" while about 40% had "some value" in the classroom. Very few of the items taken received either "somewhat of a nuisance" or "a distinct nuisance" rating from the supervising teachers.

After student teachers designated their sources of information for instructional materials, college personnel indicated where they thought students should have learned of these items. Responses from these two groups were compared using the Chi Square formula. Results from these computations revealed that responses of student teachers and college personnel displayed a high level of agreement in three of the sources of information for instructional materials. These were the educational foundation courses, the pre-student teaching experiences, and the "other sources" category. However, in four of the areas of sources of information there were significant differences between responses. These were: the methods courses, the library or resource center, the pre-education courses, and the audio-visual department, thus noting that college personnel do not

recognize these areas of the educational sequence with the same level of regard as student teachers.

In general it was concluded from this study that elementary student teachers do take many instructional materials to their student teaching assignments, these items carry positive value when applied to the learning environment, and that student teachers secure most of the information regarding instructional materials from the methods courses, the library or resource center, and the audio-visual department. It was also concluded that college personnel believed that the methods courses, the library or resource center, and the pre-education courses were the three most productive sources for information relating to instructional materials. There was also evidence suggesting that discrepancies exist between sources of information as stated by student teachers and suggested by college personnel.

From responses of participants in this study, and the results that have been discussed, there seems to be need for individuals involved in teacher education to be guided in developing a sequence of courses and experiences that are more meaningful for elementary student teachers. Such a sequence would be non-repetitious, with responsibilities for the teaching of instructional materials assigned to courses or experiences that will enable students to be more effective in their student teaching assignments, as well as when they assume the role of classroom teacher.

A STUDY OF INSTRUCTIONAL MATERIALS AND
THEIR USE BY SELECTED ELEMENTARY STUDENT TEACHERS
IN THEIR STUDENT TEACHING ASSIGNMENTS

by

Leon Everett Neeb

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF EDUCATION

Department of Education

1972

ACKNOWLEDGMENTS

Only with help and encouragement can one succeed on an advanced degree program. In my program two persons have given me abundant help and much encouragement. They have extended their help and encouragement far beyond what is expected. I hope the confidence they have displayed in my ability, and the hours they have spent with me will not be misplaced. Dr. Walter W. Scott and Dr. W. Henry Kennedy deserve great recognition for their patience and concern on my behalf. Two other members of my Committee also deserve recognition for their helpful and considerate comments in the final stages of my program and with my dissertation. They are Dr. Robert Hatfield and Dr. James Page.

There have been other persons at Michigan State University who have had influence upon my life, and have been helpful in my work on this degree. They are Dr. W. V. Hicks, Dr. A. Olmsted, Dr. Robert Houston and Dr. Dewayne Tripplett.

Other persons have also played a vital role in my program. The following have helped in the editing of my dissertation and each deserves recognition: Mrs. Jean Scott, Mrs. Frank Daly, Mrs. Anastasia Sanders, and Dr. Irene Allen. Appreciation also goes to Dr. Harold Sponberg, Dr. Donald Fox and Dr. Willard Fox along

with the "Red Rulers", for their special kind of help and encouragement. Acknowledgement is also extended to the Research Division of the Education Department at Michigan State University, and the Educational Psychology Department at Eastern Michigan University who helped with the design, mechanics and statistics of this study. Not to be overlooked are the student teachers, supervising teachers and Eastern Michigan University staff who cooperated to make this research meaningful.

No married person can embark upon a program without the help of the mate. My wife, Grace, has denied herself much on behalf of my education. To her, a very special tribute and thanks are due.

To my children, "in a couple of years" has finally arrived and now perhaps we will be able to spend more time together. To Sue, Len, Lee, and Lew a hearty "thank you" is appropriate. To others, my parents, my family and friends I also wish to extend appreciation for their help and encouragement. Again, I hope the confidence placed in my ability by these people, will not have been misplaced.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS.....	ii
LIST OF TABLES.....	vi
LIST OF APPENDICES.....	x
Chapter	
I. STATEMENT OF THE PROBLEM.....	1
Introduction	1
Statement of the Problem	6
The Need for the Study and Statement of Hypothesis.....	7
Important of Study.....	9
Procedure.....	10
Delimitations of the Study.....	12
Definition of Terms	13
Summary.....	15
II. REVIEW OF SELECTED LITERATURE.....	17
Introduction	17
The General Benefits of Student Teaching Programs to the Student Teacher	20
The General Benefits of Student Teaching Programs to the Cooperating Teacher, the Pupils, and Cooperating School ...	24
Undergraduate Programs as they Relate to Student Teaching, with Emphasis upon the Aids, Ideas, or Materials they may Provide for the Student Teacher	27
Summary.....	37
III. DEVELOPMENT OF THE QUESTIONNAIRE AND SELECTION OF SAMPLE FOR THE STUDY.....	40
Introduction	40
Development of the Student Teacher and Supervising Teacher Questionnaire...	41

Chapter	Page
Development of the Questionnaire used by College Personnel.....	43
Selection of the Sample for the Questionnaire Completed by the Student and Supervising Teacher	44
Selection of the Sample for the Questionnaire Completed by the College Personnel...	45
Tabulation of Results	46
Summary.....	47
IV. PRESENTATION OF DATA RECEIVED.....	49
Introduction	49
Aids, Ideas, and Materials Taken to the Classroom by Selected Student Teachers.....	49
Sources of Instructional Materials Taken to the Classroom as Determined by Selected Elementary Student Teachers.....	52
Value of Instructional Materials Taken to the Elementary Student Teaching Assignment, As Determined by the Supervising Teachers.....	68
Sources of Instructional Materials Taken to the Student Teaching Assignment, as Suggested by Selected College Personnel.....	73
Comparisons of Responses of Student Teachers and College Personnel in Designating Responsibility for Teaching about Instructional Materials Taken to the Elementary Student Teaching Assignment.....	87
Summary.....	98
V. CONCLUSIONS AND RECOMMENDATIONS	100
Introduction	100
Conclusions	100
Recommendations.....	103
Summary	106
BIBLIOGRAPHY	107
APPENDIXES.....	112

LIST OF TABLES

Table		Page
i	Aids, Ideas, and Material Taken to the Elementary Classroom by Selected Student Teachers.....	51
ii	Sources of Information Related to Instructional Materials in the "Books and Commercially Printed Materials" Group as Indicated by Selected Student Teachers.....	55
iii	Sources of Information Related to Instructional Materials in the "Projected Items" Group as indicated by Selected Student Teachers...	56
iv	Sources of Information Related to Instructional Materials in the "Visuals" Group as Indicated by Selected Student Teachers....	57
v	Sources of Information Related to Instrucational Materials in the "Games and Puzzles" Group as Indicated by Selected Student Teachers.....	58
vi	Sources of Information Related to Instructional Materials in the "Multiple Copy Materials" Group as Indicated by Selected Student Teachers.....	59
vii	Sources of Information Related to Instructional Materials in the "Recorded Matter" Group as Indicated by Selected Student Teachers.....	60
viii	Sources of Information Related to Instructional Materials in the "Display Boards" Group as Indicated by Selected Student Teachers.....	61
ix	Sources of Information Related to Instructional Materials in the "Live Specimen" Group as Indicated by Selected Student Teachers....	62
x	Sources of Information Related to Instructional Materials in the "Programmed Materials" Broup as Indicated by Selected Student Teachers	63

Table		Page
xi	Sources of Information Related to Instructional Materials in the "Community Resources" Group as Indicated by Selected Student Teachers	64
xii	Sources of Information Related to Instructional Materials in the "Collections" Group as Indicated by Selected Student Teachers	65
xiii	Sources of Aids, Ideas, and Materials as Indicated by Selected Student Teachers.....	66
xiv	Value of Aids, Ideas, and Materials Taken to the Classroom by Student Teachers as Determined by the Supervising Teachers	70
xv	Value of All Instructional Materials, Taken to the Classroom by Student Teachers, as Indicated by the Supervising Teachers	72
xvi	Designated Areas of Responsibility for Teaching of Instructional Materials in the "Projected Items" Group as Indicated by Selected College Personnel.....	75
xvii	Designated Areas of Responsibility for Teaching of Instructional Materials in the "Books and Commercially Printed Materials" Group as Indicated by Selected College Personnel...	76
xviii	Designated Areas of Responsibility for Teaching of Instructional Materials in the "Multiple Copy Materials" Group as Indicated by Selected College Personnel	77
xix	Designated Areas of Responsibility for Teaching of Instructional Materials in the "Recorded Matter" Group as Indicated by Selected College Personnel	78
xx	Designated Areas of Responsibility for Teaching of Instructional Materials in the "Visuals" Group as Indicated by Selected College Personnel.....	79

Table		Page
xxi	Designated Areas of Responsibility for Teaching of Instructional Materials in the "Programmed Matter" Group as Indicated by Selected College Personnel.....	80
xxii	Designated Areas of Responsibility for Teaching of Instructional Materials in the "Live Specimens" Group as Indicated by Selected College Personnel.....	81
xxiii	Designated Areas of Responsibility for Teaching of Instructional Materials in the "Collections" Group as Indicated by Selected College Personnel	82
xxiv	Designated Areas of Responsibility for Teaching of Instructional Materials in the "Community Resources" Group as Indicated by Selected College Personnel.....	83
xxv	Designated Areas of Responsibility for Teaching of Instructional Materials in the "Games and Puzzles" Group as Indicated by Selected College Personnel.....	84
xxvi	Designated Areas of Responsibility for Teaching of Instructional Materials in the "Display Boards" Group as Indicated by Selected College Personnel.....	85
xxvii	Designated Areas of Responsibility for Teaching of Instructional Materials, as Indicated by Selected College Personnel.....	86
xxviii	Chi Square Computations When Comparing Responses of Where Student Teachers Indicated They Received Information About "Projected Items" and Where College Personnel Thought They Should Have Been Taught About These Instructional Materials	89

Table		Page
xxix	Chi Square Computations When Comparing Responses of Where Student Teachers Indicated They Received Information About "Books and Commercially Printed Materials" and Where College Personnel Thought They Should Have Been Taught About These Instructional Materials.....	90
xxx	Chi Square Computations When Comparing Responses of Where Student Teachers Indicated They Received Information About "Multiple Copies" and Where College Personnel Thought They Should Have Been Taught About These Instructional Materials.....	91
xxxi	Chi Square Computations When Comparing Responses of Where Student Teachers Indicated They Received Information About "Recorded Matter" and Where College Personnel Thought They Should Have Benn Taught About These Instructional Materials.....	92
xxxii	Chi Square Computations When Comparing Responses of Where Student Teachers Indicated They Received Information About "Visuals" and Where College Personnel Thought They Should Have Been Taught About These Instructional Materials.....	94
xxxiii	Chi Square Computations When Comparing Responses of Student Teachers and College Personnel in Designating Sources of Information for All Items Taken by Student Teachers,.....	95
xxxiv	Comparison of Responses of College Personnel Teachers in Designation Sources of All Items Student Teaching, Reported in Percentage Form.....	97

LIST OF APPENDICES

Appendix		Page
A.	Aids, Ideas, and Materials Taken To The Elementary Classroom by Student Teachers	112
B.	Letter of Purpose of Study Sent to Student Teachers and Supervising Teachers...	115
C.	Key for Completing Questionnaire	116
D.	Questionnaire Used by Selected College Personnel.....	117
E.	Copy of Letter Sent to College Personnel Selected for this Study.....	120
F.	Key for Using Questionnaire Sent to College Personnel.....	121
G.	Sources of Materials Taken to Student Teaching by Selected Student Teachers	122
H.	Sources of Materials, by Groups, Taken to the Student Teaching Assignment by Selected Student Teachers	126
I.	Listing of Instructional Materials Taken to the Elementary Classroom and Value Placed on Items by Supervising Teachers	127
J.	Sources of Instructional Materials Taken to the Student Teaching Assignment, as Designated by Selected College Personnel.....	130
K.	Sources of Instructional Materials Taken to the Student Teaching Assignment, as Designated by Selected College Personnel.....	133

L.	Comparisons of Responses of Student Teachers (ST) and College Personnel (SP) in Designating Sources of Items Taken to the Elementary Classroom by Student Teachers, Including Chi Square (X^2) Computation Results	134
----	---	-----

CHAPTER I

STATEMENT OF PROBLEM

INTRODUCTION

The improvement of the quality of education in the United States has been of great concern ever since the turn of the century when this country took on the task of educating every school age child. The United States is unique in that it has tried to give all children an education regardless of their economic or social level, their race, or their religious belief. Although some critics feel that education is not achieving its goals, there is evidence to believe that progress is being made.

In meeting the responsibility for quality education, it is the teacher who carries a major share of this burden. Perhaps a much greater degree of success could be realized in the venture of "education for all" if the students who are leaving the teacher training institutions are prepared in such a way that they have a greater degree of competency.

Part of the training of every prospective teacher includes

classroom teaching under the direction of an experienced teacher. This student teaching experience, in most instances, comes near the end of the teacher education sequence and is usually carried out in a school cooperating with the teacher training institution. The value of student teaching cannot be minimized. Kathleen Pittman emphasizes this view by stating, "The student teaching program seems to prepare the teachers better than any other area of the teacher education process."¹ Further evidence that student teaching has a great value is the fact that all states have enacted legal minimal standards for certification, which include some form of directed or student teaching.

It is apparent that student teaching is of benefit not only to the student teacher, but also to the supervising teacher and the cooperating school. This view was given by Lucille Foster as she indicated that although each participant in the student teaching process must give of himself, each participant also accrues value that is only present as each becomes involved in the teacher education process.² She listed more individual attention to pupils and more thorough instruction as activities that participants of the student teaching program thought

¹Pittman, Kathleen, "An Evaluation of a Teacher Education Program by the Graduates of a State College." Unpublished Ed. D. dissertation, The University of Mississippi, 1964.

²Foster, Lucille, "Student Teaching--The Value to All Program Participants," California Journal of Elementary Education, (May, 1961), 29: 281-88.

valuable. Thelbert Drake and Leonard Craft noted in their writing that elementary and secondary pupils who have come in contact with student teachers in their classrooms, do view this student teaching experience positively.³ These students further indicated that they received more personal attention and had many varied and useful instructional aids and ideas added to their classes because of the student teachers. Other authors, Greene, Huchner, and Martuna, also indicated that schools participating in the student teaching programs found the student teachers to be a real asset to pupils, the teachers, and the communities.⁴ They noted that the student teachers were ambitious in their desire to add a new dimension to the classroom, and that additions brought by the student teachers were often unique and positive.

A major study relating to student teaching was completed in 1970. This study, "The Impact of Student Teaching Programs upon the Co-operating Public Schools in Michigan"⁵ was conducted by the teacher training institutions of the State of Michigan and was directed toward

³Drake, T. L. and Craft, L. E., "How Do Students Feel About Student Teachers?" Illinois Education, 55 (November, 1966), 106-07.

⁴Greene, G., M. Huchner, and A. Martuna, "Student Teaching: Do the Participating Schools Benefit?" Illinois Education (November, 1966), 55: 107-10.

⁵Deans and Directors of Teacher Education in Michigan, "The Impact of Student Teaching Programs upon the Cooperating Public Schools in Michigan," June, 1970.

determining the influence of student teaching upon the cooperating public schools. This investigation is also known as the "Impact Study."

The Impact Study was the result of a question arising from a meeting of the Council of State College Presidents of Michigan. The question was, "What is the impact of student teaching programs upon the public schools cooperating in such a venture as student teaching?" A committee was chosen to initiate and conduct this study. The committee was made up of Dr. Malcolm A. Lowther of the University of Michigan, Dr. Alan F. Quick of Central Michigan University, and Dr. W. Henry Kennedy of Michigan State University. Educational researchers from the three institutions were involved by the committee in the planning of the study, and the research consultation service of the Michigan State University College of Education was used extensively in the design of the study and development of the survey instruments.

Instruments devised by this committee were reviewed by the guiding committee and eventually tested as a pilot study with eight of the teacher training institutions in Michigan. After this pilot study, the instruments were refined, limitations corrected, and procedures sharpened. In the final form of the instruments, terminology used was thought to be appropriate in its intent for gaining information that would be valid and reliable for answering the original question raised by the Council of State College Presidents of Michigan.

Results from the Impact Study indicated that 97.8 percent of

teachers participating felt that teachers and administrators should either "seek" or "accept" student teachers in their schools. Other results indicated that pupils received more individual attention and counseling outside of class time when student teachers were present. Their presence also made it possible for pupils and teachers to be involved in increased small group activity.

The Impact Study contained two items which dealt specifically with the contributions student teachers made to the classroom. In the questionnaire developed by the above procedure and administered to participants, the following inquiries were considered to be most appropriate: (1) Did you bring, develop, provide, or suggest any new or different instructional materials? (2) Did you suggest or provide other kinds of aids or ideas for the classroom?

In response to these questions, 78.9 percent of the participating student teachers indicated they had brought, developed, provided, or suggested new or different instructional materials for their classes. In response to the second inquiry, 82.4 percent of the student teachers indicated they had suggested or provided other kinds of aids or ideas for the classroom.

Responding to these same questions, 75.8 percent of the supervising teachers and 75.5 percent of the school administrators responding indicated that student teachers had brought, developed, provided, or suggested new or different instructional materials for the classroom. Related to the second inquiry, 76.7 percent of the supervising

teachers and 72.4 percent of the school administrators responding indicated their student teachers had suggested or provided other kinds of aids or ideas for the classroom.

The foregoing conclusions were of particular interest to Clifford Marcus.⁶ He noted that student teachers do bring a great deal to the classroom, and from the material introduced, innovation and change take place. It was his recommendation that a study should be undertaken which would identify the exact quality and quantity of materials brought to the classroom.

STATEMENT OF THE PROBLEM

Underlying this identification of the quantity and quality of materials is the need to determine the sources from which the students have drawn the knowledge of items used in the classroom. The identification and study of the sources of materials should be helpful in providing an educational sequence that is meaningful and effective for prospective teachers.

The basic problem of this study is divided into two separate but related areas of teacher education. One phase was designed to determine the specific aids, ideas, or materials taken to the student teaching assignment by the student teacher, the source of the items taken, and their value when applied in the classroom.

⁶Marcus, Clifford, "The Impact of Student Teaching Upon the Public Schools of Michigan," Unpublished doctoral dissertation, Michigan State University, June, 1970.

The second phase sought to determine the perceptions of college personnel when considering responsibilities for teaching the use of these aids, ideas, or materials in the undergraduate program.

Consequently, this study was designed to obtain answers to the following questions:

- 1a. What instructional materials did student teachers bring, develop, or provide, and what aids or ideas do they suggest for the classroom during their student teaching assignment?
- 1b. From what source did student teachers receive information relative to these instructional materials?
- 1c. What was the value of the materials, aids, or ideas taken to the classroom?
2. Did the sources of the specific aids, ideas, or materials as stated by the student teachers compare favorably with the perceptions college personnel have when designating responsibility for teaching of these items in the education sequence prior to student teaching?

NEED FOR THE STUDY AND STATEMENT OF HYPOTHESIS

In reviewing the remarks of Marcus, one determines that a study is needed in the area of teacher education designed to help a student teacher develop the necessary instructional capabilities for more effectiveness in the student teaching assignment and eventually as a teacher in a regular classroom. The need for such an examination provided the basis for the hypotheses in this study. The hypotheses are as follows:

- 1a. Elementary student teachers took aids, ideas, and materials to the classroom with them.
- 1b. Elementary student teachers secured these instructional materials and ideas from undergraduate classes and experiences prior to their student teaching experience.
- 1c. The worth of the instructional materials taken and used in the elementary classroom were judged to have varying degrees of value in their application to the learning environment.
2. College personnel indicated that student teachers should be taught or learn of the instructional materials in same areas of the educational sequence as indicated by the student teachers when they designated their source of information about the various aids, ideas, or materials taken and used in the elementary classroom.

With focus on these hypotheses this study secured answers to the questions as listed in the statement of the problem. Answers to these questions should be of value to those persons who are involved with planning and conducting a teacher education program. Such data may provide information that will help them plan an undergraduate program that is more meaningful and that will provide student teachers with the aids, ideas, and materials for the classroom that are known to be of value and which have been identified as profitable in the student teaching experience. This study should also provide a more adequate and more sequential undergraduate program that will better train students for their student teaching assignments and as classroom teachers.

IMPORTANCE OF THE STUDY

The importance of this investigation was based on the data secured to answer the questions listed previously in the Statement of the Problem. Aside from the information received from the answers to the foregoing questions, it was hoped that other values would be secured from this investigation. For example, the information should be of interest to the college administrator, or those members of a college staff who are in charge of course review and course sequence. The results should give them an indication of courses which provide information about aids, ideas, and materials for the student teaching assignment. Such indications could be used to determine specific pre-requisites for courses, sequential preferences in undergraduate course work, and pre-student teaching experiences which are considered to carry great value.

It should also be of value to the university instructors of education and methods courses. Instructors may be prompted to evaluate their course content to see if it includes instruction directed toward aids, ideas, or materials which have been identified as helpful by the student teachers and which have been considered by the supervising teachers to have positive value.

This investigation should also be of value to college personnel who direct various activities under the heading of pre-student teaching. The study should provide them with guidelines so they can better plan

experiences which provide materials, aids, and ideas that student teachers consider worthwhile.

Directors of the university library, the instructional materials center, and the audio-visual center may have an interest in the results of this study. They may become more attentive to the special kinds of materials, aids, and ideas which should be made available to student teachers for use in the student teaching assignment.

PROCEDURE

In the study by Marcus it was suggested that it would be profitable to determine exactly what aids, ideas, and materials student teachers take to their assignments. It seemed reasonable, therefore, that an investigation of this nature would focus on the student teachers and their supervisors as the primary sources of information. The checklist questionnaire was used to enable student teachers to indicate what aids, ideas, or materials they had taken and used in the classroom.

After the student teachers had listed the specific aids, ideas, or materials they had taken and used in the classrooms, they then identified the source of the items on a checklist that had the following options: (1) General pre-education courses, (2) Educational foundation courses, (3) Methods courses, (4) Pre-student teaching, formal or informal, (5) Library or resource center, (6) Audio-visual center, (7) Other sources as identified by the student teacher.

The value of the materials taken to the classroom was determined by the supervising teacher. After the student teacher indicated

the items that had been brought to the classroom during the student teaching assignment, the supervising teacher indicated the value of the addition, as he or she perceived it, with the application of a Likert type scale with five possible selections from a position of "great value" to one of "a distracting effect."⁷

A preliminary questionnaire was given to a selected sample of student teachers for the purpose of validating the entries to be included in the final survey form. After necessary revision and refinements, the questionnaire was given to approximately two hundred selected elementary student teachers and their supervising teachers.

In tabulating the data received from the student teachers, frequency counts and percentage tables were used to report the aids, ideas, and materials taken to the student teaching assignment. The sources of information for these items as identified were handled in three ways: frequency counts, percentage tables, and arithmetic means. As a portion of the study was descriptive in nature, no comparisons were drawn between the population of this study and that of any other population.

Information gathered from the supervising teachers in applying the Likert type scale relating to the value of the aids, ideas, or materials brought by the student teachers were presented in tables to indicate the frequency of responses for each possible choice. In

⁷ John W. Best, Research in Education, Prentice Hall, Inc., Englewood Cliffs, New Jersey, 1959, pp. 157-160.

addition to the frequency tables displaying these choices of value judgments, an arithmetic mean was tabulated to show a point on the one-to-five Likert type scale which indicated the mean position of the choices made by all supervising teachers involved.

College personnel were selected to provide data related to the second phase of the study. Instructors, or administrators, with duties in each of the previously stated source areas, were asked to indicate which of the specific areas they felt had the responsibility of informing or teaching the student about the specific aid, idea, or material taken to the assignment. These responses were then tabulated on frequency charts.

Data from the second phase of the study dealing with the responsibility of teaching of the specific aid, idea, or material taken to the student teaching assignment, were also analyzed assuming the null hypothesis of no significant difference between (1) the courses college personnel regarded as responsible for teaching the aids, ideas, and materials used in student teaching, and (2) the students' identification of the sources of the items taken to their assignments.

DELIMITATION OF THE STUDY

To study all student teachers in the state of Michigan relative to the aids, ideas, or materials that they have taken to their assignments would be a monumental and unwieldy task. The following limitations were followed to make the study more manageable and effective:

1. Each university has a unique course of study for those students wishing to become teachers. This course of study is designed and defended by the education department of that institution. Therefore, this study dealt with one teacher training institution, namely, Eastern Michigan University. Eastern Michigan University was selected for the following reasons: (a) It is a teacher training institution interested in finding out as much as possible about the program it conducts, and (b) It places an adequate number of student teachers to provide a usable sample for this study.

2. Only those students presently enrolled in student teaching at the elementary level were involved in this investigation.

DEFINITION OF TERMS

AIDS - IDEAS - MATERIALS OR INSTRUCTIONAL MATERIALS:

Various items found in a classroom that are not usually considered basic equipment. They are those things that may increase student interest in the classroom, may make teaching easier and/or more explicit, or add a dimension that is unique in some classrooms. Such items as educational films, educational games, resource persons, puppets, magnetic boards, live animals, work books, transparencies, models, puzzles, sociograms, recordings, and pictures are examples of the items that would be considered as aids, ideas, or materials.

COLLEGE: The institution of higher learning which trains and recommends for certification. In this study college and university

may be used interchangeably.

COOPERATING SCHOOL: A public or private school which has an agreement with a teacher training institution allowing student teachers to enter and use their facilities and faculty to complete activities necessary for certification.

METHODS COURSES: Those courses in the elementary education program which deal with the teaching of various areas of subject matter. At Eastern Michigan University the methods courses are The Teaching of Social Studies, The Teaching of Mathematics, Science for Elementary Grades, and The Teaching of Reading.

PRE-EDUCATION COURSES: Those courses usually taken during the freshman and sophomore years (100 and 200 level courses) which are considered basic background courses leading to admission into the teacher education program.

PRE-STUDENT TEACHING, FORMAL: A planned experience of the program at Eastern Michigan University for prospective student teachers. It is of twenty-four hours in length and is completed in a "formal" situation. A formal situation is considered to be one in which the pupils are engaged in directed activities with a certified teacher in charge.

PRE-STUDENT TEACHING, INFORMAL: A planned experience for prospective teachers in the Eastern Michigan University education program. It is of twenty-four hours duration and completed in a non-formal setting. This non-formal setting may be in a recreation

program, nursery school, or other like activity that is not dependent upon a certified teacher being in charge.

PROFESSIONAL EDUCATION COURSES: Those courses in the elementary education program which deal with education, but are not considered as the "methods courses." At Eastern Michigan University the professional education courses are School and Society, Principles of Teaching, Educational Psychology, and Evaluation of Pupils.

STUDENT TEACHING: A period (or periods) during which a student receives guidance in the application of learning skills and assumes responsibility for the major activities of a teacher. This activity is carried on with the cooperating school and the guidance of the supervising teacher and college personnel designated for that purpose. In some institutions this is known as directed teaching.

SUPERVISING TEACHER: The classroom teacher designated by the cooperating school, and accepted by the college, to work with the student teacher during the student teaching assignment.

SUMMARY

As there is constant demand to upgrade our educational process, it seems that each sector of the program has need for evaluation. In this investigation the focal point was the various items taken to the elementary classroom by student teachers. One of the objectives was to determine exactly what teaching aids were taken and used by those individuals involved in student teaching. There was also a need to

determine and evaluate the sources from which the student teacher received information about these items as well as the value they carried in application to the student teaching assignment. This investigation attempted to secure this information through the use of questionnaires. From the responses of the participants, it is hoped that the individuals involved in teacher education may be guided in developing a sequence of courses and experiences which are most meaningful for elementary student teachers. Such a sequence would be non-repetitious, with responsibilities for teaching of aids, ideas, and materials assigned to courses or experiences that enable students to be more effective in their student teaching assignments, as well as when they assume the role of classroom teacher.

CHAPTER II

REVIEW OF SELECTED LITERATURE

INTRODUCTION

The history of teacher education in America begins with the very founding of our colonies. The pioneers felt that for the country to survive and grow an educated people was essential. This concern was displayed by the fact that the colonists enacted laws for public schools before they had lived here three decades. Laws, such as the one which provided for free education in Fort Amsterdam and the "Old Deluder Law," were rather crude by our present standards, but they did provide a base for a systematic approach to public education.¹ From these humble statutes, and from the deep concern of the pioneers, education was given the impetus for growth, changes, and refinements that have brought us to our present level.

Nearly two hundred years after the "Old Deluder Law," an educator, Horace Mann, Secretary of the State Board of Education of Massachusetts, discussed his interest in education, displaying concern

¹DeYoung, Chris A. and Richard Wynn, American Education (New York: McGraw-Hill Book Co., 1968), p. 154.

about the training, or the lack of training, of teachers in the schools of the time. He could not accept the idea that a teacher was just anyone possessing good moral character and a dedication to teaching.² Mann felt that an educational process was needed to train potential teachers in child growth and development, psychology, and related areas. Under his leadership a "Normal School" was opened in Lexington, Massachusetts in 1839.³ This was a model institution and within a year, two more Normal Schools were opened in Massachusetts. Other Normal Schools came into existence, and gradually teacher education took on an air of respectability. Even so, training at the Normal School was limited in the impact it had on potential teachers, mostly due to the abbreviated contact the Normal Schools had with the prospective teachers. In the earliest stages this was a contact of a year's duration.⁴

As men moved the frontier further west, the concern for education, schools, and the training of teachers also moved westward. With the Normal School of Lexington as a model, Michigan Normal was chartered by the State of Michigan and was located in Ypsilanti. It, too, carried on and enlarged the programs of education so that it

²Ibid., p. 291.

³Ibid., p. 297.

⁴Ibid.

became an institution which commanded respect because of the quality of teachers produced. Most original pioneer schools, such as the Normal School at Lexington and Michigan Normal, have lost their "Normal School" titles. They still exist, but as Michigan Normal has now become Eastern Michigan University, so have most of the other Normal Schools changed to become multi-purpose institutions. In most instances, however, these universities still display a major concern for education and the training of teachers.

The value of these Normal Schools cannot be minimized. They have been a major force in change and innovation in the field of education since they were initiated. Through research and guided development they have directed the teacher education program from a short encounter of one semester, to four-year degree programs. They now embrace both liberal education and the highly specialized training that is needed by individuals desiring to become teachers. The concern for improvement still exists, and hopefully these institutions will continue to encourage studies that will cause effective changes in the processes now facing students in education and teacher training.

This study was designed to add to the accomplishments of various research studies and writings that have been completed in the past, as they relate to teacher education. Therefore, it encompasses those areas that place an emphasis on teacher education and student teaching, as well as on college teachers who are involved in the training of the students prior to their student teaching experience.

Literature related to the problems of this study will be reviewed with the following headings:

1. The general benefits of student teaching programs to the student teacher.
2. The general benefits of student teaching programs to the cooperating teacher, the pupils, and the cooperating schools.
3. Undergraduate programs as they relate to the preparation of elementary student teachers, with emphasis upon the areas that provide, suggest, or teach about the various aids, ideas, or materials that students may take to their student teaching assignment.

To review or discuss all literature relating to student teaching and teacher education would be a most monumental task. Therefore, this study will refer only to those readings that contribute to an understanding of the three areas listed above.

THE GENERAL BENEFITS OF STUDENT TEACHING PROGRAMS TO THE STUDENT TEACHER

Evidences of the involvement of prospective teachers in a directed teaching situation can be found in American as far back as the year

1623.⁵ In this year the Reverend Samuel Hall established a private academy with a model school for training teachers.

In these earliest stages of teacher training in our country, education students were exposed to a rather modest one or two year program. In Michigan, a single year of study in the County Normal was sufficient to become certified as a teacher. After this brief encounter, young people moved to the public school classroom and assumed the teacher role. As they served the school, many skills, techniques, and practices were developed by the "trial and error" method.

This approach is no longer sufficient for the training of teachers. Too much is at stake for these procedures to continue. Merrill indicates:

The general public is convinced of the critical importance of schools in preparing young people for productive roles in modern society. We therefore cannot train teachers on the job, they must come to us with competence and confidence to handle the problems of education.⁶

Referring to this need for more than academic advancement, Houston, Blackington, and Southworth list three primary components of teacher preparation:

⁵Ibid., p. 154.

⁶Edward C. Merrill, Jr., Professional Student Teaching Programs (The Interstate Printers and Publishers, Inc., 1967), p. 4.

(1) Knowledge in academic subject fields--history, language, science, etc. : (2) cognitive knowledge of psychology, sociology, and teaching methodology: and (3) the development of teaching style. The student may acquire the first two aspects by attending classes and studying books, but only in a situation of actual experience can develop the third area.⁷

From the above statement it may be determined that the prospective teacher needs a sound base and realistic background before accepting the role of a teacher under contract.

Although student teaching is a time for the students to practice various theories they have learned in the college classroom, opportunity for additional learning is also available during this directed experience.

As Schorling states:

Student teachers will also have the opportunity to increase their knowledge and experiences if they will participate in all programs of the school and community, rather than limiting themselves to the four walls of the classroom.⁸

Adams and Dickey declare that the role of the teacher is not based solely upon performance in the classroom. They feel that the student does learn in the classroom, but indicate that other activities are also important. They state, "a student teacher gains practical knowledge

⁷Robert W. Houston, Frank H. Blackington, III, and Horton C. Southworth, Professional Growth through Student Teaching (Charles E. Merrill Books, Inc., 1965), p. V.

⁸Raleigh Schorling, Student Teaching (New York: McGraw-Hill Book Co., 1949), p. X.

through participation in programs of the schools, colleges, and community organizations."⁹

Houston, Blackington, and Southworth note in their book that the student teaching experience is time when student teachers have a chance to try various procedures and instructional materials to increase motivation and class enthusiasm. They list many aids and materials that are available for student teachers to take to their classes, and then note, "these resources are neither good nor bad per se, they are only good as they contribute to effective teaching."¹⁰ They also note that students under a master teacher will have opportunity to develop guidelines and finesse in the proper use of various media in the teaching atmosphere.

There are many benefits that come to the student teacher from a student teaching experience. As he learns and as his confidence in his teaching ability increases, certainly other individuals gain, too. The value of his gains cannot be measured accurately, nor can the benefits he provides others be measured as he learns. The benefits he provides others will be discussed in the following paragraphs.

⁹Harold P. Adams and Frank G. Dickey, Basic Principles of Student Teaching (New York, N. Y.: American Book, 1956), p. 231.

¹⁰Houston, Blackington, III, and Southworth, op. cit., p. 223.

GENERAL BENEFITS OF STUDENT TEACHING
PROGRAMS TO THE COOPERATING TEACHER,
THE PUPILS, AND COOPERATING SCHOOL

As the student teacher learns from the supervising teacher, the school and community, and from the pupils in the classroom, it can be assumed that all of these--supervising teacher, pupils, school and community--also benefit from the student teacher. To discuss the benefits for any one of these three areas separately is quite difficult. Any benefits received by one of the three groups almost assuredly will have an effect on the other two. Therefore, this area of the review of literature will deal with the general benefits of student teaching to the supervising teachers, the pupils in the public schools, and to the cooperating schools.

Much research and many writings attest that student teaching is of value to the schools. This was evident in a study by Del Popalo and Hillson. These authors indicated that each of the three categories, listed in the above paragraph, received positive benefits from the student teaching experience. They note that the teacher received benefits from this involvement, which were quite similar to those gained from an inservice program. The pupils benefited from more individualized instruction, and various programs of the school were aided by the enthusiastic involvement of student teachers.¹¹

¹¹Joseph A. Del Popolo and Maurice Hillson, "Student Teaching and the Role of the Public Schools," New York State Education, 51 (March, 1964), 14-16.

More specifically than this, Barberi notes that student teaching provides the bonus of an added pair of hands. He notes, "With two people in the classroom the student teacher was able to give individual attention to pupils, and also relieve the cooperating teacher of many routine tasks, so that more time could be devoted to actual planning and teaching."¹²

Another advantage of a second person in a classroom as stated by Curtis and Andrews is that, "It is often possible that two rather different personalities in a classroom can stimulate more pupils to maximum effort."¹³ The authors continue that often the student teacher may be able to reach pupils in the classroom because of his unique technique, or at times because of the nearness of ages between the student teacher and the pupil. In any case the effect seems to be a positive one that would not have been possible except for the student teacher.

The presence of a student teacher in the classroom often stimulates professional growth in supervising teachers. As they prepare for the arrival of the student teacher in the classroom, they become

¹²Carlo C. Barberi, "A Study of the Acceptance of the Secondary Student Teaching Program as Perceived by Faculty, Administrators, Parents and Pupils in the Mt. Pleasant Public Schools, Mt. Pleasant, Michigan" (Unpublished Ed.D. dissertation, Michigan State University, 1969), pp. 75-78.

¹³Dwight K. Curtis and Leonard O. Andrews, Guiding Your Student Teacher (Prentice-Hall, Inc., 1954, p. 19.

more aware of their own abilities and teaching style. They find themselves making a close personal inventory of their classrooms and programs. Smith states:

Teachers and school principals seem able to talk more freely about what to do for the student teacher or an intern than about what to do for themselves.

While talking about programs for the novice, they inevitably begin to talk about what they can do in their classroom to demonstrate a good program. Assessment of classroom instruction comes in the back door without the usual trauma of stand-off debates in faculty meetings where teachers have to defend or protect themselves and their teaching.¹⁴

From these comments it is seen that it is nearly impossible to produce a positive effect on the classroom without producing similar effect on the school or the pupils. As the student teacher helps a single teacher, he may also help to upgrade the entire educational system.

The Impact Study was completed in Michigan to try to determine the impact of student teaching upon the public schools involved in such programs. Among the questions teachers were asked was, "What do you think should be the attitude of the administrators and teachers in your school about working with student teachers?"¹⁵

¹⁴E. B. Smith, ed., Partnership in Teaching Education (Washington, D. C.: The American Association of Colleges for Teacher Education, 1967), p. 24.

¹⁵Deans and Directors of Teacher Education in Michigan, "The Impact of Student Teaching Programs upon the Cooperating Public Schools in Michigan" (June, 1970).

- 14.1% indicated the school "should aggressively seek student teachers."
- 36.0% indicated the school "should seek student teachers."
- 47.7% indicated the school "should accept student teachers."
- 0.4% indicated the school "should resist having student teachers in the school."
- 0.0% indicated the school "should refuse to have student teachers in the school."

This study indicates that 97.8% of supervising teachers feel the student teaching program is of value, and should be continued. If they had negative feelings about the program, these did not appear in this particular study.

As can be determined from this area of the literature reviewed, student teaching appears to be a beneficial practice for the supervising teacher, the pupils, and the schools.

UNDERGRADUATE PROGRAMS AS THEY RELATE TO STUDENT TEACHING, WITH EMPHASIS UPON THE AIDS, IDEAS OR MATERIAL THEY MAY PROVIDE FOR THE STUDENT TEACHER

So that the novice may properly perform the duties of an elementary student teacher, educational programs have been devised to enhance his chances of success. This portion of the review of literature will deal with various educational events leading to the student teaching assignment. Emphasis will be placed upon that portion of the training of the elementary student teacher that specifically introduces him to

those aids, ideas, or materials that appear beneficial to the pupil, and so increase his skills as a teacher.

Teacher education in the United States today is usually based on a program that is four years in length, although some institutions do have specialized programs requiring five years of study. It is also true that in most cases the states insist upon a four-year college degree before certification is granted. Despite specific variations in requirements, most educational programs are basically similar in structure and goals.

These elementary education programs are usually divided into three areas:

1. The general basic education course sequence, sometimes called liberal arts education.
2. The "Foundations of Education" courses and methods of teaching courses.
3. The directed experiences prior to student teaching often called "the pre-student teaching experience."

Each of these areas is designed to serve a specific function and each adds to the total education experience of the prospective teacher.

The initial college studies are designed to provide the prospective teacher with "a program to give a broad cultural background" as

stated by Hughes.¹⁶ He suggests that at this time in the program of liberal education, the student is allowed to explore various areas of thought and interests. He further states that in this area of the curriculum the student is exposed to much of the subject matter that he will teach in the classroom. This is also a time when the student learns about the areas of interest that "will enable the prospective teacher to function with a broad and acceptable background in the educational setting, and as an individual in the community."¹⁷

Very little is written about the value of other basic courses in the teacher education curriculum in producing specific materials for use by student teachers. However, the students may secure ideas from the discussions or presentations in these classes. Also, the student may produce or observe materials or learn of aids, as he completes projects to meet the requirements of the course.

A great deal is to be gained by the prospective student teacher from the actual education courses. These courses, dealing either with the foundations of education or the technical aspects of teaching, seem to be the courses that have the most influence on the student in regard to materials or ideas that he will use in the classroom.

Hughes indicated the importance of instructional aids that may

¹⁶James Monroe Hughes, Education in America (3rd ed.; Harper & Row, Publishers, 1970), p. 51.

¹⁷Ibid., p. 53.

be used in the classroom by stating, "Instructional aids, teachers and pupils alike agree, tend to make both teaching and learning more interesting. Every year shows an increase in their popularity, in confidence in their effectiveness."¹⁸ He goes on to explain the vast number and variety available to students and teachers. He also notes that teachers who are well trained and well prepared use and benefit from these aids to a great degree.

Many of the foundation courses in education are devised to introduce the student teacher to various aspects of the educational process. In courses on psychology, sociology, history of education, the principles of teaching, and others, specific instructional aids are seldom discussed. Most of the authors of books on these subjects concede that these aids and materials are important to the teaching-learning process, but leave the specific aid or material to be discussed by authors writing about specific subject matter areas. For example, Ohles, in his writing, discusses teacher preparation and emphasizes the value of aids. He notes that "He (the student teacher) needs a practice situation--experimental and permissive--in which he can actually try out various techniques, materials, approaches, and experiment with different styles, see which ones fit, blend with his personality, and develop his own strengths as a teacher."¹⁹

¹⁸Ibid., p. 569.

¹⁹John F. Ohles, Principles and Practice of Teaching (Random House, 1970), p. 69.

Houston, Blackington, and Southworth recognize the great number of instructional aids available for student teachers. They indicate, "The basic purpose for instructional materials is to improve communication, and this improves learning."²⁰ They continue that the important factor of such materials is their value to the pupil. As has been stated earlier in this study, and will be reiterated again: "These resources are neither good nor bad per se--they are only as good as they contribute to effective teaching."²¹ These authors add that a proper amount of teaching skill is needed to produce the desired effects from the aids. They also state that student teachers often become so encumbered in securing instructional materials and aids, they fail to achieve full benefit from these additions to the classroom.

The proper selection of the instructional aids is indeed a key factor in their value in the classroom. Lapeer, Dales, Skipper and Witherspoon state, "It is the use of space, equipment, and instructional materials that determines teaching effectiveness." They continue, "As the teacher plans, provides, and guides, he extracts the most from the children that an interesting and motivated classroom can provide."²²

Another area of the educational sequence prior to student teaching

²⁰Houston, Blackington, III, and Southworth, op. cit., p. 236.

²¹Ibid.

²²Sarah H. Lapeer et. al., Good Schools for Young Children (New York: Macmillan Co., 1968), p. 420.

is the methods courses. Methods courses are usually designed to teach the student teacher what to teach, and how to teach in an effective manner. In the education sequence for the elementary teacher, these courses usually embrace the subject areas of reading, science, social studies, mathematics, audio-visual materials, and language arts. At some colleges there may be methods courses in areas not stated here, or some of these courses may be combined. An example of this would be the union of mathematics and science.

These courses are considered important to the educational program of student teaching, as they provide information relating to various techniques that promote effective instruction. Also, they may be designed to explain the scope and sequence of the subject matter to be covered by the teacher in each grade. In some instances they allow the student to simulate teaching to the class or instructor in a situation which is often called "micro-teaching."

No matter what procedure is followed in the deployment of the class requirements, the methods courses seem to be a major portion of the teacher education program in introducing the student teacher to instructional aids, teaching materials, and innovative ideas that help instruction, if applied correctly.

In the area of the teaching of social studies there are numerous books on procedures to follow in making the subject relevant and interesting to pupils. Two authors who deal with the teaching of social studies through problem solving are Dunfee and Sagl. They note:

Clearly, experiences with newer media of instruction have a place in the problem-solving activities of social studies. Learning by these experiences is frequently more efficient than learning by verbal methods alone, and, used together with reading and telling, audio-visual materials of instruction do much to enhance the understanding and interest of pupils. The skillful use of these materials in problem solving will do much to demonstrate their indispensability and to encourage the expansion of school resources.²³

In their remarks it is noted that they refer to the aids as frequently producing a more efficient procedure for teaching. They also note an increased interest in the subject because of the materials added by the teacher. Another author writing on Social Studies methods agrees with the foregoing authors. He says: "The teacher's problem today then, is not the lack of materials, but how to make the best instructional use of those available to him."²⁴

Reading and language arts methods books have also been written by many individuals. Almost every book notes the vast number of instructional materials available. Arthur Heilman notes:

Paralleling the concern with materials and methodology was a phenomenal increase in the number and types of materials developed for teaching beginning reading. Materials were designed to emphasize certain premises which

²³Maxine Dunfee and Helen Sagl, Social Studies Through Problem Solving, A Challenge to Elementary School Teachers (Holt, Rinehart and Winston, Inc., 1966), p. 201.

²⁴John Jarolimek, Social Studies in Elementary Education 3rd ed.; (New York: The Macmillan Co.; London: Collier-Macmillan Ltd., 1967), p. 105.

promised to be the best approach to reading instruction. Representative examples are augmented English alphabet, diacritical markings, basals following various philosophies, trade books, concomitant stress on reading and writing, use of projected materials (films, filmstrips, etc.), programmed reading workbooks, boxed materials, and reading kits stressing particular facets of reading, ranging from phonics to appreciation of literature.²⁵

From this, one can see that many and varied types of materials are suggested as being valuable to the teaching of reading.

Also in the area of reading, Tinker and McCullough provide a listing of various aids appropriate for the classroom. Their list includes:

The audio-visual aids which may be employed advantageously on one occasion or another include motion pictures, slides, filmstrips, silent and sound pictures, models, specimens, exhibits, graphs, maps, globes, radio and television programs, and phonograph recordings. Material chosen for a particular group should be suited to the children's stage of development and maturity.

Much equipment besides books is used in teaching reading. A large portion of this equipment consists of audio-visual aids such as pictures, filmstrips, and recordings. These aids may be employed at all grade levels to broaden experience, to clarify concepts dealt with in reading, and to stimulate a desire to read.²⁶

²⁵Arthur W. Heilman, Principals and Practices of Teaching Reading (Columbus, Ohio: Charles Merrill Publishing Co., 1967), p. 147.

²⁶Miles A. Tinker and C. M. McCullough, Teaching Elementary Reading 2nd ed.,; (New York: Appleton Century Croft, 1967), p. 99.

Authors of books on the teaching of reading and areas such as science, mathematics, and art express similar concern when considering the selection and use of these materials. They continually note that these aids are aids, and as such their selection and application is most critical. These aids are not to take the place of teaching, but only to supplement the process.

Books related to methods of teaching in areas besides Social Studies and Reading are so numerous that to quote from these other sources would be redundant, as their concern for instructional aids is consistent with, and in most cases quite similar to those already quoted.

Still another area of the education process that occurs prior to the student teaching assignment is the area of "pre-student teaching." This experience has many designations, but in each instance, the pre-student teacher is expected to become involved with some experiences with children and/or teachers. This assignment usually takes place shortly before the actual student teaching, and is designed to apprise the student of some of the events he will encounter in the classroom.

One institution that attempts to provide such experiences is Northwestern University, where students in education are required to

become involved in what is known as the "100 hours" program.²⁷ One hundred hours must be spent in field laboratory experiences, working with children in camps, religious education, schools, and other activities. This activity was designed to acquaint the student with some of the problems that teachers face when dealing with children, and the problems of children in a teacher-student relationship.

A plan quite similar to the "100 hours" program was developed by the City College of New York. This program at C. C. N. Y. was devised to "strengthen students' educational insights prior to student teaching."

The plan of C. C. N. Y. included:

1. A systematic supervised school-visiting program in conjunction with the first course in professional Education sequence (Contemporary Educational Thought).
2. A required supervised group-work field assignment in a community center or school in conjunction with the first course in psychological foundations in Education (Child and Adolescent Development).
3. Additional credited or voluntary assignments as non-teaching school aides.

²⁷Leonard O. Andrews, "Experimental Programs of Laboratory Experiences in Teacher Education," The Journal of Teacher Education, I (December, 1950), pp. 259-67.

4. Observation and participation in a full-blown child guidance clinic (The City College Educational Clinic).²⁸

Here again it is seen that the pre-student teaching experience is devised to acquaint the prospective teacher with events that may take place in the regular classroom.

Another of the goals of pre-student teaching may be to help the prospective teacher develop and re-affirm his interest in the teaching profession. It also may be a time to produce a definitive position against becoming a teacher. Toulouse notes this when he discusses the attitude of students toward teaching, noting that students often become convinced that they want to teach, or they develop a positive attitude against teaching, while they are involved in this pre-student teaching experience.²⁹ He further concludes that early contacts seemed to ease some of the fears of student teaching which the student harbored.

SUMMARY

Each of the various areas of the educational sequence prior to student teaching is intended to produce certain proficiencies that are

²⁸Harold G. Shane, Mary Aline Collis, and Howard V. Meredith, "Improving Instruction in Elementary Education," Improving Instruction in Professional Education, Thirty-Seventh Yearbook of the Association for Student Teaching in Co-operation with the National Society of College Teachers of Education (Cedar Falls, Iowa: The Association for Student Teaching, 1958), pp. 33-46.

²⁹Robert B. Toulouse, "Student Evaluation of Laboratory Experiences in Education," Education Administration and Supervision, 39 (March, 1953), pp. 155-60.

essential in a successful teaching experience. General or liberal education courses provide a broad background for the student. The educational foundation and methods courses offer course content, techniques, and knowledge needed for teaching. Pre-student teaching dramatizes the relationships between students and pupils, by producing an encounter in a educational situation. In each of these areas the novice teacher gains knowledge and competence which increases his overall effectiveness.

The selected literature relevant to this study was reviewed and organized under the headings of (1) the general benefits of student teaching programs to the student teacher, (2) the general benefits of the student teaching programs to the supervising teacher, the schools, and their pupils, and (3) the relationship of undergraduate programs to student teaching with emphasis upon areas of the sequence that inform elementary student teachers of aids, ideas, and materials they may take to their assignments.

Some generalizations may be drawn from this review of literature that are most appropriate for this study. They are:

1. Student teaching is a most critical aspect of teacher education. During this experience students learn to transfer theory into practice in an actual teaching situation. They also learn a great deal about their pupils and themselves during this directed and supervised experience.
2. As the student teacher carries out his classroom assignment and gains in skills and effectiveness, benefits accrue also to

the supervising teacher, the pupils, and the school.

3. The program of course work and directed experiences prior to student teaching provides the student with knowledge for the task of teaching that confronts him, and introduces him to various procedures and methods that are most meaningful in the classroom, and to much knowledge about various aids, ideas, and materials that will enrich the teaching process.

The preponderance of conclusions in the literature and studies reviewed support the premise that student teaching programs provide various positive benefits for the student teacher, the supervising teacher, the pupils, and the schools involved. There is also evidence to indicate that courses in the educational sequence prior to student teaching either demonstrate or teach the various aids, ideas, or materials that student teachers may take to their classes. Evidence is also presented to show that these aids, ideas, and materials do in fact, find their way into the elementary classroom, and with proper application should prove to be an asset to the teaching process.

CHAPTER III

DEVELOPMENT OF THE QUESTIONNAIRES AND SELECTION OF SAMPLE FOR THE STUDY

INTRODUCTION

For this study the use of a questionnaire was considered to be an appropriate method for securing the desired data. Since it has two areas of concern, it was necessary to devise a questionnaire for each phase of the study.

The first phase is related to the aids, ideas, or materials elementary students had taken to their student teaching assignments.

This was divided into three separate sub-problems. They were:

- a. What aids, ideas, or materials did elementary students take to their student teaching assignments?
- b. From what sources did the student receive the ideas about the specific aids, ideas, or materials that were taken to the classroom?
- c. What was the value of the aid, idea, or material taken and used in the classrooms, as perceived by the supervising teacher?

The second phase of this study is also concerned with the sources of aids, ideas, or materials taken to the student teaching assignment.

In this part of the study college personnel were asked where the student teacher should learn about, or be informed of the items that the student teachers had taken to the elementary classroom.

The following procedures were used in developing the questionnaires for this study.

DEVELOPMENT OF THE STUDENT TEACHER AND SUPERVISING TEACHER QUESTIONNAIRES

A group of eighteen student teachers and their supervising teachers acted as a pilot group to determine what aids, ideas, or materials were taken to the elementary classroom by student teachers. The student teachers met weekly in a seminar related to their student teaching activities, and expressed a willingness to cooperate in this study.

At the seminar session, aids, ideas, and materials were discussed, and a listing made of those items that might be taken to a student teaching assignment. The students were then asked to list specific items they had taken to their classrooms. After they had listed the various items they had taken and used, they conferred with their supervising teachers about items they may have overlooked. From responses a composite listing of teaching aids was developed. Although this listing was quite complete, spaces were provided on the final questionnaire form for students to make additions if necessary.

This list of items was then reviewed by the pilot group of the student teachers to determine the sources from which they received

the idea, or where they had been informed about the specific aids or materials that were taken to their assignments. After the students listed the sources of items taken to their assignments, the sources were categorized. Six distinct groups emerged. They were:

1. Methods courses
2. Audio-visual department
3. Library or resource center
4. Pre-education, or liberal education courses
5. Pre-student teaching, formal or informal
6. Educational foundation courses

A seventh option was provided for those sources not included in the previously mentioned groups.

To determine the value of the items taken by the student teacher and used in the classroom, a Likert type scale was employed. The supervising teachers were asked to use their judgment in applying the scale, giving the value of one to five for each item using the following key:

1. It had great positive value, a fine addition to the class.
2. It had some value to the class.
3. It had no value to the class, but was not a distraction.
4. It had a detracting effect, was somewhat of a nuisance.
5. It was a distinct nuisance, very distracting to the class.

Using the information gathered from the pilot group of student teachers, their supervisors, and the help of persons acquainted with

research, a final form for the questionnaire was developed. A copy of the questionnaire used in this phase of the study is located in Appendix A. Letters stating the purpose of the study and a key for marking responses were attached to the questionnaire when distributed to the participants. Copies of the letter and key are located in Appendices B and C.

DEVELOPMENT OF THE QUESTIONNAIRE USED BY COLLEGE PERSONNEL

The second major concern of the study was to determine where, according to college personnel, in the educational sequence prior to student teaching, students should learn about, or be informed of the aids, ideas, or materials that are taken to the elementary student teaching assignment. In completing the questionnaire for the first phase of the study a listing of aids, ideas, and materials taken to the classroom was available. Using this list of items, and the source categories developed for the questionnaires completed by the student and supervising teachers, a second questionnaire was designed to be completed by the college personnel selected for this study. Persons knowledgeable in research techniques were asked to advise on the format and application of the questionnaire. A copy of the questionnaire devised is listed in Appendix D.

SELECTION OF THE SAMPLE FOR THE QUESTIONNAIRE
TO BE COMPLETED BY THE STUDENT AND
SUPERVISING TEACHER

The sample for the first phase of this study was selected from students enrolled in student teaching during the 1971 spring semester at Eastern Michigan University. At the time Eastern Michigan University students are enrolled in student teaching they are also required to enroll in a course known as "Seminar in Education." This seminar is provided to give the student teacher a chance to discuss problems of student teaching and the processes involved in the transition from student to teacher.

Instructors of the seminar groups were contacted. From the classes of these instructors 189 students cooperated in the completion of the questionnaires. These student teachers were assigned to both on-campus and off-campus student teaching centers. The assignments included both inner-city and rural area schools, with the student teachers involved in classes from kindergarten to seventh grade.

The participants were given questionnaires and instruction in a regular seminar meeting during the fifteenth and sixteenth weeks of an eighteen week semester. This was done so it would be near the end of the semester to include nearly all the aids, ideas, and materials that the students may have taken to the classroom. It was also far enough from the completion of the semester to ensure time for the questionnaires to be marked prior to the termination of the student teaching

assignment.

SELECTION OF THE COLLEGE PERSONNEL FOR ANALYSIS
OF SOURCES OF AIDS, IDEAS, AND MATERIALS IN
THE UNDERGRADUATE PROGRAM

Securing data from the second phase of the problem involved the selection of college personnel as participants. The participants were selected from each of the six areas designated earlier as sources of information for aids, ideas, or materials taken to student teaching assignments. After discussing the selection of the sample with research persons it was determined that the following selections would be made in each of the following six areas:

PRE-EDUCATION or LIBERAL EDUCATION: Of the college personnel at Eastern Michigan University involved with this area of education, a total of twenty-five instructors from English, Social Sciences, Art, Mathematics, Science, and Physical Education were involved.

EDUCATIONAL FOUNDATION COURSES: Instructors who have been involved in each of the courses such as Principles of Teaching, School and Society, Educational Psychology, and Seminar in Education were selected. A total of sixteen instructors volunteered to cooperate in this study and became involved from this area of the educational sequence in the teacher education program.

PRE-STUDENT TEACHING: This phase of the program at Eastern Michigan University is administered by the director and his

assistant. Both were involved in the study.

METHODS COURSES: Each instructor involved in the teaching of the methods courses during the past year was involved. A total of fifteen persons were involved in this area.

AUDIO-VISUAL DEPARTMENT: As in pre-student teaching only a small group of persons is involved in the administration of this department, with many students helping with the duties. Four persons from this group responded to the questionnaires sent to them.

LIBRARY AND RESOURCE CENTER: Library personnel and resource center personnel were invited to respond. As in the Audio-Visual and pre-student teaching departments a few persons administer the program with the help of many students. Twelve persons volunteered and became involved with this study from the Library and Resource Center.

From these six areas a total of seventy-four persons became involved in this phase of the study. Each was given a questionnaire with an introductory letter and a key to explain the various areas of concern in the study and the procedures to follow in making responses. Copies of the letter and key used for this phase of the study are listed in Appendices E and F.

TABULATION OF RESULTS

Tabulation of the returned questionnaires was completed manually. Returns were scored on master charts listing the various aids, ideas,

and materials taken to the student teaching assignment, the sources of the items taken as indicated by the student teachers, and value of the items as determined by the supervising teacher.

Various tables and charts have been used to display the results of the questionnaires. Discussion of the tables, charts, and mathematical computations is offered later.

Returned questionnaires from the college personnel involved have been tabulated and handled in a similar manner.

One of the major concerns of the study is related to the sources of the aids, ideas, and materials taken to the classroom by the elementary student teacher. The sources of the items as stated by the student teachers have been compared with the responses made by the college personnel in determining the responsibility for teaching or informing the student about specific teaching aids taken and used in the classroom. It was the hypothesis of the study that there will be no significant difference between the responses from the two groups. Comparable data was handled with the use of the Chi Square formula.

SUMMARY

Information for this study was gathered with the use of questionnaires that were devised with the cooperation of a selected group of participants, as well as other knowledgeable persons who work with research and research techniques. These tools were selected to secure data relating to the two main concerns of this study, namely,

(1) what aids, ideas, and materials do student teachers take to their assignments, what is the source of the teaching aid and what value did the supervising teacher feel the item had in the classroom; and (2) where in the undergraduate program do college instructors and administrators assign the responsibility for teaching or informing the students of the various items taken to the student teaching assignment.

Results from returns have been discussed as they relate to the importance and need of the study, using charts, tables, and mathematical computations to emphasize points of interest and importance.

CHAPTER IV

PRESENTATION OF DATA RECEIVED

INTRODUCTION

In this chapter responses from the returned questionnaires are presented. The results have been divided into five phases, and appear in the following sequence. (1) The aids, ideas, and materials taken to the classroom by selected elementary student teachers. (2) The sources of items taken to the elementary classroom as perceived by selected college personnel. (5) The comparisons of responses of student teachers and college personnel in designating sources of items taken.

To display the results in the five phases listed above various lists and tables have been constructed. Along with these lists and tables, percentage and Chi Square tabulations have been computed for further clarification.

AIDS, IDEAS, AND MATERIALS TAKEN TO THE
CLASSROOM BY SELECTED ELEMENTARY
STUDENT TEACHERS

A total of 189 questionnaires were given to elementary student teachers to be completed for this study. Of these, 136 or 71.9 per cent were completed and returned. From these 136 returns it was found that 1,185 items were taken and used in the classrooms. This is a mean of 8.7 items for each student teacher. The number of items taken to the classroom by students ranged from a high of twenty-six items to a low of one item.

A complete listing of these aids, ideas, and materials taken to the classroom is presented in Table I. These items have been ranked, placing those taken most frequently listed first. With each item there is a numeral indicating the number of student teachers who took that specific item to their assignments.

The list presented in Table I may not be complete for two reasons: (1) Although students were asked to indicate if they had taken an item, they were not asked to designate if they had taken more than one of that item. For example, a student teacher may have indicated sixteen milimeter film. From this response it is impossible to determine if one film or several films had been taken. (2) As this study was completed during the fifteenth and sixteenth weeks of a semester with eighteen weeks, it may have been possible for student

teachers to take items after completing and returning the questionnaires.

TABLE I
AIDS, IDEAS, AND MATERIALS TAKEN TO THE
ELEMENTARY CLASSROOM BY SELECTED
STUDENT TEACHERS

Aid, Idea, or Material (Number Taken)	
16mm films (121)	live plants (14)
film strips (58)	film strip/sound (14)
text books (54)	video tapes (14)
games (48)	puppets (12)
fiction books (45)	learning laboratories (11)
duplicated materials (44)	color/b&w slides (10)
reference books (43)	time lines (10)
overhead transparencies (35)	live animals (9)
models (34)	aquarium (8)
work books (33)	rock collections (8)
tape recordings (33)	magnetic board (8)
mimeographed materials (32)	peg board (8)
recordings (30)	music books (7)
pictures-painting (28)	resource persons (7)
displays (27)	graphs (7)
periodicals, newspapers (25)	terrarium (5)
poetry books (25)	coin collection (4)
pamphlets (24)	country unit kits (3)
number lines (21)	seeds (3)
puzzles (19)	specimens (3)
programmed materials (18)	stamp collection (2)
flannel board (18)	paper money collection (1)
charts (18)	poster collection (1)
cameras/snap shots (17)	relief map (1)
8mm films (17)	sociogram (1)
field trips (16)	team-teaching (1)
electric boards (16)	individualized instruction (1)
globes (15)	role-playing (1)
diarama (15)	
bulletin board/experience chart (15)	
mystery books (14)	

From Table I it is noted that a total of sixty-two different aids, ideas, and materials were taken to the classroom by the elementary student teachers involved in this study. Of these items, the teaching aid most frequently used was the sixteen millimeter film. Following the sixteen millimeter film in rank order were film strips, text books, educational games, fiction books, and duplicated materials. Items such as a paper money collection, a poster collection, a relief map, a sociogram, the use of role playing, the introduction of team teaching, and individualized instruction were taken least, as these only appeared once in the listings completed by respondents.

When reviewing the items in Table I, it is apparent that the list includes only teaching aids and materials. Acknowledgement of teaching ideas was not evident by responses of participants. Since, according to respondents of this study, there were no ideas introduced to the classroom, all items could come under the heading of instructional materials, and not teaching, aids, ideas, and materials as stated in the instrument used in the Impact Study. From this point on this study will refer to the items taken and used by elementary student teachers as "instructional materials."

SOURCES OF INSTRUCTIONAL MATERIALS TAKEN TO THE CLASSROOM AS DETERMINED BY SELECTED ELEMENTARY STUDENT TEACHERS

At the time student teachers were reporting the instructional materials taken to the classroom, they were also asked to indicate the

source, or sources, from which they had learned about the specific teaching instructional materials they had indicated. Student teachers were given seven options to indicate the source of information for each item taken to the classroom. These seven options were: pre-education courses, educational foundation courses, methods courses, pre-student teaching, the library or resource center, the audio-visual department, and "other" sources.

A complete listing of all items taken to the classroom by respondents in this study is found in Appendix G. Along with the list of items, the sources of information for each item, as indicated by student teachers, are also recorded.

Because this list of items is lengthy, it has been categorized into eleven groups of similar items for discussion. Following are these eleven classifications with the specific items that make up each category. Four items listed in Table I are not found in the eleven categories listed below. These were omitted because student teachers failed to indicate the source from which they received information about these ideas. The four omitted are: the sociogram, team teaching, individualized instruction, and role playing.

Projected Items--Sixteen millimeter films, film strips, overhead transparencies, eight millimeter films, film strips with sound, video-tapes, and color or black and white slides.

Books and Commercially Printed Materials--Text books, reference books, fiction books, periodicals, magazines, newspapers, work books, poetry books, pamphlets, mystery books, and music books.

Multiple Copied Materials--Liquid duplicated materials, mimeographed materials.

Visual Materials--Models, displays, charts, pictures, paintings, camera or snap shots, diarama, bulletin board, experience charts, globes, flat maps, time lines, graphs, and relief maps.

Programmed Material--Programmed materials, learning laboratories.

Recorded Matter--Tape recordings, records, cassette tapes.

Live Materials--Live plants, live animals, live insects, aquarium, terrarium, seeds.

Collections--Rock collections, coin collections, specimen collection, stamp collection, money collection, poster collection.

Community Resources--Field trips, resource persons, unit kits about countries.

Games and Cards--Educational games, flash cards, number lines, educational puzzles, puzzles, puppets.

Display Boards--Flannel boards, electric boards, magnetic boards, peg boards.

These eleven categories are listed again in Appendix H. With each category is the number of responses student teachers gave in indicating the source, or sources, of information of the instructional materials they took to the elementary classroom. These categories have been placed in rank order, with items having the most responses appearing first.

The following table lists the "books and commercially printed materials" with the sources of these items as indicated by the student teachers:

TABLE II

SOURCES OF INFORMATION RELATED TO
INSTRUCTIONAL MATERIALS IN THE "BOOKS AND
COMMERCIALY PRINTED MATERIALS" GROUP AS INDICATED
BY SELECTED STUDENT TEACHERS

Books and commercially printed material	Sources of Information							Totals
	Pre. Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
No. taken 269								
No. of Responses	35	30	90	12	183	5	0	355
Percentages	9.8	8.4	25.3	3.4	51.5	1.4	0	99.8

From Table II it may be noted that student teachers took 269 items of this group to their classrooms, but indicated that they had received the information from 355 sources. The source which provided 183, or 51.5 percent, of the responses was the library or resource center. The methods courses also provided a great deal of information for the students as ninety, or 25.3 percent, of the responses indicated fell in this group. The remaining sources in decreasing rank were: pre-education courses, educational foundation courses, pre-student teaching, and the audio-visual department.

Following is a listing of the "projected items" category, with the sources as indicated by the participants. It may be noted that for the 269 items they indicated a sources response of 316.

TABLE III

**SOURCES OF INFORMATION RELATED TO
INSTRUCTIONAL MATERIALS IN THE "PROJECTED
ITEMS" GROUP AS INDICATED BY SELECTED
STUDENT TEACHERS**

Projected Items	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
No taken 269								
No. of Responses	2	5	56	10	81	160	2	316
Percentages	.6	1.6	17.7	3.2	25.7	50.6	.6	100.

Table III shows that the most common source for these items was the audio-visual department, with 160, or 50.6 percent, of the responses. The second most prolific source was the library or resource center with 81 or 25.7 percent of the responses, with the methods courses ranking third with 56, or 17.7 percent, of the responses. Other sources in decreasing order were: pre-student teaching, educational foundation course, and identical responses from pre-education courses and "other" sources.

Following is a listing of the sources of instructional materials in the "visual materials" group. Student teachers indicated that they received information about these 199 items from 230 sources.

TABLE IV
SOURCES OF INFORMATION RELATED TO
INSTRUCTIONAL MATERIALS IN THE "VISUALS"
GROUP AS INDICATED BY SELECTED
STUDENT TEACHERS

Visuals	Sources of Information							Totals
	Pre-Ed. Crs.	Edl. Fnd. Crs.	Meth-ods Crs.	Pre-St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth-ers	
No. Taken 199								
No. of Responses	10	17	89	17	57	34	6	200
Percentages	4.3	7.4	38.7	7.4	24.8	14.8	2.6	100

Table IV shows that the largest rate of incidence was the methods courses with 89, or 38.7 percent, of the responses. The library or resource center was next with 57, or 24.8 percent, of the responses. The Audio-visual department was third most prolific with 34, or 14.8 percent of responses. The other sources in decreasing order were: identical counts for pre-student teaching and educational foundation courses, pre-education courses, and "other" sources.

Data presented below demonstrate the responses students made for sources of information for the items in the "games and puzzles" category. As shown in Table V students indicated 150 sources for the 134 items taken in this category:

TABLE V

**SOURCES OF INFORMATION RELATED TO
INSTRUCTIONAL MATERIALS IN THE "GAMES AND
PUZZLES" GROUP AS INDICATED BY SELECTED
STUDENT TEACHERS**

Games and Puzzles	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
No. Taken 134								
No. of Responses	12	4	95	12	24	0	3	150
Percentages	8.0	2.7	63.3	8.0	16.0	.0	2.0	100

In this group respondents marked the methods courses as the most productive, with 95, or 63.3 percent, of the responses. The source that provided the next greatest amount of information as indicated by the students was the library or resource center, with 24, or 16.0 percent, of the responses. The other sources in diminishing order were: pre-education courses and pre-student teaching, educational foundation, and "other" sources.

The sources for information in the "multiple copy" group are listed next. In this table it may be noted that for the 76 items, the student teachers indicated 99 sources:

TABLE VI

**SOURCES OF INFORMATION RELATED TO
INSTRUCTIONAL MATERIALS IN THE "MULTIPLE COPY
MATERIALS" GROUP AS INDICATED BY SELECTED
STUDENT TEACHERS**

Multiple copied Materials	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
No. Taken 76								
No. of Responses	4	18	43	12	15	6	1	99
Percentages	4.0	18.2	43.4	12.1	15.1	6.1	1.0	99.9

Of the 99 sources indicated by student teachers, 43, or 43.4 percent, of the responses were in the methods courses area. The educational foundation courses provided 18, or 18.2 percent, of the responses. The remaining sources in decreasing rank were: the library or resource center, pre-student teaching, audio-visual department, pre-education courses, and "other" sources.

Table VII is a listing of the sources student teachers indicated for the items in the "recorded materials" group. In this group students indicated that they had taken 63 items, but listed 67 sources.

TABLE VII

SOURCES OF INFORMATION RELATED TO
INSTRUCTIONAL MATERIALS IN THE "RECORDED MATTER"
GROUP AS INDICATED BY SELECTED
STUDENT TEACHERS

Recorded Matter	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
No. Taken 63								
No. of Responses	2	6	4	6	25	24	0	67
Percentages	2.9	8.9	5.9	8.9	37.3	35.8	.0	99.6

The most common source of information for the items in this group was indicated to be the library or resource center, with 25, or 37.3 percent, of the responses. Following closely was the audio-visual department, with 24, or 35.8 percent, of the responses. Subsequent in order were: the educational foundation courses, pre-student teaching, methods courses, and pre-education courses.

On fifty occasions student teachers indicated they had taken display boards to their student teaching assignments. They also indicated that they had received information about these "display boards" from 59 sources. Table VIII is a display of sources that the student teachers indicated:

TABLE VIII

SOURCES OF INFORMATION RELATED TO
INSTRUCTIONAL MATERIALS IN THE "DISPLAY BOARDS"
GROUP AS INDICATED BY SELECTED
STUDENT TEACHERS

Display Boards	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
No. Taken 50								
No. of Responses	0	3	38	4	10	4	0	59
Percentages	.0	5.1	64.4	6.8	16.9	6.7	.0	99.9

Of the sources listed in the preceding table it is noted that the most productive source was the methods courses with 38, or 64.4 percent, of the responses. The next highest source was designated as the library or resource center, with ten, or 16.9 percent, of the responses. Other productive sources were: the audio-visual department, pre-student teaching, and the educational foundation courses.

In the next group of items taken to the student teaching assignments it was indicated that the students learned of the 47 aids, ideas, or materials from 47 sources. These sources for the "live specimen" group are presented in Table IX, which follows:

TABLE IX

SOURCES OF INFORMATION RELATED TO
INSTRUCTIONAL MATERIALS IN THE "LIVE SPECIMEN"
GROUP AS INDICATED BY SELECTED
STUDENT TEACHERS

Live Specimen	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
No. Taken 47								
No. of Responses	6	0	29	4	1	3	4	47
Percentages	12.7	.0	61.7	8.5	2.2	6.3	8.5	99.9

The area of education that was reported to provide the greatest amount of information for live specimens was the methods courses with 29, or 61.7 percent, of the responses. Pre-student teaching courses were next with six, or 12.7 percent, of the responses. Also providing information were pre-education courses and "other" sources, the audio-visual department, and library or resource center.

In Table X is the list of sources for the instructional materials in the "programmed materials" group:

TABLE X

SOURCES OF INFORMATION RELATED TO
INSTRUCTIONAL MATERIALS IN THE "PROGRAMMED
MATERIALS" GROUP AS INDICATED BY SELECTED
STUDENT TEACHERS

Programmed Materials	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
No. Taken 29								
No. of Responses	0	0	13	0	11	5	0	29
Percentages	.0	.0	44.8	.0	37.9	17.2	.0	99.9

From the results listed in this table it is indicated that student teachers learn of programmed materials 13, or 44.8 percent, of the times from the methods courses. The library or resource center, with eleven, or 37.9 percent, of the responses was next in sequence, with the audio-visual department providing five, or 17.2 percent, of the responses.

In the "community resources" group student teachers indicated that they had taken 26 items to their classrooms. For these 26 instructional materials they indicated they had received the information from 27 sources. Table XI is the tabulation of the results of student teacher responses in this group:

TABLE XI

SOURCES OF INFORMATION RELATED TO
INSTRUCTIONAL MATERIALS IN THE "COMMUNITY
RESOURCES" GROUP AS INDICATED BY SELECTED
STUDENT TEACHERS

Community Resources	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
No. Taken 26								
No. of Responses	0	0	17	1	9	0	0	27
Percentages	.0	.0	62.9	3.7	33.3	.0	.0	99.9

In this group the methods courses provided the greatest amount of information with seventeen, or 62.9 percent, of the responses. The library or resource center was next with nine, or 33.3 percent, of the responses. Pre-student teaching provided one response.

The group with the least number of items taken to the student teaching assignment was the "collections" group. For the nineteen items taken to the classroom the student teachers indicated that they received their information from twenty sources. Table XII is the resumé of these responses:

TABLE XII

SOURCES OF INFORMATION RELATED TO
INSTRUCTIONAL MATERIALS IN THE "COLLECTIONS"
GROUP AS INDICATED BY SELECTED
STUDENT TEACHERS

Collections	Sources of Information							Totals
	Pre-Ed. Crs.	Edl. Fnd. Crs.	Meth-ods Crs.	Pre-St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth-ers	
No. Taken 19								
No. of Responses	0	0	4	2	5	0	9	20
Percentages	.0	.0	20.0	10.0	25.0	.0	45.0	100.0

Of the items taken in this group, respondents indicated they received much of their information from no specific course sequence, as they listed nine, or 45 percent, of their responses in the "other" column. They indicated the library or resource center on five, or 25 percent, of the responses, and the methods courses with four, or twenty percent, of the responses. Pre-student teaching provided two responses in this group.

By reviewing the totals line of Appendix H it may be determined which area of education prior to student teaching was most productive for providing information relative to the instructional materials taken to the classroom by elementary student teachers. This totals line from Appendix H appears in Table XIII. The totals are in numerical form as well as in percentage form.

TABLE XIII

SOURCES OF AIDS, IDEAS, AND MATERIALS AS
INDICATED BY SELECTED STUDENT TEACHERS

Sources of Items	Number of Responses	Percentage of Responses
Methods Courses.	478	34.2%
Library or Resource Center.	424	30.2%
Audio-Visual Center.	242	17.2%
Educational Foundation Courses	83	5.9%
Pre-Student Teaching Experience.	80	5.7%
Pre-Education Courses	71	5.0%
Other Sources	25	1.7%
Totals.	1403	99.9%

From Table XIII it is determined that the area of education prior to student teaching which is most frequently indicated as the source of information for instructional materials, as reported by respondents in this study, is the methods courses. These methods courses were designated as responsible for 34.2 percent of the information student teachers secured related to instructional materials taken to the classroom.

The library or resource center was the second most productive

area for providing information for student teachers. Respondents indicated that 30.2 percent of their information came from these sources.

The third most productive source was the audio-visual department. This department provided 17.2 percent of the sources of information as indicated by the students in this study.

The educational foundation courses, pre-student teaching, and pre-education courses were rated nearly equal in importance for providing information related to instructional materials for student teachers. The ratings for these three groups is as follows: educational foundation courses, 5.9 percent; pre-student teaching, 5.7 percent; and pre-education courses 5.0 percent.

Only twenty-five, or 1.7 percent, of the students indicated their sources from outside the six groups of courses and experiences listed above. These twenty-five responses in the "other" group included the following sources: television programs designed for small children, regular television programs, television commercials, store displays, conversations with practicing teachers, magazines, college roommates, their own education, newspaper articles, advertisements, and highway advertisements.

VALUE OF INSTRUCTIONAL MATERIALS TAKEN TO THE
ELEMENTARY STUDENT TEACHING ASSIGNMENT, AS
DETERMINED BY THE SUPERVISING TEACHERS

In the first phase of this study student teachers designated the various instructional materials they had taken to the classroom. The supervising teachers were then asked to evaluate each item as it was applied to the learning process in the classroom. The supervising teachers were given a Likert type scale with five possible choices for making this decision. These five options were:

1. The item had great positive value, a fine addition to the classroom.
2. The item had some value in the classroom.
3. The item had no value in the classroom, but at the same time it was not a distraction.
4. The item was somewhat of a nuisance, having a deterring effect on the learning process.
5. The item was a distinct nuisance in the classroom, having a great distracting effect on the learning process.

After the supervising teachers had completed this portion of the questionnaire, an arithmetic mean was tabulated for ratings given to the various items student teachers had taken to the classroom. A complete listing of instructional materials taken to the elementary classroom by student teachers has been placed in Appendix I. With each of the items in this listing is the arithmetic mean of the ratings given the teaching aids by the supervising teachers. The items have been placed in rank order, with those receiving the better ratings

having been placed first in this Appendix. From these tabulations it is noted that several instructional materials received a mean score of 1.00, indicating that they had the highest possible rating for value to the classroom. These items were: a relief map, seeds, a stamp collection, a paper money collection, specimens, a poster collection, and country unit kits. At the other extreme, mimeographed materials had a mean score of 2.09, peg boards a mean score of 2.00, and work books a mean score of 1.91.

Using the eleven categories designated earlier in this chapter, the various items have been grouped again for further explanation. These groupings are listed in Table XIV. Along with each grouping is the composite of responses that supervising teachers gave the items in estimating their value in the classroom. They are placed in rank order with the categories having the lower mean scores, indicating greater value to the classroom, appearing first.

From Table XIV it is noted that the category which received the best rating was the "community resources" group. This group had a mean score of 1.15 as its overall rating. The category with the second best rating was the "live specimen" group, with an overall rating of 1.31. The third highest group received a rating of 1.35. This was the "collections" group.

Observation of Table XIV shows that the fourth group, "programmed materials," had a mean score of 1.48. This score was only slightly superior to the "visuals" group, with a mean score of 1.50.

TABLE XIV

VALUE OF AIDS, IDEAS, AND MATERIALS TAKEN TO
THE CLASSROOM BY STUDENT TEACHERS AS
DETERMINED BY THE SUPERVISING TEACHERS

Group of Items	Ratings					Mean Rating of Group
	1	2	3	4	5	
Community Resources	22	4	0	0	0	1.15
Live Specimens	33	13	1	0	0	1.31
Collections	13	5	1	0	0	1.36
Programmed Materials	19	7	2	1	0	1.48
Visuals	110	79	9	1	0	1.50
Recording Materials	52	62	6	0	0	1.57
Games-Puzzles	46	48	6	0	0	1.60
Books-Commercially Printed Materials	132	107	27	1	1	1.63
Projected Materials	132	101	31	0	0	1.66
Display Boards	20	24	6	0	0	1.72
Multiple Copies	32	29	5	0	0	1.91
Totals	611	479	94	1	1	1.60

The sixth ranking group, "recordings," had a rating of 1.57. In the seventh group, "games and puzzles," the teachers indicated their value at a rating of 1.60.

Supervising teachers also reported that "books and printed matter" had a mean value of 1.63 in the classroom. "Projected matter" had a rating of 1.66 for ninth ranking in the overall group. The last two groups were the "display boards" and multiple copies" groups. These two groups had mean ratings of 1.72 and 1.91 respectively.

Table XV is the result of lifting the totals line from Table XIV and computing the responses in both numerical and percentage forms.

From this table it may be determined that of the 1,204 responses received from the supervising teachers in evaluating the aids, ideas, and materials taken to the classroom by elementary student teachers, 611, or 50.8 percent of the items were given a rating 1.00. This indicates that over one half of the items taken to the classroom were considered to be of great positive value to the learning environment. At the same time it may be seen that 479 of the items taken to the classroom were in the "2" rating group, indicating that they had some value to the teaching situation and the learning climate in the classroom.

Nineteen items, or 1.6 percent of the responses from supervising teachers received a rating of "4", indicating that the aid or material was a nuisance to the classroom, and somewhat of a

distraction. Only one item of the 1,204 was enough of a distraction to be a distinct nuisance, and merited a rating of "5".

TABLE XV

VALUE OF ALL INSTRUCTIONAL MATERIALS, TAKEN
TO THE CLASSROOM BY STUDENT TEACHERS, AS INDICATED
BY THE SUPERVISING TEACHERS

Ratings	Responses Per Rating	Percentage of Responses
1	611	50.8%
2	479	39.8%
3	94	7.7%
4	19	1.6%
5	1	.001%
Totals	1204	99.901%

SOURCES OF INSTRUCTIONAL MATERIALS TAKEN
TO THE STUDENT TEACHING ASSIGNMENT, AS
SUGGESTED BY SELECTED COLLEGE PERSONNEL

After student teachers had determined the items that were taken to the elementary classroom, college personnel were asked to indicate where they thought the student teachers should learn about, or be informed of each instructional material. These college personnel were selected because of their teaching assignment or administrative position, as suggested in Chapter III.

Results of these seventy-four questionnaires have been tabulated to show how college personnel responded when designating where they thought student teachers should learn of the items taken to their elementary student teaching assignments. This listing of the data from the returned questionnaires is located in Appendix J. For presentation these items have been grouped into eleven categories as in previous portions of this chapter.

The results of this grouping, along with the responses of the college personnel, are located in Appendix K. Each of these groups in this appendix will be discussed separately in the following paragraphs.

In discussing these responses, it is to be noted that with the "projected items" group there is a base response numeral. This base response is the number of responses possible if the college personnel respondents marked only one source of information for each

item in the questionnaire. This base response has been determined by taking the number of respondents of the college personnel (74) and multiplying it by the number of items in the "projected items" group (7), giving a base response of 518 for this specific group. However, in Table XVI it may be seen that there were 705 actual responses from college personnel when they indicated where they thought student teachers should learn of the instructional materials in the "projected items" group. This indicates that these respondents felt student teachers might learn of specific items in more than one area of the educational sequence prior to student teaching. Data relative to the "projected items" group are listed in the following table:

Referring to the following table it may be seen that the actual response count was 705. Of these responses, 323, or 45.8 percent were placed in the audio-visual department source category by the college personnel, with 291, or 41.2 percent marked in the methods courses. Also receiving responses for the responsibility of teaching of items in the "projected items" group in decreasing order were: the pre-education courses, the educational foundation courses, the pre-student teaching experience, and the library or resource center. On twelve occasions, respondents indicated no category should have the responsibility for teaching of these items.

TABLE XVI

**DESIGNATED AREAS OF RESPONSIBILITY FOR TEACHING OF
INSTRUCTIONAL MATERIALS IN THE "PROJECTED
ITEMS" GROUP AS INDICATED BY
SELECTED COLLEGE PERSONNEL**

Projected Items	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
Base Response 518								
No. of Responses	34	27	291	16	2	323	12	705
Percentages	4.8	3.8	41.2	2.2	.3	45.8	1.7	99.8

The following table, Table XVII, is the tabulation of responses made by college personnel in the "books and printed materials" group of items. From a base response of 666, respondents marked an actual response of 911. Again this indicates that college personnel felt that some items should be taught by more than one category of courses.

In this "books and commercially printed matter" group of items college personnel indicated that the methods courses should be the most productive for teaching of these items, as they gave 352, or 38.6 percent of the actual responses to this category. The methods courses were closely followed by the library or resource center, which received 351, or 38.5 percent of the responses. Pre-education

TABLE XVII

DESIGNATED AREAS OF RESPONSIBILITY FOR TEACHING OF
INSTRUCTIONAL MATERIALS IN THE "BOOKS AND
COMMERCIALY PRINTED MATERIALS" GROUP AS INDICATED
BY SELECTED COLLEGE PERSONNEL

Books and Commercially Printed Materials	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
Base Response 666								
No. of Responses	126	37	352	24	351	0	21	911
Percentages	13.8	4.0	38.6	2.6	38.5	.0	2.3	99.8

courses, educational foundation courses, and pre-student teaching followed in decreasing order. On twenty-one occasions the respondents felt no group was responsible for teaching of certain items.

Table XVIII is a list of the sources suggested by college personnel as those responsible for teaching of "multiple copy materials." In this group there was a base response of 148 and an actual response of 173, again indicating respondents felt student teachers should learn of certain items from more than one source.

As one studies this table it is apparent that the methods courses were designated as most responsible for teaching about multiple copy materials, as this source was given in 98, or 56.6 percent of the actual responses. Following the methods courses were the

TABLE XVIII

DESIGNATED AREAS OF RESPONSIBILITY FOR TEACHING
OF INSTRUCTIONAL MATERIALS IN THE "MULTIPLE
COPY MATERIALS" GROUP AS INDICATED BY
SELECTED COLLEGE PERSONNEL

Multiple Copied Materials	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Gen.	A. V. Dept.	Oth- ers	
Base Response 148								
No. of Responses	26	34	98	2	12	0	1	173
Percentages	15.0	19.6	56.6	1.1	6.9	.0	.6	99.7

educational foundation courses with 34, or 19.6 percent, of the responses and the pre-education course with 26, or 15 percent, of the responses. Other groups in decreasing order were the library or resource center and pre-student teaching. On only one occasion did a respondent feel it was not the responsibility of any category.

In the next group, "recorded materials," there was a base response of 148, with an actual response of 233. Here again it is demonstrated that college personnel felt that more than one group of courses should be responsible for teaching of some items. Table XIX displays the responses in this group:

TABLE XIX

**DESIGNATED AREAS OF RESPONSIBILITY FOR TEACHING
OF INSTRUCTIONAL MATERIALS IN THE "RECORDED
MATTER" GROUP AS INDICATED BY SELECTED
COLLEGE PERSONNEL**

Recorded Matter	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
Base Response 148								
No. of Responses	16	14	85	4	26	88	0	233
Percentages	6.8	6.0	36.4	1.7	11.1	37.7	.0	99.7

College personnel designated the audio-visual department as responsible for teaching of recorded matter with 88, or 37.7 percent, of their responses. The next highest area for responsibility was the methods courses with 85, or 36.4 percent, of the responses. After these categories the following received recognition in diminishing order: the library or resource center, the pre-education courses, the educational foundation courses, and pre-student teaching experience.

The category listed as the "visuals" group had a base response of 888, but an actual count of 1,140 responses. These data are located in Table XX, along with the sources indicated by the college personnel:

TABLE XX

DESIGNATED AREAS OF RESPONSIBILITY FOR TEACHING
OF INSTRUCTIONAL MATERIALS IN THE "VISUALS"
GROUP AS INDICATED BY SELECTED
COLLEGE PERSONNEL

Visuals	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
Base Response 888								
No. of Responses	186	47	567	49	239	31	21	1140
Percentages	16.3	4.1	49.7	4.2	20.9	2.7	1.8	99.7

In this "visuals" group, the methods courses were listed as the group that should provide the most information to student teachers, as it had 567, or 49.7 percent, of the responses. Following the methods courses were the library or resource center with 239, or 20.9 percent, of the responses, and the pre-education courses with 186, or 16.3 percent, of the responses. Also suggested as sources for student teachers in decreasing order were the pre-student teaching experience, the educational foundation courses, and the audio-visual department. In 21 instances college personnel felt that no one course category should have the responsibility for teaching of the items in this group.

In the "programmed materials" group it was possible for college personnel to have a base response of 148. However, they indicated

206 actual responses for these items. The following table designates how these responses were divided:

TABLE XXI

DESIGNATED AREAS OF RESPONSIBILITY FOR TEACHING
OF INSTRUCTIONAL MATERIALS IN THE "PROGRAMMED
MATTER" GROUP AS INDICATED BY SELECTED
COLLEGE PERSONNEL

Programmed Matter	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
Base Response 148								
No. of Responses	28	12	102	4	60	0	0	206
Percentages	13.5	5.8	49.5	1.9	29.1	.0	.0	99.8

As one reviews the content of Table XXI it may be seen that the methods courses were designated as having the responsibility of teaching those items, as these courses received 102, or 49.5 percent, of the responses. The next most mentioned category was the library or resource center with 60, or 29.1 percent, of the responses. Following in decreasing order were these sources: the pre-education courses, the educational foundation courses, and pre-student teaching.

It was possible for college personnel to produce a base response of 444 in the "live specimen" group. However, they indicated a total of 510 actual responses. These responses are presented by the

tabulations in Table XXII, which follows:

TABLE XXII

DESIGNATED AREAS OF RESPONSIBILITY FOR TEACHING
OF INSTRUCTIONAL MATERIALS IN THE "LIVE SPECIMENS"
GROUP AS INDICATED BY SELECTED
COLLEGE PERSONNEL

Live Specimens	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
Base Response 444								
No. of Responses	114	12	312	38	6	0	28	510
Percentages	22.3	2.3	61.1	7.4	1.1	.0	5.4	98.6

Once again the methods courses were rated as those courses most likely to teach of the items in this group as they received 312, or 61.1 percent, of the responses. Following the methods courses as a source was the pre-education courses with 114, or 22.3 percent, of the responses. In decreasing order the other sources listed were: the pre-student teaching experiences, the "others" category, the educational foundation courses, and the library or resource center.

In Table XXIII which follows, the responses from college personnel relating to "collections" are listed. This group had an actual response count of 396, from a base count of 370.

TABLE XXIII

DESIGNATED AREAS OF RESPONSIBILITY FOR TEACHING OF
INSTRUCTIONAL MATERIALS IN THE "COLLECTIONS"
GROUP AS INDICATED BY SELECTED
COLLEGE PERSONNEL

Collections	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
Base Responses 370								
No. of Responses	56	15	200	25	35	0	65	396
Percentages	14.1	3.7	50.5	6.3	8.8	.0	16.4	99.8

Of these 396 responses 200, or 50.5 percent, were placed in the methods courses category, indicating those courses as the most likely to produce information for student teachers relative to "collections." The college personnel felt that this was not the responsibility of any group in 65, or 16.4 percent, of the responses, and placed in rank order the following sources: the pre-education courses, the library or resource center, the pre-student teaching experience, and the educational foundation course.

The results of the responses from college personnel, Table XXIII, are noted as they concerned themselves with the aids, ideas, and materials in the "community resources" group. From a base response of 222 they indicated 287 actual responses, thus again

indicating that some items should be taught to student teachers in more than one area of the educational sequence prior to student teaching.

TABLE XXIV

DESIGNATED AREAS OF RESPONSIBILITY FOR TEACHING OF
INSTRUCTIONAL MATERIALS IN THE "COMMUNITY"
RESOURCES" GROUP AS INDICATED BY SELECTED
COLLEGE PERSONNEL

Community Resources	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
Base Responses 222								
No. of Responses	32	21	151	15	66	0	1	287
Percentages	11.1	7.3	52.9	5.2	22.9	.0	.3	99.7

Referring to the responses in this table, college personnel felt the student teachers should learn a great deal of the "community resources" items from the methods courses, as they placed 152, or 52.9 percent, of their responses in this category. They placed 66, or 22.9 percent, of their responses in the library or resource center, and lesser amounts in each of the following categories: the pre-education courses, the educational foundation courses, the pre-student teaching experience, and "other" sources.

In the group of items under the heading of "games and puzzles," college personnel gave an actual response of 507 from a base response

of 370. This indicates that respondents could not limit their responses to one source, but on many occasions gave multiple selections. Table XXV lists the results of their responses as they related to this group:

TABLE XXV

**DESIGNATED AREAS OF RESPONSIBILITY FOR TEACHING OF
INSTRUCTIONAL MATERIALS IN THE "GAMES AND PUZZLES"
GROUP AS INDICATED BY SELECTED
COLLEGE PERSONNEL**

Games and Puzzles	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
Base Response 370								
No. of Responses	44	10	304	20	129	0	0	507
Percentages	8.6	1.9	59.9	3.9	25.4	.0	.0	99.7

Data presented above indicate the methods courses as those most likely to produce information relative to "games and puzzles" as college personnel made 304, or 59.9 percent, of their responses in the library or resource center category, and fewer responses in the pre-education courses, the pre-student teaching experience, and the educational foundation courses.

The final group of items to be discussed is the "display boards" group. Of the 148 base responses, college personnel indicated an actual response of 180. The data related to their responses is listed

below in Table XXVI:

TABLE XXVI

**DESIGNATED AREAS OF RESPONSIBILITY FOR TEACHING OF
INSTRUCTIONAL MATERIALS IN THE "DISPLAY BOARDS"
GROUP AS INDICATED BY SELECTED
COLLEGE PERSONNEL**

Display Boards	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
Base Response 148								
No. of Responses	10	15	128	2	17	8	0	180
Percentages	5.5	8.3	71.1	1.1	9.4	4.4	.0	99.8

It may be concluded from the preceding table that college personnel felt that the methods courses should provide the most information, as 128, or 71.1 percent, of their responses fell in this category. The remaining responses went to the following groups which are listed in diminishing order: the library or resource center, the educational foundation courses, the pre-education courses, the audio-visual center, and the pre-student teaching experience.

By lifting the totals line from Appendix K it may be determined where college personnel felt student teachers should be taught about, or should learn of, instructional materials taken to their elementary student teaching assignments. Table XXVII which follows is a list of all responses college personnel gave in this phase of the study:

TABLE XXVII

DESIGNATED AREAS OF RESPONSIBILITY FOR TEACHING OF
INSTRUCTIONAL MATERIALS, AS INDICATED BY
SELECTED COLLEGE PERSONNEL

Sources of Information	Responses	Percentages
Pre-Education Courses	672	12.8%
Educational Foundation Courses	244	4.6%
Methods Courses	2591	49.3%
Pre-Student Teaching Experience	199	3.8%
Library-Resource Center	943	17.9%
Audio-Visual Department	450	8.7%
Other Sources	149	2.8%
Totals	5248	99.9%

In reference to the above table it may be observed that there were 5,248 actual responses made by respondents. Of these, 2,591, or 49.3 percent, of the responses were placed in the methods courses category, thus indicating that these courses should be most productive in providing information for student teachers relative to instructional materials.

The source which received the second highest rating as responsible for teaching of items taken to the student teaching assignment was the library or resource center category. This category

received 943, or 17.9 percent, of the responses.

Third in rank as designated for providing information to student teachers as suggested by college personnel were the pre-education courses. This category received 672, or 12.8 percent of the responses.

The audio-visual department ranked fourth as a possible source of information to student teachers. They gave 450, or 8.7 percent, of their responses to this category of sources.

The educational foundation courses were placed next in rank as a source of information for elementary student teachers, as determined by college personnel. They designated 244, or 4.6 percent, of their responses for this group of courses.

College personnel indicated that the pre-student teaching experience would provide a lesser amount of information as they placed only 199, or 3.8 percent of their responses in this category.

The remaining 149, or 2.8 percent, of the total responses were placed in the category with the heading of "not a responsibility of any group," indicating none of the other six categories should be responsible for teaching of these items.

COMPARISONS OF RESPONSES OF STUDENT TEACHERS
AND COLLEGE PERSONNEL IN DESIGNATING
RESPONSIBILITY FOR TEACHING ABOUT INSTRUCTIONAL
MATERIALS TAKEN TO THE ELEMENTARY
STUDENT TEACHING ASSIGNMENT

In the second phase of this study student teachers indicated the sources from which they had learned of the instructional materials

they had taken and used in their student teaching assignments. These data were discussed earlier and tabulations of their responses placed in Appendix H. The third phase of this study focused on the responses of college personnel when designating where they thought the student teachers should learn about, or be informed of, the items taken to the elementary classroom. Data from these respondents were reported earlier and placed in Appendix K. The last phase of this study was designed to compare the results of responses from the student teachers and college personnel as reported in these appendices.

After the responses of these two groups of respondents were matched as to items taken to the classroom, as well as the sources of the items, the frequencies observed were used to compute expected frequencies. With these figures (frequency observed and frequency expected) a 2 by 2 Chi Square formula was applied to determine the significance of differences of responses from the student teachers and college personnel. The formula used for these computations is as follows:

$$\chi^2 = \sum \left\{ \frac{(fo - fe)^2}{fe} \right\} \cdot 1$$

The Chi Square formula was computed and results were observed with one degree of freedom at the five percent level. Using this formula any Chi Square computation which exceeded 3.84 would

¹Henry E. Garrett and R. S. Woodworth, Statistics in Psychology and Education, Longmans, Green and Co., New York, New York; 1961. p. 253.

indicate significant differences of responses, thus rejecting the null hypothesis of this study. The null hypothesis indicated that there would be no significant differences between responses of student teachers and college personnel when designating sources of information related to the instructional materials taken to the classroom by elementary student teachers.

Responses from student teachers and college personnel have been reported earlier in this chapter. Using these data which gave the frequency observed, the frequency expected was computed along with the Chi Square (X^2). Although all these tabulations have been placed in Appendix L, data from these comparisons will be discussed only when they are considered significant.

In the following table instructional materials in the "projected items" group are listed:

TABLE XXVIII

CHI SQUARE COMPUTATIONS WHEN COMPARING RESPONSES OF WHERE STUDENT TEACHERS INDICATED THEY RECEIVED INFORMATION ABOUT "PROJECTED ITEMS" AND WHERE COLLEGE PERSONNEL THOUGHT THEY SHOULD HAVE BEEN TAUGHT ABOUT THESE INSTRUCTIONAL MATERIALS

Responses of:	Sources of Information							Totals
	Pre-Ed. Crs.	Edl. Fnd. Crs.	Meth-ods. Crs.	Pre-St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth-ers	
Student Teachers	2	5	56	10	81	160	2	316
College Personnel	34	27	29	16	2	323	12	705
Chi Square	6.01	1.39	20.04	.08	76.67	.48	.21	

Chi square computations indicate significant differences between responses at 3.84, with one degree of freedom at a 5% level of confidence.

In this group of items college personnel and student teachers indicated a high level of agreement in four of the sources listed. The four areas in which they displayed this agreement were: the educational foundation courses, pre-student teaching, the audio-visual center, and "other" sources. In the remaining three sources the respondents had significant differences in their responses, thus refuting the null hypothesis as stated for this study. The three areas that had significant differences were: the methods courses, the library or resource center, and the pre-education courses.

Another group of items was the "books and commercially printed materials." Again responses of student teachers and college personnel involved in this study were computed to determine the X^2 . These computations are found in Table XXIX:

TABLE XXIX

CHI SQUARE COMPUTATIONS WHEN COMPARING RESPONSES OF WHERE STUDENT TEACHERS INDICATED THEY RECEIVED INFORMATION ABOUT "BOOKS AND COMMERCIALY PRINTED MATERIALS" AND WHERE COLLEGE PERSONNEL THOUGHT THEY SHOULD HAVE BEEN TAUGHT ABOUT THESE INSTRUCTIONAL MATERIALS

Responses of:	Sources of Information							Totals
	Pre-Ed. Crs.	Edl. Fnd. Crs.	Meth-ods Crs.	Pre-St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth-ers	
Student Teachers	35	30	90	12	183	5	0	355
College Personnel	126	37	352	24	351	0	21	911
Chi Square	1.42	3.22	6.71	.07	4.47	3.75	4.86	

Chi square computations indicate significant differences between responses at 3.84, with one degree of freedom at a 5% level of confidence.

Data from this table indicate that student teachers and college personnel had differences that were significant in three of the sources that student teachers learned of the teaching aids, used in their assignments. These three sources were: the methods courses, the library or resource center, and the "others" group. In the remaining four source areas there were no differences that were significant. These were: the pre-education courses, the educational foundation courses, the pre-student teaching experience, and the audio-visual department.

Table XXX lists the X^2 results of the comparisons in the "multiple copy" group of teaching aids. This table is given below:

TABLE XXX

CHI SQUARE COMPUTATIONS WHEN COMPARING RESPONSES
OF WHERE STUDENT TEACHERS INDICATED THEY RECEIVED
INFORMATION ABOUT "MULTIPLE COPIES" AND
WHERE COLLEGE PERSONNEL THOUGHT THEY SHOULD HAVE
BEEN TAUGHT ABOUT THESE INSTRUCTIONAL MATERIALS

Responses of:	Sources of Information							Totals
	Pre-Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Gen.	A. V. Dept.	Oth- ers	
Student Teachers	4	18	43	12	15	6	1	99
College Personnel	26	34	98	2	12	0	1	173
Chi Square	3.2	0.0	.78	5.39	1.2	2.38	1.0	

Chi square computations indicate significant differences between responses at 3.84, with one degree of freedom at a 5% level of confidence.

From this table it may be observed that college personnel and student teachers had a high level of agreement in six of the seven sources of information. The only category that had a significant difference for supplying information relative to teaching aids was the pre-student teaching experience. The remaining areas that had the high level of agreement between responses of participants were: the pre-education courses, the educational foundation courses, the methods courses, the library or resource center, the audio-visual department, and the "others" sources.

Next is the "recorded matter" group. Results of the X^2 tabulations comparing student teacher and college personnel responses for this group appear in Table XXXI, which follows:

TABLE XXXI

CHI SQUARE COMPUTATIONS WHEN COMPARING RESPONSES
OF WHERE STUDENT TEACHERS INDICATED THEY RECEIVED
INFORMATION ABOUT "RECORDED MATTER" AND
WHERE COLLEGE PERSONNEL THOUGHT THEY SHOULD HAVE
BEEN TAUGHT ABOUT THESE INSTRUCTIONAL MATERIALS

Responses of:	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers	
Student Teachers	2	6	4	6	25	24	0	67
College Personnel	16	14	85	4	26	88	0	233
Chi Square	0.2	.13	10.84	1.88	7.23	0.0	0.0	

Chi square computations indicate significant differences between responses at 3.84, with one degree of freedom at a 5% level of confidence.

It may be determined from the X^2 tabulations listed in this table that on two occasions there were significant differences between the responses of the student teachers and those of college personnel when indicating sources of teaching aids in this group of items. These two groups were the methods courses and the library or resource center. The other five categories had a high level of agreement. Those sources having the high level of agreement were: the pre-education courses, the educational foundation courses, the pre-student teaching experiences, the audio-visual center, and the "others" sources.

In the "visuals" group of items X^2 computations were carried out to determine the agreement of responses of college personnel and student teachers. The results of these tabulations are listed in the following table:

TABLE XXXII

**CHI SQUARE COMPUTATIONS WHEN COMPARING RESPONSES
OF WHERE STUDENT TEACHERS INDICATED THEY RECEIVED
INFORMATION ABOUT "VISUALS" AND WHERE
COLLEGE PERSONNEL THOUGHT THEY SHOULD HAVE BEEN
TAUGHT ABOUT THESE INSTRUCTIONAL MATERIALS**

Responses of:	Sources of Information							Totals
	Pre- Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Gen.	A. V. Dept.	Oth- ers	
Student Teachers	10	17	89	17	57	34	6	230
College Personnel	186	47	567	49	239	31	21	1140
Chi Square	12.64	1.14	2.37	1.13	0.41	16.45	.16	

Chi square computations indicate significant differences between responses at 3.84, with one degree of freedom at a 5% level of confidence.

In this group of items there were two categories of sources that had significant differences of agreement. These were the pre-education courses and the audio-visual department. There was a high level of agreement in the remaining five categories which were: the educational foundation courses, the methods courses, the pre-student teaching experiences, the library or resource center, and the "others" group.

The remaining groups of instructional materials are not discussed, nor does data appear in tables about comparisons of responses. These groups are: programmed materials, live specimens, collections, community resources, games and puzzles, and display

boards. In each of these groups there were no significant differences when comparing responses of where student teachers indicated they received information and where college personnel thought they should have been taught about these instructional materials.

After all responses from student teachers and college personnel were totaled in the seven source categories for the instructional materials taken to the elementary classroom, they were again compared and a X^2 was tabulated for each of the categories. Table XXXIII is a listing of these tabulations:

TABLE XXXIII

**CHI SQUARE COMPUTATIONS WHEN COMPARING RESPONSES
OF STUDENT TEACHERS AND COLLEGE PERSONNEL
IN DESIGNATING SOURCES OF INFORMATION FOR ALL ITEMS
TAKEN BY STUDENT TEACHERS**

Responses of:	Sources of Information							Totals
	Pre-Ed. Crs.	Edl. Fnd. Crs.	Meth-ods Crs.	Pre-St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth-ers	
Student Teachers	71	83	478	80	424	242	25	1403
College Personnel	672	244	2591	199	943	450	149	5248
Chi Square	37.43	1.45	30.72	3.83	34.61	32.32	2.44	

Chi square computations indicate significant differences between responses at 3.84, with one degree of freedom at a 5% level of confidence.

Reviewing this table it is noted that the null hypothesis of no significant difference between responses of student teachers and college

personnel was supported in only three of the seven categories. Sources that supported the null hypothesis were: the educational foundation courses, the pre-student teaching experience, and the "others" sources.

The four remaining groups; the pre-education courses, the methods courses, the library or resource center, and the audio-visual department, all had X^2 tabulation results that indicated a significant difference between the responses of the two groups, thus rejecting the null hypothesis as stated earlier in this study.

In the preceding table responses of student teachers and college personnel in designating sources of items were compared using Chi Square computations. To further compare the responses of participants in this study they have been tabulated in percentage form. These percentage tabulations for comparing responses are found in Table XXXIV.

Following are observations of data as they appear in Table XXXIV. In three areas there were small differences between the responses of student teachers and college personnel when indicating sources of information relative to items taken to the student teaching assignment. The differences were less than two percent and reflected the Chi Square tabulations indicating responses of participants were suggestive of the null hypothesis of this study. These sources were: the educational foundation courses, the pre-student teaching experiences and the "others" sources.

TABLE XXXIV

**COMPARISON OF RESPONSES OF COLLEGE PERSONNEL
TEACHERS IN DESIGNATION SOURCES OF ALL ITEMS
STUDENT TEACHING, REPORTED IN PERCENTAGE FORM**

Sources of Items	College Personnel Responses	Student Teacher Responses
Methods Courses.....	49.3%	34.1%
Library or Resource Center.....	17.9%	30.2%
Pre-Education Courses	12.8%	5.0%
Audio-Visual Department	8.7%	17.2%
Educational Foundation Courses	4.6%	5.9%
Pre-Student Teaching Experiences	3.8%	5.7%
"Other" or not a Responsibility.....	2.8%	1.7%
Totals.....	99.99%	99.98%

College personnel and student teachers agreed that the most productive sources for information about teaching aids were the methods courses and the library or resource center. However, college personnel overestimated the value of the methods courses and underestimated the worth of the library or resource center as sources of information for students. These two sources provided approximately two-thirds of all information about teaching items for the participating student teachers.

Responses of participants also rejected the null hypothesis in the remaining two areas. These two sources were the pre-education courses and the audio-visual department. In percentage form it is demonstrated that college personnel suggested the pre-student teaching experience would provide more information than students indicated they had received. Students also suggested the audio-visual department as a more productive source than suggested by the college personnel.

SUMMARY

In this chapter data were presented from questionnaires completed by selected college personnel and student teachers. These data were displayed in tables and charts with the use of frequency counts, arithmetic means, percentages, and Chi Square tabulations.

These data show that student teachers took instructional materials of a diversified nature to the elementary classroom. It is also noted that student teachers received most of the information about these items from the methods courses, the library or resource center, and the audio-visual department. It is also shown that an overwhelming majority of items taken to the classroom have positive value in their application to the learning environment, as determined by the supervising teacher.

College personnel indicated that student teachers should learn about aids, ideas, and materials mostly from the methods courses, the library or resource center, and the pre-education courses.

In comparing the responses of these student teachers and college personnel in designating the sources of information of these teaching helps used in the classroom, significant differences were found in four of the categories. Results rejected the null hypothesis of no significant differences between responses of selected college personnel and student teachers in designating sources of information about items taken to the classroom in these four categories: the methods courses, the pre-education courses, the library or resource center, and the audio-visual department. In the remaining three categories there was a high level of agreement in the responses of these two groups. These categories which display the agreement were the educational foundation courses, the pre-student teaching experience, and the "other" sources.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

INTRODUCTION

In the statement of the problem the following questions were listed: (1) What aids, ideas, and materials did elementary student teachers take to their student teaching assignments? (2) From what sources did the student teachers receive information concerning these items? (3) What value did these aids have when used in the classroom? (4) Where did selected college personnel feel that student teachers should learn about, or be informed of these items? (5) Did the responses of student teachers, when indicating the sources of the items, compare favorably with responses of college personnel when they indicated the responsibility for the teaching of these items? By the use of questionnaires data were received from 136 student teachers and seventy-four college personnel relative to the problems listed above.

CONCLUSIONS

Listed below are conclusions that have been reached after review of data received from participants in this study.

(1) Student teachers took numerous items to their elementary classroom assignments. The 136 students involved in this study took 1185 items for a mean of 8.7 instructional materials per student teacher. These respondents took 62 different types of teaching aids to their classrooms. The most common aids taken were: 16 mm films, film strips, text books, educational games, fiction books, duplicated materials, reference books and overhead transparencies.

(2) Student teachers indicated that they received most of their information about instructional materials used in their student teaching assignments from the methods courses. Although the methods courses were designated as the most prolific sources, these courses were only slightly more productive than the library or resource center. The third most productive area was the audio-visual department. Other sources that produced lesser amounts of information for students, in decreasing order, were: the education foundation courses, the pre-student teaching experiences, the pre-education courses, and "other" sources.

(3) Evidence indicates that a preponderance of the items taken to the student teaching assignments carried positive value as judged by supervising teachers when applying the Likert type scale used in this study. The ratio of items receiving positive ratings to those receiving negative or nuisance ratings was fifty-one to one. Only ninety-four of the items were rated as neutral, having neither positive value nor a distracting effect in the classroom.

(4) College personnel suggested the methods courses should be the most productive source for providing information relative to teaching aids used in the elementary classroom by student teachers. These same respondents indicated the library or resource center as the second most productive area, with the pre-education courses ranking third and the audio-visual department fourth.

(5) There were significant differences between responses of college personnel and student teachers in four of the sources of information as designated in this study. Each of the four areas is listed below, noting the differences:

- a. **Methods Courses:** College personnel suggested that the students would find the methods courses more productive than the actual indications of the student teachers in their responses.
- b. **Library or Resource Center:** Students indicated that they found the library or resource center a more fertile source than expected by the college personnel, according to their responses.
- c. **Pre-Education Courses:** Student teachers indicated that these courses were less valuable for providing information related to teaching aids than college personnel suggested they would be.
- d. **Audio-Visual Department:** Student teachers secured information from this department at a far greater

frequency than suggested by college personnel.

(6) In three of the sources designated in this study college personnel and student teachers displayed responses that were similar when designating sources of teaching aids. Following are the three areas in which differences were not significant: the educational foundation courses, the pre-student teaching experiences, and the "others" sources.

(7) Student teachers indicated they often received their information relating to instructional materials from more than one source in their undergraduate program.

(8) There is some evidence pointing to the fact that the preponderance of usage of items does not assure higher ratings for their value when used in the classroom.

RECOMMENDATIONS

After studying the data of this study, concerns still remain. Because of this the following recommendations have been formulated:

- (1) That this study be replicated with a similar sample to determine if results would be similar. Variations might be of value if the sample were to be increased in number, or the design of the study were to include more than one semester. A survey to involve secondary student teachers would also be of value. Another consideration would be to replicate this study using students

and college personnel from more than one teacher training instruction.

- (2) That a more detailed survey be conducted to determine the number of each type of item taken to the classroom by individual student teachers.
- (3) That a study be conducted to determine why specific items were considered to have a nuisance or detracting effect on the learning process in the classroom.
- (4) To allow pupils, as well as teachers, to help determine the value of the teaching aids or ideas that were taken and used in the classroom.
- (5) That college personnel be apprised of the discrepancies between the results they expected of courses and their actual value as determined from student teacher responses. Included in this would be to inform college personnel that a fertile area is evidently being overlooked when they (the college personnel) do not credit the audio-visual department as being an excellent source of materials. Perhaps a re-introduction to the

materials and facilities that are on the campus and available to student teachers would be appropriate.

- (6) That creative or unique and useful items that were considered effective in the classroom be collected and displayed for viewing and study by other student teachers and undergraduate education majors.
- (7) That student teachers should be informed of instructional materials that carry nuisance value, and possible reasons for their lack of value in the classroom.
- (8) That student teachers should be made aware of the value of instructional materials and their importance as a tool to create interest, involve the students, and improve communication in the classroom.
- (9) That college personnel, supervising teachers, and college supervisors promote and encourage creativity in prospective teachers when selecting and using instructional materials. It is often through the creative use of hobbies, collection, and other similar activities that imaginativeness of student teachers will provide dividends in

securing unique and useful instructional materials for elementary classrooms.

- (10) That instructional materials found to carry positive value in the classroom should be cataloged and made available for student teachers. This list should be updated continuously to include new and innovative materials as they become available.

SUMMARY

This study attempted to provide information relative to the instructional materials taken to student teaching assignments by elementary student teachers. With the use of questionnaires and the cooperation of selected student teachers, their supervising teachers, and selected college personnel, it is believed that the purpose of this study has been fulfilled. This information in no way is to be considered a conclusive or final statement on items taken to the classroom. Rather it is but one approach to the problem of teaching education, and hopefully will add a new dimension, enabling our teacher training institutions and instructors to be more effective in their process of training superior teachers.

BIBLIOGRAPHY

- Adams, Harold P. and Dickey, Frank G. Basic Principles of Student Teaching. New York, New York: American Book, 1956.
- Amidon, Edmund and Hunter, Elizabeth. Improving Teaching. New York, New York: Holt, Rinehart and Winston, Inc., 1967.
- Andrews, Leonard O. Student Teaching. New York: The Center For Applied Research in Education, 1964.
- Andrews, Leonard O. "Experimental Programs of Laboratory Experiences in Teacher Education," The Journal of Teacher Education, 1:259-67, December, 1950.
- Armstrong, Robert Joseph, Jr. "The Organization and Administration of Elementary Off-Campus Student Teaching Programs in Massachusetts: Current Practices and Proposed Patterns." Unpublished Ed. D. dissertation, University of Massachusetts, 1967.
- Barberi, Carlo C. "A Study of the Acceptance of the Secondary Student Teaching Program as Perceived by Faculty, Administrators, Parents and Pupils in the Mt. Pleasant Public Schools, Mt. Pleasant, Michigan." Unpublished Ed. D. dissertation, Michigan State University, 1969.
- Bennie, William A. Cooperation for Better Student Teaching. Minneapolis, Minnesota: Burgess Publishing Company, 1966.
- Bennie, William A. "Teacher Education and the Student Teaching Program." The American School Board Journal, 144 (April, 1962), 18.
- Best, John W. Research in Education, Prentice Hall, Inc., Englewood Cliff, N. J., 1959.
- Blair, Lois C. and Erickson, Paul. "The Student Teacher's Experiences in the Community." The Association for Student Teaching Bulletin No. 21. Cedar Falls, Iowa: The Association, 1964.
- Bond, Guy L. and Miles A. Tinker. Reading Difficulties, Their Diagnosis and Correction. Appleton Century Crofts, New York, 1967.

- Combs, Arthur W. The Professional Education of Teachers. Boston: Allyn and Bacon, Inc., 1965.
- Conant, James B. The Education of American Teachers. New York: McGraw-Hill Book Company, 1963.
- Curtis, Dwight K., Ed. Achieving Quality Off-Campus Professional Laboratory Experiences. Cedar Falls, Iowa: The Association for Student Teaching, 1957.
- Curtis, Dwight K. and Andrews, Leonard O. Guiding Your Student Teacher, New York, New York: Prentice-Hall, Inc., 1954.
- Dean, Lee and Kennedy, W. Henry. "A Position Paper on Student Teaching Programs." Teacher Education in Transition. Edited by Howard E. Bosley, Baltimore, Maryland: Multi-State Teacher Education Project, 1969.
- Deans and Directors of Teacher Education in Michigan. "The Impact of Student Teaching Programs Upon the Cooperating Public Schools in Michigan." June, 1970.
- Del Popolo, Joseph A. and Hillson, Maurice. "Student Teaching and the Role of the Public Schools." New York State Education, 51 (March, 1964), 14-16.
- DeYoung, Chris A. and Wynn, Richard. American Education, New York, New York: McGraw-Hill Book Company, 1968.
- Drake, T. L. and Kraft, L. E. "How Do Students Feel About Student Teachers?" Illinois Education, 55 (November, 1966), 106-07.
- Dunfee, Maxine and Sagl, Helen. Social Studies Through Problem Solving a Challenge to Elementary School Teachers, Holt, Rinehart and Winston, Inc., 1966.
- Elam, Stanley, ed. Improving Teacher Education in the United States. Bloomington, Indiana: Phi Delta Kappa, Inc., 1967.
- Evjen, Myrtle. "Role of the Cooperation School." Journal of Teacher Education, XVIII (Winter, 1967), 411-16.
- Foster, Lucille, "Student Teaching - The Value to all Program Participants," California Journal of Elementary Education, 29: 241-8. May, 1961.

- Garrett, Henry E., and Woodworth, R. S., Statistics in Psychology and Education, Longmans, Green and Co., New York, New York, 1961.
- Greene, G., Huchner, M., and Martuna, A. "Student Teaching: Do the Participating Schools Benefit?" Illinois Education 55: 107-109-110, November, 1966.
- Heilman, Arthur W. Principles and Practice of Teaching Reading. Charles Merrill Publishing Company, Columbus, Ohio, 1967.
- Houston, W. Robert, Blackington, III, Frank H. and Southworth, Horton C. Growth Through Student Teaching, Columbus, Ohio. Charles E. Merrill Books, Inc., 1965.
- Huey, J. Frances. Teaching Primary Children, Holt, Rinehart and Winston, Inc., 1965.
- Hughes, James Monroe. Education in America. Third Edition, Harper and Row, Publishers, 1970.
- Hunter, Elizabeth and Amidon, Edmund. "Direct Experience in Teacher Education: Innovation and Experimentation." The Journal of Teacher Education, 17 (Fall, 1966), 282-90.
- Jarolimek, John. Social Studies in Elementary Education, Third Edition, The Macmillan Company, New York, Collier-Macmillan Limited, London, 1967.
- Keach, Jr., Everett T. Elementary School Student Teaching: A Casebook, John Wiley and Sons, Inc., 1966.
- Lamb, Pose. The Student Teaching Process in Elementary Schools. Columbus: Charles E. Merrill Books, Indiana, 1965.
- Lapeer, Sarah H., Ruth Dales, Dora Skipper and Ralph Witherspoon. Good Schools for Young Children, The Macmillan Company, New York, 1968.
- McGeoch, Dorothy M., Ed. Internships in Teacher Education, Forty-Fifth Yearbook, 1966; The Association for Student Teaching, Wm. C. Brown Company, Inc., 1966.
- Marcus, Clifford. "The Impact of Student Teaching Upon the Public Schools of Michigan." Unpublished dissertation, Michigan State University, 1970.

- Merrill, Jr., Edward C. Professional Student Teaching Programs, The Interstate Printers and Publishers, Inc., 1967.
- Michaelis, John, U. "Teacher Education--Student Teaching and Internship." Encyclopedia of Educational Research. 3rd. ed. New York: The Macmillan Company, 1960.
- Mitzell, Harold E. "The Impending Instruction Resolution." The Phi Delta Kappan, April, 1970.
- Myers, George R., Walsh, William J. Student Teaching and Internship in Today's Secondary Schools--A Key to Improved Student Teaching Experiences. Charles E. Merrill Books, Inc., 1964.
- Ohles, John F. Principles and Practice of Teaching. Random House, 1970.
- Pittman, Kathleen. "An Evaluation of a Teacher Education Program by the Graduates of a State College." Unpublished Ed. D. dissertation, The University of Mississippi, 1964.
- Rich, Victor J. "The Evolving Student Teaching Program at Western Illinois University and an Assessment of the Quad-Cities Resident Student Teaching Center", Unpublished Ed. D. dissertation, Michigan State University, 1967.
- Rutherford, John Alby. "The Effect of Student Teaching Upon Pupil Achievement in Selected Fourth Grade Classrooms." Unpublished Ed. D. dissertation, University of Virginia, 1967.
- Schorling, Raleigh. Student Teaching, New York: McGraw-Hill Book Company, 1949.
- Shane, Harold G., Collis, Mary Aline, and Meredith, Howard V. "Improving Instruction in Elementary Education," Improving Instruction in Professional Education, Thirty-Seventh Year-book of the Association for Student Teaching in Cooperation with the National Society of College Teachers of Education (Cedar Falls, Iowa: The Association for Student Teaching, 1958).
- Silberman, Charles. Crisis in the Classroom, Random House, 1970.
- Smith, E. B., ed. Partnership in Teaching Education. Washington, D. C.: The American Association of Colleges for Teacher Education, 1967.

Tanruther, Edgar M. Clinical Experiences in Teaching for the Student Teacher or Intern. New York: Dodd, Mead and Company, 1967.

Tanruther, Edgar M. "Facilitation In-Service Education," Forty-Fifth Yearbook of the Association for Student Teaching. Cedar Falls, Iowa: The Association, 1966.

Tinker, Miles A., and McCullough, C. M. Teaching Elementary Reading, 2nd edition. New York: Appleton Century Croft, 1967.

Toulouse, Robert B. "Student Evaluation of Laboratory Experiences in Education," Educational Administration and Supervision, 39:155-60, March, 1953.

APPENDICES

APPENDIX B

LETTER OF PURPOSE OF STUDY SENT TO
STUDENT TEACHERS AND SUPERVISING TEACHERS

Dear Student and Supervising Teacher;

At Eastern Michigan University we are continually striving to upgrade our educational program. To do this we often need the help of student teachers and the teachers of our public schools. We would like your help in determining exactly what aids, ideas, and materials student teachers take to the elementary classroom. We are also interested in the value the item has as it is applied in the teaching environment.

To the Supervising Teacher;

On the questionnaire the student teacher has indicated what items they have taken and used in the classroom. We hope you will add items not listed by your student teacher. On the right side of the form is a scale, ranging from 1 to 5. With this scale would you please indicate your perception of the value of the aid, idea, or materials brought to the class? Use the following key:

1. It has great positive value, a fine addition to the classroom.
2. It had some value to the classroom.
3. It had no value to the classroom, but was not a distraction.
4. It had a deterring effect in the classroom, was somewhat of a nuisance.
5. It was a distinct nuisance, very distracting to the class.

After you have marked each response made by the student teacher, please return the questionnaire. Thank you for your interest in this project.

Sincerely,

APPENDIX C

KEY USED BY PARTICIPANTS TO COMPLETE QUESTIONNAIRE

Key or possible sources of aids, ideas, or materials taken and used in the student teaching assignment.

Pre-Ed. Crs. ---pre-education courses, those non-education courses that are sometimes considered as the liberal arts courses. They are usually taken during the freshman and sophomore years of college.

Edl. Fnd. Crs. -education foundation courses, those education courses related to education, such as: Principles of Teaching, School and Society, Human Growth and Development, Educational Psychology, Guidance, etc.

Methods Crs. --methods courses, such as the Teaching of Reading, Science for the Elementary Grades, Audio-Visual Methods and Materials, Industrial Arts for the Elementary Grades, Teaching of Social Studies, the Teaching of Mathematics, etc.

Pre. St. Tch. --pre-student teaching, either the formal or the informal contacts under the heading of pre-student teaching.

Lib. -Res. Cen. -the library at E. M. U. or resource center, which is located on the 3rd floor of Pierce Hall.

A. V. Dept. ----the audio-visual center, located in the library basement at Eastern Michigan University.

APPENDIX D

QUESTIONNAIRE USED BY COLLEGE PERSONNEL

Possible sources of information of aids, ideas, and materials used by student teachers in their elementary classrooms.

Items	Sources of Information						
	Pre. Ed. Crs.	Edl. Fnd. Crs.	Meth. ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth- ers
Overhead Transparencies							
8mm Films							
16mm Films							
Video Tapes							
Film Strips							
Color/B & W Slides							
Film Strips/Sound							
Pamphlets							
Periodicals/Magazines							
Music Books							
Mystery Books							
Fiction Books							
Poetry Books							
Work Books							
Reference Books							
Text Books							
Liquid Duplicated Matter							
Mimeographed Materials							
Video-Taped Materials							
Records/Tapes							

Items	Sources of Information						
	Pre. Ed. Crs.	Edl. Fnd. Crs.	Meth-ods Crs.	Pre-St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth-ers
Globes							
Educational Models							
Diagrams							
Experience Charts							
Time Lines							
Charts							
Graphs							
Relief Maps							
Flat Maps							
Pictures/Paintings							
Camera/Snap Shots							
Programmed Materials							
Learning Laboratories							
Live Animals							
Live Plants							
Live Insects							
Aquarium							
Terrarium							
Collections							

APPENDIX D - CONTINUED

Items	Sources of Information					
	Pre-Ed. Crs.	Edl. Fnd. Crs.	Meth-ods Crs.	Pre-St. T. Exp.	Lib. Res. Cen.	A. V. Dept.
Resource Persons						
Field Trips						
Flash Cards						
Games						
Puzzles						
Number Lines						
Puppets						
Flannel Boards						
Peg Boards						
Magnetic Boards						
Electric Boards						

APPENDIX E

LETTER TO COLLEGE PERSONNEL REGARDING QUESTIONNAIRE

Dear Colleague:

A survey was recently completed involving nearly 150 E. M. U. elementary student teachers. This study was directed toward the aids, idea, or materials they had taken and used in their student teaching assignment.

This study was completed to:

1. Determine the type and value of aids, ideas, or materials student teachers had taken to their assignments.
2. Determine where in the education program of the student does the student learn about, or where is the student informed of these aids, ideas, or materials.

Enclosed is a listing of the various items utilized in the student teaching assignment by the students involved in this study. Also listed are six possible choices as to areas of the educational sequence that may be responsible for teaching or informing the students about the aids, ideas, or materials used. As you review the list, would you mark the area that you believe is most responsible for the teaching about, or informing the students of each specific item? There is a column provided to mark if you feel that the item is not the responsibility of any group listed, but would be a part of the students contact outside of regular class activity.

Thank you for your cooperation in this study.

Sincerely,

APPENDIX F

KEY USED BY PARTICIPANTS TO COMPLETE QUESTIONNAIRE

Key or possible sources of aids, ideas, or materials taken and used in the student teaching assignment.

Pre-Ed. Crs. ---pre-education courses, those non-education courses that are sometimes considered as the liberal arts courses. They are usually taken during the freshmen and sophomore years of college.

Edl. Fnd. Crs. -education foundation courses, those education courses related to education, such as: Principles of Teaching, School and Society, Human Growth and Development, Educational Psychology, Guidance, etc.

Methods Crs. --methods courses, such as the Teaching of Reading, Science for the Elementary Grades, Audio-Visual Methods and Materials, Industrial Arts for the Elementary Grades, Teaching of Social Studies, the Teaching of Mathematics, etc.

Pre. St. Tch. --pre-student teaching, either the formal or the informal contacts under the heading of pre-student teaching.

Lib-Res. Cen. - the library at E. M. U. or resource center, which is located on the 3rd floor of Pierce Hall.

A. V. Dept. ----the audio-visual center, located in the library basement at Eastern Michigan University.

APPENDIX G

SOURCES OF MATERIALS TAKEN TO STUDENT TEACHING BY
SELECTED STUDENT TEACHERS

Items	No Taken	Sources of Information						
		Pre. Ed. Crs.	Edl. Fnd. Crs.	Meth ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth ers
16mm Films	121	0	0	20	2	22	96	0
Film Strips	58	0	2	10	4	30	35	0
Text Books	54	10	10	22	1	38	1	0
Games	48	8	1	33	4	11	11	2
Fiction Books	45	4	0	14	0	27	0	0
Duplicated Mat.	44	2	8	28	6	15	4	1
Reference Books	43	0	12	18	5	29	4	0
Overhead Trans.	35	2	3	16	2	7	6	0
Flash Cards	34	1	2	28	4	4	0	0
Models	34	1	0	16	4	11	4	0
Work Books	33	2	4	12	6	12	0	0
Tape Rec.	33	2	3	2	4	9	15	0
Mimeographed Mat.	32	2	10	15	6	0	2	0
Records/Tapes	30	0	3	2	2	19	10	0
Pictures/Paint.	28	2	3	2	4	16	6	1
Displays	27	4	0	15	4	8	2	1
Periodicals/Newsp.	25	6	2	10	0	25	0	0
Poetry Books	24	7	0	8	0	17	0	0
Pamphlets	24	0	2	3	0	23	0	0
Number Lines	21	0	0	14	0	7	0	0

APPENDIX G - CONTINUED

Items	No Taken	Sources of Information						
		Pre.	Edl.	Meth.	Pre.	Lib.	A.V.	Oth
		Ed.	Fnd.	ods	St. T.	Res.	Dept.	ers
		Cra.	Cra.	Cra.	Exp.	Cen.		
Puzzles	19	2	0	12	2	2	0	1
Programmed Mat.	18	0	0	6	0	7	5	0
Flannel Board	18	0	3	10	4	2	4	0
Charts	18	1	8	9	2	6	6	1
8mm Films	17	0	0	3	0	0	15	1
Camera/Snapsh.	17	0	0	6	0	4	7	0
Field Trips	16	0	0	13	0	3	0	0
Electric Boards	16	0	0	12	0	6	0	0
Globes	15	1	0	8	0	4	2	0
Diarama	15	0	1	8	2	0	4	1
Bulletin Bds.	15	0	1	8	2	0	4	1
Mystery Books	14	3	0	1	0	10	0	0
Live Plants	14	0	10	10	0	0	2	0
Film Strips/Sound	14	0	12	12	0	2	2	0
Video Tapes	14	0	6	6	2	6	0	0
Puppets	12	1	8	8	2	0	0	0
Flat Maps	12	1	4	4	0	3	1	1
Learning Labs.	11	0	7	7	0	4	0	0
Color/B & W Slides	10	0	0	0	0	4	6	1
Time Line	10	0	9	9	0	1	0	0

APPENDIX G - CONTINUED

Items	No Taken	Sources of Information						
		Pre.	Edl.	Meth.	Pre.	Lib.	A. V.	Oth
		Ed. Crs.	Fnd. Crs.	ods Crs.	St. T. Exp.	Res. Cen.	Dept.	ers
Live Animals	9	3	0	4	1	1	1	0
Aquarium	8	0	0	6	0	0	0	2
Live Insects	8	3	0	4	1	0	0	0
Rock Collection	8	0	0	2	0	4	0	2
Magnetic Board	8	0	0	8	0	2	0	0
Peg Board	8	0	0	8	0	0	0	0
Music Books	7	3	0	2	0	2	0	0
Resource Persons	7	0	0	4	1	3	0	0
Graphs	7	0	2	4	1	0	0	0
Terarium	5	0	0	2	2	0	0	1
Coin Collect.	4	0	0	0	2	1	0	1
Country Unit Kits	3	0	0	0	0	0	0	3
Seeds	3	0	0	3	0	0	0	0
Specimens	3	0	0	2	0	0	0	1
Stamp Collect.	2	0	0	0	0	0	0	2
Paper Money Col.	1	0	0	0	0	0	0	1
Poster Collec.	1	0	0	0	0	0	0	1
Relief Map	1	0	0	0	0	0	1	0
Individualized Inst.	1							
Sociogram	1							

APPENDIX G - CONTINUED

Items	No. Taken	Sources of Information						
		Pre. Ed. Crs.	Edl. Fnd. Crs.	Meth ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth ers
Role Playing	1							
Team Teaching	1							

APPENDIX H

**SOURCES OF MATERIALS, BY GROUPS, TAKEN TO THE STUDENT
TEACHING ASSIGNMENT BY SELECTED STUDENT TEACHERS**

Items (No. Taken)	Sources of Information							Totals
	Pre. Ed. Crs.	Edl. Fnd. Crs.	Meth ods Crs.	Pre. St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth ers	
Books, Commercially Printed Matter (269)	35	30	90	12	183	5	0	355
Projected Items (269)	2	5	56	10	81	160	2	316
Visual Materials (199)	10	17	89	17	57	34	6	230
Games Puzzles (134)	12	4	95	12	24	0	3	150
Multiple Copied Material (76)	4	18	43	12	15	6	1	99
Recorded Matter (63)	2	6	4	6	25	24	0	67
Display Bds. (50)	0	3	38	4	10	4	0	59
Live Specimens (47)	6	0	29	4	1	3	4	47
Programmed Materials (29)	0	0	13	0	11	5	0	29
Community Resources (26)	0	0	17	1	9	0	0	27
Collections (19)	0	0	4	2	5	0	9	20
Totals (1181)	71	83	478	80	424	242	25	1403

APPENDIX I

LISTING OF INSTRUCTIONAL MATERIALS TAKEN TO THE
ELEMENTARY CLASSROOM AND VALUE PLACED
ON ITEMS BY SUPERVISING TEACHERS

Items	Value Ratings					Mean Rating
	1	2	3	4	5	
Relief Map	1	-	-	-	-	1.00
Seeds	3	-	-	-	-	1.00
Stamp Collection	2	-	-	-	-	1.00
Paper Money Collection	1	-	-	-	-	1.00
Specimens	3	-	-	-	-	1.00
Poster Collection	1	-	-	-	-	1.00
Country Unit Kits	3	-	-	-	-	1.00
Aquarium	7	1	-	-	-	1.12
Resource Persons	6	1	-	-	-	1.16
Music Books	6	1	-	-	-	1.16
Mystery Books	12	2	-	-	-	1.16
Camera/Snap Shots	14	3	-	-	-	1.17
Field Trips	13	3	-	-	-	1.18
Terrarium	4	1	-	-	-	1.20
Graphs	5	2	-	-	-	1.28
Time Lines	7	3	-	-	-	1.30
Flat Maps	8	4	-	-	-	1.33
Live Animals	6	3	-	-	-	1.33
Insects	5	3	-	-	-	1.37
Puzzles	12	7	-	-	-	1.38

APPENDIX I - CONTINUED

Items	Value Ratings					Mean Rating
	1	2	3	4	5	
Programmed Material	13	3	2	-	-	1.38
Models	21	13	-	-	-	1.38
Recordings	19	10	1	-	-	1.40
Slides- B & W-Color	6	4	-	-	-	1.40
8mm Films	10	7	-	-	-	1.41
Film Strips	8	6	-	1	-	1.42
Reference Books	24	17	2	-	-	1.44
Globes	8	7	-	-	-	1.46
Fiction Books	27	16	2	-	-	1.48
Film Strips	37	15	5	-	-	1.48
Plants	8	5	1	-	-	1.50
Coin Collections	2	2	-	-	-	1.50
Magnetic Boards	4	4	-	-	-	1.50
Pictures/Paintings	13	15	-	-	-	1.53
Overhead Transparencies	18	15	2	-	-	1.54
Charts	8	10	-	-	-	1.55
Puppets	6	5	1	-	-	1.58
Number Lines	8	13	-	-	-	1.58
Rock Collection	4	3	1	-	-	1.62
Learning Lab.	6	4	-	1	-	1.63
Displays	13	12	1	1	-	1.63

APPENDIX I - CONTINUED

Items	Value Ratings					Mean Rating
	1	2	3	4	5	
Video Tapes	7	5	2	-	-	1.64
Poetry Books	12	8	4	-	-	1.66
Electric Boards	7	7	2	-	-	1.68
Educational Games	20	23	5	-	-	1.69
Flannel Boards	7	9	2	-	-	1.72
Tape Recordings	10	21	2	-	-	1.72
Pamphlets	9	14	-	-	1	1.75
Duplicated Materials	18	21	2	3	-	1.77
Text Books	24	19	10	1	-	1.77
Flash Cards	10	19	5	-	-	1.82
Periodicals/Newspapers	8	13	4	-	-	1.84
16mm Films	46	49	22	4	-	1.85
Diarama	6	5	4	-	-	1.86
Bult. Board Exp. Charts	6	5	4	-	-	1.86
Workbooks	10	17	5	1	-	1.91
Peg Boards	2	4	2	-	-	2.00
Memeographed Materials	14	8	3	7	-	2.09

APPENDIX J

**SOURCES OF INSTRUCTIONAL MATERIALS TAKEN TO THE STUDENT
TEACHING ASSIGNMENT, AS DESIGNATED BY SELECTED
COLLEGE PERSONNEL**

Items	Sources of Information						
	Pre. Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth ers
16 mm Films	7	2	40	3	0	57	1
Film Strips	2	6	38	2	0	58	0
Text Books	26	6	41	4	28	0	1
Games	12	3	60	4	32	0	0
Fiction Books	5	1	32	3	46	0	4
Duplicated Matter	13	17	49	1	6	0	0
Reference Books	11	2	44	1	51	0	2
Overhead Trans.	7	3	53	2	2	32	0
Flash Cards	10	3	59	4	31	0	0
Models	23	3	42	2	26	0	0
Work Books	10	7	44	6	24	0	3
Tape Re.	7	6	41	2	0	55	0
Mimo. Matter	13	17	49	1	6	0	0
Records	9	8	44	2	18	41	0
Pictures/Paintings	10	6	40	6	27	8	1
Displays	15	4	48	5	19	1	1
Periodicals/News	15	8	39	0	42	0	0
Poetry Books	6	2	42	3	45	0	3
Pamphles	17	8	38	0	42	0	0

APPENDIX J - CONTINUED

Items	Sources of Information						
	Pre Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth ers
Number Lines	8	1	63	2	15	0	0
Puzzles	8	5	60	4	29	0	0
Programmed Mats.	14	6	51	2	30	0	0
Flannel Boards	5	2	64	1	9	3	1
Charts	13	4	54	5	18	0	0
8mm Films	7	4	46	3	0	30	8
Camera/Snapshots	7	6	34	5	3	21	8
Field Trips	15	8	54	7	9	0	1
Electric Boards	5	2	64	1	9	3	0
Globes	24	3	45	2	28	0	0
Bult. Bd. Exp. Charts	9	4	50	5	7	2	2
Diarma	9	4	50	5	7	2	2
Mystery Books	6	1	31	3	46	0	4
Live Plants	20	3	50	7	0	0	7
Film Strips/Sound	3	1	39	2	0	52	0
Audio-Visual Tapes	2	3	38	2	0	58	0
Puppets	6	1	62	5	22	0	0
Flat Maps	21	2	48	3	34	0	0
Learning Labs	14	7	51	2	30	0	0
Color Slides	5	3	37	2	0	36	3

APPENDIX J - CONTINUED

Items	Sources of Information						
	Pre Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Gen.	A. V. Dept.	Oth ers
Time Lines	16	3	47	12	18	0	0
Live Animals	20	3	49	7	0	0	7
Aquarium	22	0	53	6	2	0	3
Insects	19	3	51	7	2	0	6
Rock Collections	10	3	42	5	11	0	10
Magnetic Boards	5	3	64	1	8	4	0
Peg Boards	5	3	64	1	9	3	1
Music Books	33	2	46	4	27	0	4
Resource Persons	14	7	44	6	12	0	0
Graphs	12	7	53	4	18	0	0
Terrarium	22	0	53	4	18	0	3
Coin Collections	10	4	38	5	5	0	16
County Units	3	6	44	2	45	0	0
Seeds	11	3	56	5	2	0	1
Specimens	16	1	43	5	4	0	11
Stamp Collections	10	3	35	5	9	2	11
Paper Money	10	4	38	5	5	0	16
Posters	10	3	38	5	6	0	15
Relief Maps	21	2	48	3	34	0	0

APPENDIX K

**SOURCES OF INSTRUCTIONAL MATERIALS TAKEN TO THE STUDENT
TEACHING ASSIGNMENT, AS DESIGNATED BY SELECTED
COLLEGE PERSONNEL**

Group of Items	Sources of Information							Totals
	Pre. Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth ers	
Projected Item	34	27	291	16	2	323	12	705
Books - Com. Printed Mat.	126	37	352	24	351	0	21	911
Multiple Copied Mat.	26	34	98	2	12	0	1	173
Recorded Materials	16	14	85	4	26	88	0	233
Visual Materials	186	47	567	49	239	31	21	1140
Projected Items	114	12	102	4	60	0	0	206
Live Specimens	56	12	312	38	6	0	28	510
Collections	32	15	200	25	35	0	65	396
Community Resources	44	21	152	15	66	0	1	287
Games Puzzles	10	10	304	20	129	0	0	507
Display Boards	10	15	128	2	17	8	0	180
Totals	672	244	2591	199	943	450	149	5248

APPENDIX L

COMPARISONS OF RESPONSES OF STUDENT TEACHERS (ST) AND COLLEGE PERSONNEL (SP) IN DESIGNATING SOURCES OF ITEMS TAKEN TO THE ELEMENTARY CLASSROOM BY STUDENT TEACHERS, INCLUDING CHI SQUARE (χ^2) COMPUTATION RESULTS

Group of Items	Sources of Information								Totals
	Pre. Ed. Crs.	Edl. Fnd. Crs.	Meth-ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth ers		
Projected Items	2	5	56	10	81	160	2	316	
	34	27	291	16	2	323	12	705	
	6.01	1.39	20.04	0.08	76.67	0.48	0.21		
Books & Com. Print.	35	30	90	12	188	5	0	355	
	126	37	352	24	351	0	21	911	
	1.42	3.22	6.71	0.07	4.47	3.75	4.86		
Multiple Copied Mt.	4	18	43	12	15	6	1	99	
	26	34	98	2	12	0	1	173	
	3.2	0.0	0.78	5.39	1.2	3.38	1.0		
Recorded Matter	2	6	4	6	25	24	0	67	
	16	14	85	4	26	88	0	233	
	0.2	0.13	10.84	1.88	7.23	0.0	0.0		
Visual Materials	10	10	89	17	57	34	6	230	
	186	186	567	49	239	31	21	1140	
	12.64	12.64	2.37	1.13	0.41	16.43	0.16		
Programmed Materials	0	0	0	0	11	5	0	29	
	28	12	12	4	60	0	0	206	
	1.41	0.0	0.0	1.0	0.06	3.75	0.0		
Live Specimens	6	0	29	4	1	3	4	47	
	114	12	312	38	6	0	28	510	
	.62	0.0	0.0	0.0	0.58	2.67	0.18		
Collections	0	0	4	2	5	0	9	20	
	56	15	200	25	35	0	65	396	
	1.37	0.0	1.85	0.0	1.67	0.0	1.35		

APPENDIX L - CONTINUED

Group of Items	Sources of Information								Totals
	Pre. Ed. Crs.	Edl. Fnd. Crs.	Meth- ods Crs.	Pre- St. T. Exp.	Lib. Res. Cen.	A. V. Dept.	Oth ers		
Community Resources	ST	0	0	7	1	9	0	0	27
	CP	32	21	152	15	66	0	1	287
	X2	1.4	.53	0.03	0.53	0.3	0.0	1.0	
Games & Puzzles	ST	12	4	95	12	25	0	3	150
	CP	44	10	304	20	129	0	0	507
	X2	0.03	0.0	0.6	1.2	2.1	0.0	0.75	
Display Boards	ST	0	3	38	4	10	4	0	59
	CP	10	15	128	2	17	8	0	180
	X2	.56	0.0	0.7	1.37	0.34	0.0	0.0	
Totals	ST	71	83	478	80	424	242	25	1403
	CP	672	244	2591	199	943	450	149	5248
	X2	37.43	1.45	0.72	3.83	34.61	32.32	2.44	

Chi Square Computations indicate significant differences between responses at 3.84, with one degree of freedom at a 5% level of confidence.

MICHIGAN STATE UNIV. LIBRARIES



31293102024290