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THE IMPACT OF PRE-EDUCATION CLINICAL EXPERIENCE
IN TEACHER CAREER DECISION MAKING AMONG SELECTED
MICHIGAN STATE UNIVERSITY ELEMENTARY TEACHER
CANDIDATES.

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THE IMPACT OF PRE-EDUCATION CLINICAL EXPERIENCE IN TEACHER
CAREER DECISION MAKING AMONG SELECTED
MICHIGAN STATE UNIVERSITY ELEMENTARY
TEACHER CANDIDATES

By

Charles Henry Lowery

A DISSERTATION

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ABSTRACT

THE IMPACT OF PRE-EDUCATION CLINICAL EXPERIENCE IN TEACHER CAREER DECISION MAKING AMONG SELECTED MICHIGAN STATE UNIVERSITY ELEMENTARY TEACHER CANDIDATES

By

Charles Henry Lowery

The Problem

In 1971, the College of Education at Michigan State University undertook a screening and selection procedure to limit enrollments in the elementary certification programs. A course, Education 101A, was developed which served as the pre-education elementary classroom based clinical experience for prospective majors. The study was conducted to measure the effect of this experience on the variables: self-stated motivation for teaching, attitude toward the course, and application of the course to desire to teach elementary children.

The Procedure

Five groups of thirty Michigan State University students each were randomly selected from the 934 students successfully completing Education 101A or its waiver equivalent for the fall term 1971 through the fall term 1973, and sent a Pre-Education Clinical Experience

Questionnaire designed to measure these variables. Data were collected to supply answers to the research questions:

1. What kind of successes are students having as a result of the Education 101A experience?
2. What, if any, is the effect of Education 101A on the pursuit of an elementary teaching career?

The following hypotheses were tested on the three dependent variables:

There is no difference:

- a. among graduates, student teachers, continuing education majors, non-continuing education majors, and waiver students on the three dependent variables.
- b. between male and female on the dependent variables.
- c. between persons who have had no experience with children prior to Education 101A and persons who have experience with children before taking Education 101A.
- d. among Michigan State University class level; sophomore, junior, and senior.
- e. between Michigan State University students receiving waivers and those who successfully complete Education 101A for admission into elementary teacher certification programs.

A multivariate analysis of variance was performed to test the significance of the major hypotheses at the .05 level. A univariate ANOVA tested the sub hypotheses at the .0167 alpha level for significance.

The Findings and Conclusions

1. Education 101A does aid students in making decisions to continue or discontinue elementary teacher certification programs.
2. The more experiences one has with children, the greater his or her self-stated motivation for teaching.
3. The application of Education 101A to desire to teach is related to a student's decision to take elementary education as a major.
4. Student's decision to enter an elementary teacher certification program is not affected by the method of entry: either by taking the prescribed course or its waiver equivalent.
5. Student classification level has little or no effect on the decision to enter an elementary teacher certification program.
6. Sex is related to a student's decision to take elementary education as a major when the complex of dependent variables are considered simultaneously.

The Recommendations

As a result of the findings, the following recommendations are made:

1. For counseling purposes, clinical experience courses similar to Education 101A should be expanded to include provisions for the identification of students who have successfully

completed the clinical experience but yet remain undecided about their commitment to teaching.

2. Caution should be exercised to insure that students entering clinical experience courses with no prior experience with children receive ample child-oriented experiences as an aid in the decision making process selecting elementary teaching as a career.
3. Education 101A type courses should be continued as they have been demonstrated, but similar courses should be expanded to the secondary education level.

Dedicated to
Trudy, Deirdre, and Darrin

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CHAPTER I

THE PROBLEM

Need for the Study

During the early 1950's pre-student teaching clinical experiences were recognized as needed pre-requisites for future teacher trainees.¹ During the ensuing decade, "professional laboratory experiences" were implemented in teacher education curricula.²

In 1971, Michigan State University initiated a clinical experience program for prospective elementary education majors that limited Elementary Education enrollment. Exploring Teaching, Education 101A, emerged as the pre-requisite course for all persons seeking admission to elementary teacher certification programs.³ The limited enrollment brought with it the problem of adequate selection procedure for entrance into elementary teacher certification programs. With

¹American Association of Colleges for Teacher Education, Revised Standards and Policies for Teacher Education of the American Association of Colleges for Teacher Education, Oneonta, New York, AACTE, 1951, pp. 20-30.

²William W. Sinclair, "An Analysis of Three Pre-Student Teaching Experiences in the Preparation of Elementary School Teachers", Unpublished Doctoral Dissertation, Michigan State University, 1961, p. 14.

³"Exploring Teaching", College of Education, Michigan State University, Unpublished Guidelines, September 1971.

respect to the program admission question of who should be selected for elementary teacher training,⁴ Education 101A, a pre-elementary education clinical experience course, became a means for early identification of those students who were least likely to succeed in elementary teaching. Hence, students who successfully completed Education 101A were admitted into elementary teacher certification programs.

From the fall term 1971 through the fall term 1973, 934 students were admitted to elementary teacher certification programs through the new admissions system. Seven hundred ninety-three satisfied elementary Education 101A requirements,⁵ and 141 were admitted by waiver of Education 101A clinical experience.⁶ Yet, the effect of Education 101A clinical experience on teacher career decision was not known.

During the Education 101A experience, students may display an interest for elementary teaching, yet at the successful completion of Education 101A, this interest may shift to teaching related areas or to not teaching at all. This study is exploratory and centers on student's decision to continue or discontinue an elementary teacher certification program.

⁴Ann G. Olmsted, Frank H. Blackington III, W. Robert Houston, "Stances Teachers Take: A Basis for Selective Admission", Phi Delta Kappan, January 1974, p. 330.

⁵Michigan State University Student Final Grade List for Education 101A, Office of the Registrar, Fall term 1971 - Fall term 1973.

⁶Undergraduate Student Affairs Office, Education 101A Waivers, College of Education, Fall 1971 - Fall 1973.

All of the subjects in this study successfully completed Education 101A or its waiver equivalent. Some of the subjects elected to continue and others to discontinue elementary teacher certification programs. It would seem that a difference in interest or other variables exists. This difference may be due to the commitment students have for teaching.

If evidence gathered shows significant difference among the groups studied on attitude toward Education 101A or application of Education 101A to desire to teach or self stated motivation for teaching, as these are related to the independent variables of groups, sex, no experience with children, experience with children and class level, then the three dependent variables have some relationship to a student's desire to major in elementary education. Also, if the data gathered shows that students make significant changes in decisions after taking the Education 101A experience, then Education 101A is a mechanism that aids students in committing themselves to elementary teacher certification programs.

Purpose of the Study

The present study is designed to investigate the students who were admitted to elementary teacher certification programs from the fall term 1971 through the fall term 1973, and answer the following questions:

1. What kind of successes are students having as a result of the Education 101A experience? i.e., What actually happened to those persons who successfully completed Education 101A?

2. What, if any, is the effect of Education 101A on the pursuit of an elementary teaching career?

Hypotheses

The hypotheses are stated here in broad research form. An appropriate explanation follows the list.

- I. There is a difference among the graduates, student teachers, continuing education majors, non-continuing education majors and waiver students on self stated motivation for teaching, attitude toward Education 101A and application of Education 101A to desire to teach.
- II. There is a difference between male and female on self stated motivation for teaching, attitude toward Education 101A and application of Education 101A to desire to teach.
- III. There is a difference between persons who have had no experience with children prior to Education 101A and persons who have had experience with children before taking Education 101A on self stated motivation for teaching, attitude toward Education 101A, and application of Education 101A to desire to teach.
- IV. There is a difference among the Michigan State University class levels: sophomore, junior, and senior, on self stated motivation for teaching, attitude toward Education 101A, and application of Education 101A to desire to teach.

- V. There is a difference between Michigan State University students receiving waivers and those Michigan State University students who successfully completed Education 101A for admission into elementary teacher certification programs on self stated motivation for teaching and attitude toward Education 101A.

Hypothesis I tests for the difference that may exist between the groups of subjects studied on the three dependent variables. It is designed to answer the question: are there differences among the students who successfully complete Education 101A on self stated motivation for teaching, attitude toward Education 101A, and application of Education 101A to desire to teach? All of the subjects in this study were successful in Education 101A or its equivalent. Yet, some of the subjects declined to continue an elementary teacher certification program. Differences in interest or other variables may exist. To what extent these differences are a result of Education 101A is explored.

Hypothesis II is intended to investigate the influence of sex on the three dependent variables. From the original population of $N = 934$ in this study, a sex ratio of approximately 5 females to 1 male was found. This indicated that the majority of students seeking entrance into elementary teacher education at Michigan State University are female. The effect of sex on the three dependent variables is explored.

Hypothesis III is designed to explore the difference that may exist among the subjects of this study in relation to prior experience with children. Students with and without prior experience with children before taking Education 101A successfully completed the Exploring Teaching experience.

Hypothesis IV investigates the difference that may exist among the groups of this study by class level and hypothesis V, the difference that may exist among students admitted to elementary certification programs as a result of the Education 101A and its equivalent experience on the three dependent variables.

Assumptions of the Study

In order to provide a valid interpretation of the results of this study, the following assumptions are made:

1. The sample population is representative of Michigan State University students desiring elementary teacher certification.
2. The seven terms, fall 1971 to fall 1973 inclusive, are very similar in experience, content, and purpose.
3. Clinical experiences of Education 101A represent only one phase of the career decision making process.

Limitations of the Study

The study is limited in that:

1. No freshmen appear in this study, although Education 101A was listed with a freshman level course number. This was

due to a backlog of upperclassmen and transfer students during the initial phase of the establishment of Education 101A.

2. The sample population can be generalized only to those Michigan State University on-campus students who applied for admission into elementary education during the fall term 1971 through the fall term 1973.
3. The emphasis of the study is on decision making in terms of a student's continuation in elementary teacher certification programs.
4. The dependent variable, application of Education 101A to desire to teach, could not be considered for the waiver group and is not a part of this study.

Overview

In Chapter I, the problem of the study has been presented. The discussion focused on the following headings: The need for the study, purpose, assumptions, limitations and the hypotheses, and concludes with an overview of the thesis.

A review of the literature related to pre-elementary education clinical experience and teacher career decision is contained in Chapter II. The format includes a discussion of: teacher career decision and clinical experience, commitment to teaching, and teacher career choice.

Chapter III describes the design of the study: definitions, population, sample, hypotheses, design, instrument, procedure, and summary serve as format headings.

The analysis of data is presented in Chapter IV. The format includes: analytical instrument, experimental design, hypotheses, summary of the data collected and chapter summary.

Chapter V is a summary discussion and conclusion of the study. The following headings provide a format for discussion: a summary of the study, conclusions drawn from the data, discussion, implication for change, and recommendations for further research.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter presents a review of the literature related to teacher career decision making and clinical experience. The presentation begins with a discussion of career decision as related to clinical experience, and is followed by discussions of commitment to teaching and teacher career choice. The chapter concludes with a summary of the literature.

Teacher Career Decision and Clinical Experience

The need for "Professional Laboratory Experiences" at all maturity levels in Teacher Education was recognized by the American Association of Colleges for Teacher Education in 1951.¹ It was felt that through a laboratory experience, teacher education students would have the advantage of live classroom activity in working with children and making decisions about future teaching.

¹American Association of Colleges for Teacher Education, Revised Standards and Policies for Accrediting Colleges for Teacher Education of the American Association of Colleges for Teacher Education, Oneonta, New York: AACTE, 1951.

Worcester² noted that his elementary students preparing for practice teaching gained valuable experience working with public school students prior to student teaching. "Several of the future teachers were able to decide at which level to do their student teaching." At the University of Virginia, Jones³ studied various types of professional laboratory experiences which constituted an integral part of the formal pre-service education of teachers prior to student teaching. Three of the five conclusions from the analysis of the pre-student teaching experiences are listed:

1. All of the types of pre-student teaching experiences: observation, participation, child study, teaching, extra-curricular activities, and non-college laboratory experiences, seemed to be conducive to success in student teaching.
2. The thirty-eight specific experiences considered in this study seemed to have actual and/or potential value as professional laboratory experiences prior to student teaching.
3. There was a considerable amount of variation in carry over value of various types of pre-student teaching experiences into student teaching situations.

²Thomas K. Worcester, "Preparing Students for Practice Teaching," The Journal of Teacher Education, 5:323, December, 1954.

³Isabelle F. Jones, "A Study of the Various Types of Pre-Student Teaching Experiences to Success in Student Teaching," Dissertation Abstracts International, 16: 709, 1956.

Eduolino⁴ studied the relationship between successful student teaching and pre-student teaching experiences to determine the difference among students who had experiences with children prior to student teaching and success in student teaching at the University of Michigan. The following conclusions are supported by his data:

1. Students who have had experience with children in church-related activities during their high school years were much more "successful" as student teachers than those who did not have these experiences.
2. The more hours of experience a student had with children prior to student teaching, the less frequent was the occurrence of the problems related to instructional methods and understanding of objectives in particular school districts.
3. Students with more hours of experience with children prior to student teaching found it easier to solve their problems on school discipline and adjustment to children than those students who had fewer of such experiences.

⁴Emilio Quial Eduolino, "The Relationship Between Successful Student Teaching and Pre-Student Teaching Experiences with Children," Dissertation Abstracts International, 19:486, September, 1958.

4. The more hours of experience the student had with children prior to student teaching, the better satisfied he was with his student teaching.

In 1959, Colvin⁵ investigated direct experiences prior to student teaching at Wayne State University, in order to determine answers to the following questions:

1. What purposes were achieved through the program of professional laboratory experiences prior to student teaching?
2. What were the personal characteristics of students selected for study, and what had they previously learned about children and teaching?
3. What kind of experiences prior to student teaching helped students achieve competencies needed for today's teachers?

The effects of the project indicated that "students generally showed professional growth, although differences among the individuals were noted in degree of understanding and extent of competence revealed".

Most students became less anxious about teaching, more eager to assume responsibility for guiding children, and more able to identify factors involved in effective teaching.

⁵Cynthia M. Colvin, "Achieving Readiness for Student Teaching Through Direct Experience," Dissertation Abstracts International, 19:3229, June, 1959.

The need for exposure of students to live classroom activity is recognized by Bidna and Hahn⁶. They reported that one major criticism of teacher education is that it is all theory and little practice. For support they refer to Herbert A. Thelen who relates that:

"There is little opportunity for prospective teachers to test theory in practical situations. There is too little opportunity for them to work intensively with pupils. And such opportunities as there is comes too late in the program."⁷

In a report by Scrivner⁸, the need for clinical laboratory experiences for the training of teachers at the University of Mississippi was emphasized. He related that early professional courses could afford students first hand working relations and communications with children.

Hunter and Amidon⁹ indicated that experience with children played an important role in the education of future teachers. They called for the expansion of direct experiences with children throughout

⁶David B. Bidna and Robert O. Hahn, "Participating and Observing," The Journal of Teacher Education, 10:319-325, September, 1959.

⁷Herbert A. Thelen, "A Proposal for a Pilot Study in the Preparation of Prospective Elementary Teachers," (Chicago: Department of Education, University of Chicago, Summer, 1954).

⁸A. W. Scrivner, "Professional Laboratory Experiences," The Journal of Teacher Education, 12:48-53, March, 1961.

⁹Elizabeth Hunter and Edmund Amidon, "Direct Experience in Teacher Education: Innovation and Experimentation," The Journal of Teacher Education, 17:282-289, Fall, 1966.

the professional sequence.

Turney and Stoneking¹⁰ found that the study-teach program for the preparation of teachers at Peabody College for Teachers, caused some students who had planned a career of secondary school teaching to decide to specialize at the Junior High Level.

Harrington¹¹ related that teachers in training should have a myriad of experiences and contact with a variety of public school situations throughout their entire college career. In this way, they could see and feel what ought to be in formulating philosophies of education and value judgement.

The professional laboratory experiences provided prior to student teaching in the professional education segment of the secondary school teacher education program of selected educational institutions in Illinois was analyzed by Clemmons.¹² Four of the study conclusions are listed below:

1. There is a need for pre-student teaching clinical experiences which allow students, through study and

¹⁰David Turney and Lewis W. Stoneking, "A Professional Sequence for the Development of Career Teachers," The Journal of Teacher Education, 16:281-185, September, 1965.

¹¹Nancy D. Harrington, "A Challenge for Teacher Education," The Journal of Education, 152:51-52, December, 1969.

¹²James D. Clemmons, "An Analysis of Professional Laboratory Experiences Provided Prior to Student Teaching in Secondary Teacher Education Programs of Selected Institutions in Illinois," Dissertation Abstracts International, 30:4302A, April 1970.

observation, the chance to observe the stages of growth of secondary school pupils.

2. Individual 'live' observations in secondary school classrooms should be included in a pre-student teaching experience program.
3. Students should be afforded the opportunity to act as teacher-aides sometime during their professional laboratory experience program.
4. Most anticipated changes in the pre-student teaching-laboratory experiences programs. . .emphasized the involvement of students in more meaningful and extensive 'live' experiences with secondary pupils.

In a study of the relationship among selected variables concerning freshmen students involved in clinical experience and their decision-making in choosing a career in teaching, Workman¹³, at Ohio State University, reported that students who were decided at the beginning and end of the experience about teaching as a career and about a teaching area tended to have a greater amount of education related work experience.

Hersh¹⁴, at Boston University, analyzed the professional

¹³Daniel W. Workman, "The Relationship of Selected Variables in Decision-Making Regarding Choice of a Career in Teaching," Dissertation Abstracts International, 33:4233A, February, 1973.

¹⁴Richard Hersh, "An Analytical Approach to the Professional Training of Teachers," Dissertation Abstracts International, 31:265A, July, 1970.

education of teachers to bridge the gap between teaching theory and practice. He indicated that a need exists for providing increased opportunities in professional education to allow for the prospective teacher to learn and test theory in the context of reality prior to student teaching. His recommendations included the idea that professional education programs should help prospective teachers move from the role of student to that of teacher prior to student teaching.

Wood¹⁵ studied the influence of laboratory experiences on career expectations of prospective business teachers at the University of Nebraska. He found that pre-student teaching laboratory experiences positively affected the attitude of student teachers toward teaching and recommended that "pre-student teaching laboratory experience can be effectively used as a screening device for selecting teacher trainees."

Mosley¹⁶ studied the career decision problem of the beginning education student. He noted that the last contact students had with the school was as a student in the public school. Clinical experiences could supply realistic conditions for the student to analyze whether he wants to teach or not.

¹⁵Jerry Lee Wood, "The Influence of Professional Laboratory Experiences Upon the Career Choice of Undergraduate Business Teacher Education Majors," Dissertation Abstracts International, 32:831A, August, 1971.

¹⁶Aubrey H. Mosley, "Teacher Education: The University and the School," Kappa Delta Pi, 8:26-27, October, 1971.

Walsh¹⁷ indicated that "early contact with children. . .can result in the student's confronting important career decisions before reaching: . . .Do I really want to teach? Usually it is not until one's period of student teaching that such vital questions are faced and the resultant decision made." Walsh emphasized that some students nearing the end of their teacher preparation are reluctant to change, although they realize that they may be better satisfied in another pursuit.

Cooper and Sadker¹⁸ indicated that clinical experiences helped "the prospective teacher discover earlier in his college career whether or not he really wants to teach."

Commitment to Teaching

The decision to pursue teaching as a career is equated with commitment to teaching. In the recent past, the commitment of teachers to the teaching profession has been a serious problem. Teacher turn-over has been numerous.¹⁹

Bennett²⁰ conducted a review of the literature and studied

¹⁷Huber M. Walsh, "Let's Move the Methods Course Off Campus," The Journal of Teacher Education, 21:348-349, Fall, 1970.

¹⁸James M. Cooper and David Sadker, "Current Trends in Teacher Education Curriculum," The Journal of Teacher Education, 23:312-317, Fall, 1972.

¹⁹Arnold M. Gallegos, "Teacher Training: The Realities," The Journal of Teacher Education, 23:43, Spring, 1972.

²⁰Don Bennett, "Teacher Commitment - Whose Responsibility?" The Journal of Teacher Education, 21:515-518, Winter, 1970.

the attributes related to commitment to teaching. He reported that a consensus among writers is that many of the female students completing teacher education programs are not really interested in teaching but look upon it as only temporary employment . . . or . . . family income supplement. Bennett's findings indicated that "the successful completion of the professional education sequence of courses required for regular certification had a significant relationship to commitment to teaching." He recommended that:

1. A continual effort be made to identify prospective teachers early in their college or pre-college training so that prospective guidance can direct them through their professional teacher education.
2. An effort be made by instructors of professional education courses to instill in prospective teachers a positive commitment to teaching.
3. Methods be developed to measure aspects of commitment to teaching.
4. Professional courses required for temporary certified teachers be individualized to meet classroom needs.
5. Serious consideration be given to the re-evaluation of methods courses taught by specialists on the elementary level.
6. Variables other than career motivation and teacher involvement be identified and investigated in relationship to teacher commitment.

Olmsted, Blackington, and Houston²¹ noted that many view teaching as a first step to a more preferred career. They stated that more information is needed about the why's and how's of commitment to teaching.

Clark and Kingsbury²² reported that simultaneous alternative teacher preparation programs may be a better approach to teacher training. Their central position has that "no one knows the best way to prepare any person for any teaching role." Students could have a greater choice in the how's . . . of their preparation. They emphasized that with this might come greater commitment.

Garry²³ studied the freshman clinical Experience Program at the Ohio State University. She reported that:

1. Students who began the quarter with a firm commitment to teaching tended to make no change in level of commitment.
2. Students who began with a tentative commitment to teaching indicated a change in commitment to a greater extent.

²¹Ann G. Olmsted, Frank H. Blackington III, and W. Robert Houston, "Stances Teachers Take: A Basis for Selective Admission," Phi Delta Kappan, 54:330-334, January, 1974.

²²Richard J. Clark and Donald J. Kingsbury, "Simultaneous Alternative Teacher Preparation Programs," Phi Delta Kappan, 54:447-480, March, 1973.

²³Alice Walsh Garry, "A Study of Significant Incidents In A Teacher Training Early Experiencing Program," Dissertation Abstracts International, 33:4216A, February, 1973.

Perry²⁴ conducted a study at the University of Alabama to determine the influence of selected factors on prospective teachers in their choice of teaching as a career. He concluded that clusters of motives, influences such as good teachers, and time elements were somewhat indicative of a degree of commitment to teaching. He recommended that the selection process for prospective teachers take into account these factors in determining commitment to teaching.

A program of continuous Pre-Student Teaching Laboratory Experiences from the beginning of the teacher preparation program was discussed by Shuff and Shuff.²⁵ They noted that through pre-student teaching laboratory experiences, students would be evidencing a commitment to teaching . . .

Sandefur²⁶ reported an experimental study conducted at Kansas State Teachers College. "The primary objective of the study was to examine the proposition that valid content in teacher education could best be achieved by providing selected clinical laboratory and content experiences designed to produce functional behaviors." It was concluded that:

²⁴James Z. Perry, "The Influence of Selected Factors on the Choice of Teaching as a Career," Dissertation Abstracts International, 33:560A, April, 1973.

²⁵Marvin Shuff and Robert V. Shuff, "Design For Excellence: A Program for Laboratory Experiences," The Journal of Teacher Education.

²⁶J. T. Sandefur, "Kansas State Teachers College Experimental Study of Professional Education for Secondary Teachers," The Journal of Teacher Education, 21:386-395, Fall, 1970.

1. The possession of factual information about professional content does not necessarily commit the teacher to action consistent with that information.
2. Behavioral changes in prospective teachers could be more readily effected by programs of professional education that stressed direct involvement in the teaching-learning process through meaningful laboratory experiences made relevant to content and theory.
3. Prospective teachers could be sensitized to the use of certain desirable teaching actions, such as the use of praise and the acceptance of students' ideas, through a planned professional program utilizing demonstration, observation and participation.

Teacher Career Choice

Career development in Elementary Education received very little attention until the post World War II years.

In the early 1950's, education faced the problem of increasing the number of qualified elementary teachers to meet the demand of an expanding youth population. The unsatisfactory results obtained from teacher trainee recruitment caused many educators to question and some to explore the reason why "some people choose elementary school teaching as a career and some do not."²⁷

²⁷Ray C. Maul, "How Many Teachers Do We Need?" The Journal of Teacher Education, 3:94, June, 1952.

Wilcox and Beigel²⁸ surveyed first-semester freshmen students in an attempt to show the significance of motivational factors on the choice of teaching as a career. They concluded that "teaching is chosen not merely because of intellectual interest but, more frequently, on the basis of emotional need." It was recommended that teacher education institutions should inquire into the basic motivations of prospective teachers.

Jordaan's²⁹ review of research on vocational choice indicated that "Every vocational decision has a history . . . The final decision . . . is the result of a process stretching over many years."

Kaczkowski, et al.,³⁰ related the influence of exploratory experiences on students' choice of a workshop course. They noted that vocational decision evolves out of the developmental process of the individual . . . Exploration, reality testing of . . . let students become familiar with different kinds of opportunities available to them.

Dutton and Keislar's³¹ review of the literature on attitude

²⁸Isobel Wilcox and Hugo G. Beigel, "Motivations in the Choice of Teaching," The Journal of Teacher Education, 4:106-109, March, 1953.

²⁹Jean Pierre Jordaan, "The Vocational Choice," The Journal of Teacher Education, 6:3, March, 1955.

³⁰Henry Kaczkowski, Clifford George, and Paul Gallagher, "The Influence of an Exploratory Shop Course," Vocational Guidance Quarterly, 11:202-203, Spring, 1963.

³¹Wilber H. Dutton and Evan R. Keislar, "Attitudes Toward Teaching," The Journal of Teacher Education, 12:165-171, June, 1961.

toward teaching indicated that the way an individual feels toward a profession and his disposition toward overt action seem to play an important part in the selection of a profession as a career.

Austin³² conducted a study to assess the career expectations of 650 male high school seniors on their personal characteristics when they were in the ninth grade . . . The students' . . . career choice at the ninth grade level were the best predictors of career outcome at the twelfth grade level.

Elton³³ investigated the influence of personality and aptitude predictors on the career role choice and vocational choices of entering freshmen at the University of Kentucky. The analysis of the data revealed that:

1. Personality factors accounted for the major part of discrimination in vocational choice.
2. A combination of ability and personality accounted for the major part of discrimination in career role choice.

Delong³⁴ described the teacher preparation program at Grand

³²Helen S. Austin, "Career Development During High School Years," The Journal of Counseling Psychology, 14:94-98, March, 1967.

³³Charles F. Elton, "Male Career Role and Vocational Choice: Their Prediction with Personality and Aptitude Variables," The Journal of Counseling Psychology, 14:99-105, March, 1967.

³⁴Greta Delong, "Toward More Meaningful Teacher Preparation," The Journal of Teacher Education, 22:15-17, Spring, 1971.

Valley State College. Students were required to spend 90 full days in the public schools. The variety of experience in public schools provided opportunity for students to explore many facets of public school education before deciding on a specific vocation or teaching assignment.

Austin³⁵ studied the patterns of career change over time, and noted that:

1. The career shifts, with their resulting net "gains" and "losses" to various occupational groups, reflected that a student perceives and interprets an occupational career differently at different stages of his educational and occupational development.
2. Career changes occurred as a result of personal development and educational experiences.
3. Consistent patterns of shift reflected environmental and cultural influences on career decision.

Wish and Hasazi³⁶ investigated the relationship of achievement-related motivational variables and subject probability of success to curricular choice in college males. The analysis of the data indicated that when fear of failure was greater than the need for

³⁵Helen S. Austin, "Patterns of Career Choice Over Time," Personnel and Guidance Journal, 45:541-546, February, 1967.

³⁶Peter A. Wish and Joseph E. Hasazi, "Motivational Determinants of Curricular Choice in College Males," The Journal of Counseling Psychology, 20:121-131, March, 1973.

achievement, subjects chose majors with either a low or high probability of success, regardless of how probability of success was judged. When need for achievement was the greater of the motives, results depended on how the probability of success was determined. Subjects chose majors with a low or high probability of success when the self was used as the standard of judgment, but chose majors with an intermediate probability of success when others were used as the standard.

Robbins³⁷ related that the decision-making process in professional education will shift from theory-oriented to experience-oriented people. He emphasized that the prospective teacher will move through a series of sequential experimental roles--teacher aide, participant observer, assisting teacher, associate teacher, intern teacher, extern teacher--in route to becoming a fully certified teacher.

Summary

The review of the literature has reflected the major thinking in the area of teacher career choice and clinical experience. The ideas are summarized in the following statements.

1. Most writers who dealt with pre-student teaching clinical experience tended to agree that such experiences with children were advantageous for prospective teachers.
2. A need for a greater commitment of teachers to the teaching profession was recognized.

³⁷Glaydon D. Robbins, "New Preparation for Teachers," The Educational Forum, 36:99-102, November, 1971.

3. Although the decision to pursue a career may occur as a result of experiences encountered over many years, exposure to environmental experiences tended to aid in decision-making.

CHAPTER III

DESIGN OF THE STUDY

Chapter III describes the methodology used in conducting the study and includes a discussion of definitions, population, sample, hypotheses, design, the instrument and format headings.

Definitions

The following definitions clarify pertinent terms which are used through the study.

1. Clinical experiences are elementary classroom experiences provided in Education 101A for pre-education students seeking admission to elementary teacher certification programs. As a teacher's aide, pre-education students are required to spend one day each week for one ten-week term in an actual elementary classroom setting under the supervision of a regular elementary teacher with regular contact by university faculty both in the elementary classroom and in large groups on campus.
2. Continuing education majors are those Michigan State University students who have successfully completed Education 101A and are pursuing an elementary teacher certification program in one of the following: elementary

education, special education, or child development and teaching (pre-school education). These majors have not yet enrolled in student teaching.

3. Graduates are those Michigan State University students who successfully completed Education 101A and all requirements for elementary teacher certification and graduated with an undergraduate degree and teaching certificate.
4. Noncontinuing Education Majors are those Michigan State University students who have successfully completed Education 101A but have not pursued an elementary teacher certification program.
5. Pre-Education students are those Michigan State University students required to successfully complete Education 101A, the pre-requisite course for admission to elementary teacher certification programs as described in item 2 above.
6. Education 101A--Exploring Elementary Teaching, is a three hour clinical experience course required of all students seeking admission to the Michigan State University elementary certification program as described in item 2 above. The current Michigan State University catalog describes Education 101A as:

Emphasis on the nature of teaching in the elementary school achieved through field experiences while serving

as a teacher aide in the elementary classroom. Concurrent lecture sessions focus on techniques of classroom management and operation.¹

7. Education 101A Equivalency is "a course given in a community college (or another four year college) which may be considered equivalent to the M.S.U. Education 101A Exploring Teaching if the following conditions are met:
 - a) The student shall have a minimum of 60 contact hours in the regular elementary, nursery school, Headstart or special education classroom during the regular school year, at which time the children are engaged in customary school learning tasks.
 - b) The student shall have regular supervision by an individual responsible for the exploring teaching experience.
 - c) There shall be regular contact between the college supervisor and the student in a group setting or in a one-to-one setting for the purposes of feedback and clarification of student's perceptions of teacher aide tasks and his performance in carrying out these tasks.
 - d) The supervisor and the classroom teacher shall make a serious effort to evaluate the student's performance as a teacher aide."²
8. Prior Classroom Experiences are those contacts with children, youth, and adults which make a direct contribution to an understanding of guiding individuals and are

¹Michigan State University Catalogue, Description of Courses Section, Michigan State University Publications, Vol. #6, p. 197, 1971.

²College of Education, "Education 101A Course Equivalency Guidelines," Michigan State University Publications, 1972.

not considered requirements for successful completion of Education 101A.

9. Student Teachers are those Michigan State University students who successfully completed Education 101A along with all other certification requirements and are enrolled or have completed student teaching (Education 436) but have not graduated.
10. Waiver students are those students possessing experience equivalent to Education 101A for admittance to elementary teacher certification programs.

Population

The population for this study consists of 793 Michigan State University graduates, student teachers, continuing education majors, non-continuing education majors³ and 141 waiver students⁴ who successfully completed Education 101A or its equivalent, pre-requisite for entrance into an elementary teacher certification program, during the Fall term 1971 through the Fall term 1973.

Michigan State University registration records were used to identify the 934 student population for this study. Education 101A

³Office of the Registrar, Michigan State University Final Grade List for Education 101A, Fall term 1971 to Fall term 1973, inclusive.

⁴Undergraduate Student Affairs Office, Education 101A waivers, College of Education, Fall term 1971 to Fall term 1973, inclusive.

class lists from the Fall term 1971 through the Fall term 1973 were used to subdivide the population into five groups for study.

Sample

The sample population was a direct proportion random sampling of Michigan State University students who successfully completed Education 101A or its equivalent during the Fall term 1971 through the Fall term 1973. The sample was selected in the following manner:

A classification of five sub-groups was made of the 934 Michigan State University students who successfully completed Education 101A or its equivalent during the Fall term 1971 through the Fall term 1973. On the average, it was found that the ratio of students seeking entrance into elementary certification programs was 5 females to 1 male. To be consistent with the study design, it was necessary that the sample population be at or near a 50-50 male, female split. The original population of 934 was divided first into male and female subjects and then a random selection performed obtaining the five group sample populations.

Raj's⁵ random number tables together with the Michigan State University Fall term 1971 through Fall term 1973 Education 101A final grade list were used to randomly select thirty subjects for each of the five groups.

A basic group size of thirty was due to the limited size of

⁵Des Raj, The Design of Sample Surveys, (McGraw-Hill, Inc., 1972), pp. 364-68.

the non-continuing education group which consisted of 31 subjects. This group had a female to male ratio of 2 to 1. A ratio of 1 to 1 male and female was obtained for the graduates, student teachers, continuing education majors, and waiver students.

Hypotheses

The null form is utilized in stating the hypotheses.

- Ho. 1 There is no difference among the graduates, student teachers, continuing education majors, non-continuing education majors and waiver students on self stated motivation for teaching, attitude toward Education 101A and application of Education 101A to desire to teach.
- Ho. 1
A There is no difference among graduates, student teachers, continuing education majors, non-continuing education majors and waiver students on self stated motivation for teaching.
- Ho. 1
B There is no difference among graduates, student teachers, continuing education majors, non-continuing majors and waiver students on attitude toward Education 101A.
- Ho. 1
C There is no difference among graduates, student teachers, continuing education majors, non-continuing education majors and waiver students on application of Education 101A to desire to teach.

- Ho. 2 There is no difference between male and female on self stated motivation for teaching, attitude toward Education 101A and application of Education 101A to desire to teach.
- Ho. 2
A There is no difference between male and female on self stated motivation for teaching.
- Ho. 2
B There is no difference between male and female on attitude toward Education 101A.
- Ho. 2
C There is no difference between male and female on application of Education 101A to desire to teach.
- Ho. 3 There is no difference between persons who have had no experience with children before Education 101A on self stated motivation for teaching, attitude toward Education 101A, and application of Education 101A to desire to teach.
- Ho. 3
A There is no difference between persons who have had no experience with children prior to Education 101A and persons who have experience with children before Education 101A on self stated motivation for teaching.
- Ho. 3
B There is no difference between persons who have had no experience with children prior to Education 101A and persons who have experience with children before Education 101A on attitude toward Education 101A.
- Ho. 3
C There is no difference between persons who have had no experience with children prior to Education 101A

and persons who have experience with children before Education 101A on application of Education 101A to desire to teach.

- Ho. 4 There is no difference among the class levels:
sophomore, junior, senior and graduate, on self stated
motivation for teaching, attitude toward Education 101A,
and the application of Education 101A toward desire to
teach.
- Ho. 4
A There is no difference among the class levels:
sophomore, junior, senior and graduate, on self stated
motivation for teaching.
- Ho. 4
B There is no difference among the class levels:
sophomore, junior, senior and graduate, on attitude
toward Education 101A.
- Ho. 4
C There is no difference among the class levels:
sophomore, junior, senior and graduate, on application
of Education 101A to desire to teach.
- Ho. 5 There is no difference between Michigan State University
students receiving waivers and those Michigan State
University students who successfully completed Education
101A for admission into elementary teacher certification
programs on self stated motivation for teaching, atti-
tude toward Education 101A.
- Ho. 5
A There is no difference between Michigan State University
students receiving waivers and those Michigan State

University students who successfully completed Education 101A for admission into elementary certification programs on self stated motivation for teaching.

- No. 5
B There is no difference between Michigan State University students receiving waivers and those Michigan State University students who successfully completed Education 101A for admission into elementary certification programs on attitude toward Education 101A.

Design

The methodology of the study is a three way analysis of variance. A multivariate and univariate analysis performed on five groups, graduates (G_1), student teachers (G_2), continuing education majors (G_3), non-continuing education majors (G_4), and waiver students (G_5), contrasted sex and experience with the dependent variables, self stated motivation for teaching, attitude toward Education 101A and application of Education 101A to desire to teach. All hypotheses constructed were tested at the .05 level of significance. The study design is as follows:

	<u>MALE</u>		<u>FEMALE</u>			
	<u>Experience</u>	<u>No Experience</u>	<u>Experience</u>	<u>No Experience</u>		
G_1	4	4	4	4	30	16
G_2	4	4	4	4	30	16
G_3	4	4	4	4	30	16
G_4	4	4	4	4	30	16
G_5	4	4	4	4	30	16

The study design contained 20 group cells and allowed for a 60 percent questionnaire response. All group cells, except no experience male and female of group five, were covered by the full compliment of questionnaire questions made on the three dependent variables and these cells are not applicable to waiver students by definition. The dependent variable, application of Education 101A to desire to teach was not applicable to waiver students and was not a part of the study.

Limitations of the study include two concerns. The occurrence of zero cell frequencies was one possibility. The probability that such an event would occur was reduced by first dividing the subjects of each group into categories of male and female subjects. Then, a random selection was made of male subjects separate from female subjects for the five groups studied. This process yielded either a 50-50 or near 50-50 division of male and female sample population insuring non-zero cell frequencies. Four groups of 50 percent male and female ratio and one group of 60-40 percent female to male ratio were obtained.

The second design problem was the possibility of not maintaining a true proportion of subjects in each sample group population to reflect the original group population. To control for this problem, a selection of the maximum number of subjects in the smallest original group as the sample group size was made. This resulted in an equal cell frequency of 4 for a possible 60 percent questionnaire response. Equal group sample population was necessary to control for type 1

errors (rejecting H_0 when in fact H_0 is true) and to allow for estimations within standard deviation of non-zero observation cells.

A multivariate and univariate three-way analysis of variance was performed on hypotheses $H_0. 1$, $H_0. 2$, $H_0. 3$, and $H_0. 5$. A one-way univariate analysis was performed on $H_0. 4$. This method was used to determine if a difference existed among the hypotheses on the variables, self stated motivation for teaching, attitude toward Education 101A, and application of Education 101A to desire to teach.

The demographic data collected in questions 1 through 7 of the Pre-Elementary education questionnaire form was analyzed.

Dependent variable data were collected in questions 8 through 20 on the Pre-Elementary education questionnaire form. The following combination of questions were formed as a result of recommendations of the Elementary Screening and Selection Advisory Committee and the Michigan State University Research Department.

1. Self stated motivation for teaching (Y_1) or SELFST was formed by the questions 8, 11, 12, 17, 19, and 20.
[Symbolically: $Y_1 = X_1 + X_4 + X_5 + X_{10} + X_{12} + X_{13}$].
2. Attitude toward Education 101A (Y_2) or ATTITD was measured with questions 15 and 18. [Symbolically: $Y_2 = X_{11} - X_8$].
3. Application of Education 101A to desire to teach (Y_3) or APPLIC was measured with questions 9, 10, 13, 14, and 16.
[Symbolically: $Y_3 = X_2 + X_3 + X_6 + X_7 + X_9$].

Instrument

The questionnaire used in this study was designed by the researcher with the assistance and advisement of the Elementary Education Screening and Selection Advisory Committee. The instrument was unique to this study, and therefore, face and content validity as perceived by the experts was used as described below. The Likert approach to scaling was used with the instrument. This method was chosen because of the interest in attitude and the ready adaptability of this scale to I.B.M. processes. A score of 5 was assigned to the position, "strongly agree", decreasing in value to a low of 1 for the position, "strongly disagree". A score of 0 was assigned to the position, "not applicable".

A list of dependent variables together with a list of questions was sent to the Screening and Selection Advisory Committee for Admission into Elementary Teacher Certification Programs. The Advisory Committee received the questions and added pertinent comments. These data were compiled and a questionnaire formed.

The revised questionnaire was returned to the Advisory Committee, who acted as a review panel. The committee indicated their preference of questions used and reviewed the revised questionnaire for clarity. From these data collected, the questionnaire was revised again and considered the actual instrument to be administered to the sample population.

Procedure

The procedure describes the methods used to identify group subjects and to collect and analyze data for the study. One hundred and fifty subjects, representing five groups for study, were randomly selected from the Fall term 1971 through the Fall term 1973 Education 101A Final Grade List during the spring term 1974. On April 5, 1974, a questionnaire, cover letter, and self-addressed stamped envelope were mailed to each subject requesting participation in the study by completing and returning the questionnaire. Fifty-eight percent of the population responded by April 30, 1974. On May 2, 1974, a non-response follow-up letter was sent to all non-respondents. By May 20, 1974, a seventy-one percent response was received. Table 3.1 illustrates the population distribution and the number of responses received.

Table 3.1. Summary of the Population Distribution Responses.

Subjects	Number Mailed	Number Returned			Percentage Returned		
		Male	Female	Total	Male	Female	Total
Total Population	150	47	59	106	44	56	71
Graduates	30	8	8	16	50	50	53
Student Teachers	30	10	13	23	43	57	77
Continuing Education Majors	30	13	11	24	54	46	80
Non-continuing Education Majors	30	4	18	22	18	82	73
Waiver Students	30	12	9	21	57	43	70

The questionnaire data returns were coded for IBM key punch processing and transferred to IBM cards. The computer programs used

were designed to test the hypotheses for significance at the .05 level. If a hypothesis test was significant at the .95 level of confidence, the computer program would automatically test the three dependent variables at the .0167 level of significance for the difference that existed among the groups. Finn's⁶ multivariate analysis of variance was used to find the overall significance of hypotheses. The analysis of data was performed through the use of the CDC 3600 IBM computer.

Summary

Chapter III includes descriptions of the procedures, methods, sources of data utilized to investigate the five groups studied of self stated motivation for teaching, attitude toward Education 101A, and application of Education 101A to desire to teach.

With the assistance of the Elementary Screening and Selection Advisory Committee for Admission into Elementary Teacher Certification Programs, twenty questions were selected for the questionnaire. The instrument was mailed to 150 subjects who successfully completed Education 101A clinical experience or its waiver equivalent during the Fall term 1971 through the Fall term 1973. A 71 percent questionnaire response was received.

The data from the returned questionnaire were quantified and

⁶Jeremy D. Finn, "Multivariate," Version 4 (Buffalo: State University of New York at Buffalo, Department of Educational Psychology, June 1968).

Finn's multivariate analysis of variance used to find overall significance at the .05 level. Univariate analyses were performed at the .0167 level of significance.

The data are organized, presented, and analyzed in Chapter IV.

CHAPTER IV

ANALYSIS OF DATA

The analysis of the five hypotheses tested in the present study are presented in the first section of this chapter. Following this is a summary of the data collected. The Analysis of Data is concluded with a chapter summary.

Analytical Instrument

The instrument used to measure the three dependent variables of the study was the Pre-Education Clinical Experience and Teacher Career Decision Questionnaire.

Items 1 through 7 of the Pre-Education clinical experience questionnaire elicits demographic information about age, sex, sophomore, junior, senior, graduate, teaching related experience and preference for teaching.

Items 8 through 20 ask teacher career information for measurement of the dependent variables, self stated motivation for teaching, application of Education 101A to desire to teach and attitude toward Education 101A.

Experimental Design

The data collected for the overall experimental design and the experimental hypotheses designs for Ho. 4 and Ho. 5 are explained in

tables 4.1 and 4.2. The tables illustrate cell frequency distribution, cell mean and standard deviation and grand mean for three dependent variables. Negative means are a result of negative questions that required reversals for scoring.

Table 4.1. Cell Mean, Frequency, Standard Deviation and Grand Mean of Experience of Male and Female on Self Stated Motivation, Attitude and Application.

	Female				Male				
	No Experience		Experience		No Experience		Experience		
	n=3		n=5		n=4		n=4		
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	
G ₁	10.33	3.06	10.00	2.63	12.25	2.63	16.00	2.94	SELFST
	13.67	3.51	11.20	4.97	13.00	4.08	14.25	3.40	APPLIC
	No Response		0.40	0.55	No Response		1.00	0.82	ATTITD
----- n=5 ----- n=5 ----- n=3 ----- n=10 -----									
G ₂	11.20	1.92	14.80	3.77	15.00	1.00	14.00	2.91	SELFST
	13.40	5.32	14.80	4.15	0.67	5.77	14.70	3.02	APPLIC
	0.40	0.55	0.80	1.30	0.33	0.58	0.80	0.92	ATTITD
----- n=9 ----- n=4 ----- n=3 ----- n=8 -----									
G ₃	11.67	3.32	16.50	6.45	9.67	3.21	13.00	4.31	SELFST
	13.33	1.32	16.75	2.22	12.33	2.89	13.38	1.60	APPLIC
	-0.33	0.50	0.25	0.50	No Response		0.38	0.52	ATTITD
----- n=1 ----- n=3 ----- n=5 ----- n=13 -----									
G ₄	15.00	0.00	11.33	1.58	5.20	3.11	12.69	3.73	SELFST
	8.00	0.00	10.67	6.03	6.80	3.42	11.62	4.37	APPLIC
	No Response		-1.33	1.53	-.20	0.45	0.85	1.34	ATTITD
----- n=7 ----- n=8 -----									
G ₅			9.29	5.47			16.38	1.85	SELFST
			10.00	4.58			12.25	2.96	APPLIC
			0.57	1.99			0.50	1.85	ATTITD

Grand	11.5		12.0		9.9		14.0		SELFST
Mean	8.85		12.4		7.46		12.95		APPLIC
	- .046		.29		-.0006		4.27		ATTITD

Table 4.2. Cell Frequency, Mean Standard Deviation and Grand Mean of Classified Group Interest on Self Stated Motivation for Teaching, Attitude Toward Education 101A and Application of Education 101A to Desire to Teach.

	<u>Ho.4</u>				<u>Ho.5</u>		
	n=25				n=63		
	Mean	S.D.			Mean	S.D.	
Graduates	12.20	4.796	SELFST	$G_1 + G_2 + G_3$	13.14	3.63	SELFST
	11.36	4.348	APPLIC				
	0.80	1.354	ATTITD		0.35	0.74	ATTITD
----- n=40 -----				----- n=18 -----			
Seniors	13.30	3.398	SELFST	G_5	12.50	5.57	SELFST
	13.18	3.961	APPLIC				
	0.40	1.081	ATTITD		0.44	1.69	ATTITD
----- n=26 -----				-----			
Juniors	12.88	4.330	SELFST	Grand Mean	12.998		SELFST
	13.38	3.201	APPLIC				
	-.08	.891	ATTITD		.37		ATTITD
----- n=12 -----							
Sophomores	10.08	5.071	SELFST				
	11.83	5.096	APPLIC				
	0.17	5.774	ATTITD				
Grand Mean	12.55		SELFST				
	12.63		APPLIC				
	.389		ATTITD				

Hypotheses

The hypotheses tested in this study are presented below. A tabular presentation of results, description of significance testing done and a significance statement accompanies each hypothesis. (For interaction terms see Appendix C, Table C.1).

Hypothesis Ho.1

There is no difference among the graduates, student teachers, continuing education majors, non-continuing education majors, and waiver students, on self stated motivation for teaching, application of Education 101A to desire to teach, and attitude toward Education 101A.

A multivariate three-way analysis of variance tested the significance of hypothesis Ho.1. The results were significant as illustrated in Table 4.3.

Table 4.3. MANANOVA of Self Stated Motivation for Teaching, Application of Education 101A to Desire to Teach, and Attitude Toward Education 101A for Five Interest Groups.

Source of Variation	df		Multivariate F-Test	ANOVA P $\leq$
Groups	12,217		2.197	.0129*
		Hypothesis Mean Square	Univariate F-Test	ANOVA P $\leq$
SELFST ERROR	4 84	23.499 13.392	1.755	.146
ATTITD ERROR	4 84	1.171 1.085	.994	.416
APPLIC ERROR	4 84	69.189 14.480	4.778	.0017**

*Significant at the .05 level.

**Significant at the .0167 level.

Hypothesis Ho.1 was designed to test the difference among the groups on the three dependent variables. It was tested at the .05 level of significance. A probability of p less than .0129 was obtained. This indicated that the group multivariate F-test value, 2.197, was

significant and that a difference existed among the five groups on at least one of the dependent variables.

Hypothesis Ho.1:A

There is no difference among the graduates, student teachers, continuing education majors, non-continuing education majors, and waiver students on self stated motivation for teaching.

And

Hypothesis Ho.1:B

There is no difference among the graduates, student teachers, continuing education majors, non-continuing education majors, and waiver students on attitude toward Education 101A.

A three-way ANOVA tested the significance of hypotheses Ho.1:A and Ho.1:B. The results of the F-tests are illustrated in Table 4.3.

The null hypotheses for self stated motivation for teaching and attitude toward Education 101A were not rejected at the .0167 level of significance.

The probability, p less than .0017, indicated that the difference among the groups was on the application of Education 101A to desire to teach.

Hypothesis Ho.1:C

There is no difference among the graduates, student teachers, continuing education majors, non-continuing education majors, and waiver students on application of Education 101A to desire to teach.

A three-way ANOVA tested the significance of hypothesis Ho.1:C. The results of the analysis is given in Table 4.3.

Hypothesis Ho.2

There will be no difference between males and females on self stated motivation for teaching, attitude toward Education 101A, and application of Education 101A to desire to teach.

A multivariate three-way ANOVA was performed to test the significance of hypothesis Ho.2. The overall multivariate F-ratio test was significant. The results of the analysis are given in Table 4.4.

Table 4.4. MANOVA of Sex on Application of Education 101A to Desire to Teach, Self Stated Motivation for Teaching and Attitude Toward Education 101A.

Source of Variation		df	Multivariate F-Test	ANOVA P $\leq$
Sex		3, 82	2.735	.0489*

Source of Variation	df	Hypothesis Mean Square	Univariate F-Test	ANOVA P $\leq$
Sex				
SELFST ERROR	1 84	15.794 13.392	3.868	.051
ATTITD ERROR	1 84	3.950 1.085	3.352	.071
APPLIC ERROR	1 84	5.364 14.480	.371	.545

*Significant at the .05 level of significance.

The null hypothesis of the group sex comparison was rejected at the .95 level of confidence. The significance of the multivariate

F-test indicates that a difference existed on sex among the groups studied on at least one of the dependent variables.

However, the univariate F-test performed on the dependent variables, at the 1/3 alpha level of significance, indicated that no difference existed among the five groups on the three dependent variables illustrated in Table 4.4.

The null hypotheses for the comparison of sex with self stated motivation for teaching, attitude toward Education 101A, and application of Education 101A to desire to teach were not rejected at the .05 level of significance.

Hypothesis Ho.2:A

There will be no difference between males and females on self stated motivation for teaching.

And

Hypothesis Ho.2:B

There will be no difference between males and females on attitude toward Education 101A.

And

Hypothesis Ho.2:C

There will be no difference between males and females on application of Education 101A to desire to teach.

A three way ANOVA was performed to test the significance of hypotheses Ho.2:A, Ho.2:B, and Ho.2:C. The univariate F-tests were not significant. The results of the analyses are given in Table 4.4.

Hypothesis Ho.3

There will be no difference between persons who have had no experience with children prior to Education 101A and persons who have experience with children before Education 101A on self stated motivation for teaching, attitude toward Education 101A and application of Education 101A to desire to teach.

A multivariate three-way ANOVA was performed to test the significance of hypothesis Ho.3. The F-ratio for multivariate test was significant. The result of the analysis is given in Table 4.5.

Table 4.5. MANANOVA of Self Stated Motivation for Teaching, Attitude Toward Education 101A, and Application of Education 101A to Desire to Teach on Experience.

Source of Variation	df		Multivariate F-Test	ANOVA P $\leq$
Experience	3, 82		7.051	.0003*
	df	Hypothesis Mean Square	Univariate F-Test	ANOVA P
SELFST ERROR	1 84	193.765 13.392	14.469	.003**
ATTITD ERROR	1 84	5.092 1.085	4.322	.0407*
APPLIC ERROR	1 84	25.632 14.480	1.770	.187

*Significant at the .05 level of confidence.

**Significant at the .0167 level of confidence.

The null hypothesis for difference in experience was rejected at the .95 level of confidence. The significance of the multivariate F-test indicates that a difference exists on experience between

students who have experience with children before Education 101A and those who do not have prior experience with children on at least one of the three dependent variables.

The univariate F-test performed on the three dependent variables indicate that the difference among students with experience and those with no experience with children was on self stated motivation for teaching.

Hypothesis Ho.3:A

There will be no difference between persons who have had no experience with children prior to Education 101A and persons who have experience with children before Education 101A on self stated motivation for teaching.

And

Hypothesis Ho.3:B

There will be no difference between persons who have had no experience with children prior to Education 101A and persons who have experience with children before Education 101A on attitude toward Education 101A.

A three-way univariate analysis of variance was performed to test the significance of Ho.3:A, and Ho.3:B. The results of the analysis is given in Table 4.5.

The null hypothesis, Ho.3:A, was rejected at the .0167 level of significance and indicated that self stated motivation for teaching was the cause of the overall multivariate F-test significance.

A comparison of the average grand mean indicated that those students who have experience with children before the Education 101A experience tend to have a higher self stated motivation for teaching

than those who have no experience with children prior to the Education 101A experience.

Table 4.6. Grand Mean and Average Grand Mean of Experience for Males and Females on Self Stated Motivation for Teaching.

	Grand Mean Male	Grand Mean Female	Average Grand Mean	
No Prior Experience	9.9	11.2	10.5	SELFST
Prior Experience	14.0	12.0	13.0	SELFST

Hypothesis Ho.3:C

There will be no difference between persons who have had no experience with children prior to Education 101A and persons who have experience with children before Education 101A on application of Education 101A to desire to teach.

A three-way ANOVA tested the significance of hypothesis Ho.3:C. The null hypothesis for difference in experience comparison was not rejected at the .0167 level of significance. The result of the F-test is illustrated in Table 4.5.

Hypothesis Ho.4

There will be no difference among the class levels sophomore, junior, senior, and graduate on self stated motivation for teaching, attitude toward Education 101A, and application of Education 101A to desire to teach.

A multivariate analysis of variance was performed to test the significance of hypothesis Ho.4. The multivariate ANOVA was not

significant. The result of the analysis is given in Table 4.7.

Table 4.7. MANANOVA of Self Stated Motivation for Teaching, Attitude Toward Education 101A, and Application of Education 101A to Desire to Teach on Class Level Difference.

Source of Variation	df	Multivariate F-Test	p
Classification	9, 236	1.9197	.531

The null hypothesis for the class level difference was not rejected at the .05 level of significance. This indicated that no difference existed among the class levels on the three dependent variables.

Hypothesis Ho.5

There is no difference between Michigan State University students receiving waivers and those Michigan State University students who successfully completed Education 101A for admission into elementary teacher certification programs on self stated motivation for teaching and attitude toward Education 101A.

A multivariate analysis of variance was performed to test for the difference that may exist, if any, between those students who enter teacher certification programs by the Education 101A equivalency experience and those who are admitted by the successful completion of Education 101A clinical experience.

The null hypothesis was tested for significance at the .95 level of confidence. A probability of p less .0802 indicated that the multivariate F-test was not significant and no difference

existed among the groups on the dependent variables. The results of the analysis is given in Table 4.8.

Table 4.8. MANANOVA of Self Stated Motivation for Teaching, Attitude Toward Education 101A, and Application of Education 101A to Desire to Teach in Student Admission.

Source of Variation	df	Multivariate F-Test	P
$G_1 + G_2 + G_3$ VS G_5	3, 77	2.338	.0802

The null hypothesis for the difference in students admitted to elementary teacher certification programs was not rejected at the .05 level of significance.

Summary of the Data Collected

The summary of the data collected includes a descriptive analysis and tables that interpret and illustrate the questionnaire item response. The intention is an empirical presentation of the data with a minimum interpretative comment.

Descriptive Analysis

Of the 106 population response, 66 percent (70 students) elected to continue elementary teacher certification programs after the successful completion of Education 101A, 29 percent (31 students) remained fairly certain about teaching, and 9 percent (10 students)

declined the pursuit of elementary teacher training. (See tables 4.9 and 4.10).

Table 4.9. Analysis of Contingency Table for "Desire to Teach Elementary Education After Taking Education 101A."

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Absolutely Certain	10	11	12	4	6	43	41
Fairly Certain	4	9	9	3	6	31	29
Undecided	1	0	0	5	0	6	6
Certain I Did Not Want To	0	0	2	8	0	10	9
N/A	1	3	1	2	9	16	15
TOTAL	16	23	24	22	21	106	100

Table 4.10. Analysis of Contingency Table for "The Influence of Education 101A Caused Me To."

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Continue an Elem. Certi. Program	15	15	20	8	12	70	66
Change major from Elem. Education	0	0	2	8	0	10	9
Change major from Spec. Education	0	0	0	3	0	3	3
Change major from Pre-School Educ.	0	3	0	1	0	4	4
None of the Above	0	2	1	1	1	5	5
Didn't Influence Me	1	3	1	1	8	14	13
TOTAL	16	23	24	22	21	106	100

While some students entered the pre-elementary educational clinical experience course with a fixed outlook on teaching, a large

percentage of the students entered the course Fairly Certain or Undecided. Table 4.11 indicates that 50 percent (53 students) of the response population were fairly certain about elementary teaching and 15 percent (16 students) were undecided before taking Education 101A.

Table 4.11. Analysis of Contingency Table for Desire to Teach Elementary Education Before Taking Education 101A.

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Absolutely Certain	6	7	7	5	4	29	27
Fairly Certain	9	13	13	8	10	53	50
Undecided	1	2	4	9	0	16	15
Certain I Did Not Want To	0	0	0	0	0	0	0
N/A	0	1	0	0	7	8	8
TOTAL	16	23	24	22	21	106	100

Sixty-six percent (70 students) of the population continued elementary teacher certification programs, 29 percent (31 students) remained fairly certain about their commitment to teaching, and 6 percent (6 students) were undecided after the successful completion of Education 101A. (See tables 4.9 and 4.10). However, 9 percent (10 students) changed to a "certain I do not want to teach elementary education" position and 41 percent (43 students) indicated an "absolutely certain I want to teach elementary education" position. Of the 43 persons involved in the absolutely certain category after the successful completion of Education 101A, 22 were elements of the original absolutely certain I want to teach elementary education

category, 19 were originally in the fairly certain category, and 2 were originally undecided. Of the 10 persons who changed to certain I do not want to teach elementary education category, 3 were originally in the fairly certain category and 7 were originally undecided.

The total (106) population response indicated that prior to the Education 101A experience, 15 percent (16 students) of the population, was "undecided" about becoming an elementary teacher and 50 percent (53 students) was "fairly certain". After the completion of Education 101A, 16 percent (17 students) changed majors, 9 percent (10 students) of the population was certain they did not want to be an elementary teacher. Forty-one percent (43 students) were "absolutely certain" they wanted to teach elementary education, and 20 percent (31 students) were "fairly certain". (See tables 4.9 and 4.10).

The analysis of data indicated that an apparent discrepancy occurred with the study instrument for the non-continuing education majors group in the response choice options. This discrepancy is noted in Table 4.9. The option that should have existed in the response category would account for the students successfully completing the Education 101A experience, being admitted to an elementary teacher certification program, and then the decision is made to not continue the teacher certification program. The discrepancy probably occurred as a result of the students responding to the choice "absolutely certain" they wanted to teach elementary education after the successful completion of the Education 101A experience and

Table 4.12. Analysis of Contingency Table for the Comparison of Decision to Teach Before and After the Education 101A Experience.

Before Education 101A		Total	Percent	After Education 101A		Total	Percent
				(A ₁ , A ₃ , A ₄ , A ₆ , A ₈ , A ₁₀ , A ₁₁ , A ₁₂ , A ₁₃ , A ₁₄ , A ₁₅ , A ₁₆ , A ₁₇ , A ₁₈ , A ₁₉ , A ₂₀ , A ₂₁ , A ₂₂ , A ₂₅ , A ₂₆ , A ₂₇ , A ₂₈) = 22			
Absolutely Certain	(A ₁ , A ₂ , ..., A ₂₉) Original Selection	29	27	(C ₃ , C ₄ , C ₅ , C ₆ , C ₇ , C ₈ , C ₁₂ , C ₁₃ , C ₁₅ , C ₁₉ , C ₂₂ , C ₂₄ , C ₂₆ , C ₂₇ , C ₃₄ , C ₃₈ , C ₄₄ , C ₄₇ , C ₅₀) = 19			
				(U ₂ , U ₁₆) = 2		43	41
				(A ₂ , A ₂₄) = 2			
Fairly Certain	(C ₁ , C ₂ , ..., C ₅₃) Original Selection	53	50	(C ₁ , C ₂ , C ₉ , C ₁₀ , C ₁₁ , C ₁₄ , C ₁₆ , C ₁₇ , C ₁₈ , C ₂₀ , C ₂₁ , C ₂₃ , C ₂₅ , C ₂₈ , C ₃₀ , C ₃₁ , C ₃₂ , C ₃₃ , C ₃₉ , C ₄₃ , C ₄₅ , C ₄₆ , C ₄₈ , C ₄₉ , C ₅₁ , C ₅₃) = 26			
				(U ₅ , U ₁₁ , U ₁₂) = 3		31	29

Table 4.12. Continued.

Before Education 101A		Total	Percent	After Education 101A		Total	Percent
Original Selection				$(C_{37}, C_{41}) = 2$			
Undecided	$(U_1, U_2, \dots, U_{16})$	16	15	$(U_1, U_6, U_{13}, U_{14}) = 4$		6	6
-----				-----			
Certain I Did Not Want To		0	0	$(C_{35}, C_{36}, C_{42}) = 3$			
				$(U_3, U_4, U_7, U_8, U_9, U_{10}, U_{15}) = 7$		10	9
-----				-----			
				$(A_5, A_7, A_9, A_{23}, A_{29}) = 5$			
				$(C_{29}, C_{40}, C_{52}) = 3$			
Not Applicable	$(N_1, N_2, \dots, N_8)$	8	8				
Original Selection				$(N_1, N_2, N_3, N_4, N_5, N_6, N_7, N_8) = 8$		16	15
TOTAL		106	100			106	100

consequently, were classified as non-continuing education majors.

Four students in this study fell into this category and no response option existed that would sub-divide the non-continuing education majors category and properly categorize the four respondents.

Table 4.13 indicates that 34 percent (36 students) in this study had no experience with children prior to Education 101A, and 63 percent (66 students) had experience with children before the Education 101A experience. Although a large number of students entered the pre-elementary education experience course with prior experience with children, a large percentage of these students remain in doubt or only fairly certain about their commitment to teaching.

Table 4.13. Analysis of Contingency Table.

Prior teacher related experience with children before taking Education 101A.

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Had Experience	9	15	12	16	14	66	63
No Experience	7	8	12	6	3	36	34
N/R	0	0	0	0	3	3	3
TOTAL	16	23	24	22	21	106	100

Fifty-six percent of the respondents were female and 44 percent were male. A division of 50 ± 6 percent of male and female respondents was received.

Table 4.14. Analysis of Contingency Table for Sex.

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Male	8	10	13	4	12	47	44
Female	8	13	11	18	9	59	56
TOTAL	16	23	24	22	21	106	100

Summary

The five hypotheses studied are listed in the first column below. A statement of the result of significance testing for each hypothesis is presented in the second column.

HypothesesResults

Ho.1 There is no difference among the graduates, student teachers, continuing education majors, non-continuing education majors, and waiver students on self stated motivation for teaching, attitude toward Education 101A, and application of Education 101A to desire to teach.

The null hypothesis was rejected at the .05 level of significance.

Ho.1:A There is no difference among the graduates, student teachers, continuing education majors, non-continuing education majors and

The null hypothesis was not rejected at the .0167 level of significance.

HypothesesResults

waiver students on self stated motivation for teaching.

Ho.1:B There is no difference among the graduates, student teachers, continuing education majors, non-continuing education majors, and waiver students on attitude toward Education 101A.

Ho.1:C There is no difference among the graduates, student teachers, continuing education majors, non-continuing education majors and waiver students on application of Education 101A to desire to teach.

Ho.2 There is no difference between males and females on self stated motivation for teaching, attitude toward Education 101A, and application of Education 101A to desire to teach.

The null hypothesis was not rejected at the .0167 level of significance.

The null hypothesis was rejected at the .0167 level of significance.

The null hypothesis was rejected at the .05 level of significance.

Hypotheses

Ho.2:A There is no difference between males and females on self stated motivation for teaching.

Ho.2:B There is no difference between males and females on attitude toward Education 101A.

Ho.2:C There is no difference between males and females on application of Education 101A to desire to teach.

Ho.3 There is no difference between persons who have had no experience with children prior to Education 101A and persons who have experience with children before Education 101A on self stated motivation for teaching, attitude toward Education 101A and application of Education 101A to desire to teach.

Results

The null hypothesis was not rejected at the .0167 level of significance.

The null hypothesis was not rejected at the .0167 level of significance.

The null hypothesis was not rejected at the .0167 level of significance.

The null hypothesis was rejected at the .05 level of significance.

Hypotheses

Ho.3:A There is no difference between persons who have had no experience with children prior to Education 101A and persons who have experience with children before Education 101A on self stated motivation for teaching.

Ho.3:B There is no difference between persons who have had no experience with children prior to Education 101A and persons who have experience with children before Education 101A on attitude toward Education 101A.

Ho.3:C There is no difference between persons who have had no experience with children prior to Education 101A and persons who have experience with children before Education 101A on application of Education 101A to desire to teach.

Results

The null hypothesis was rejected at the .0167 level of significance.

The null hypothesis was rejected at the .0167 level of significance.

The null hypothesis was not rejected at the .0167 level of significance.

HypothesesResults

Ho.4 There is no difference among the class levels sophomore, junior, senior and graduate on self stated motivation for teaching, attitude toward Education 101A and application of Education 101A to desire to teach.

The null hypothesis was not rejected at the .05 level of significance.

Ho.5 There is no difference between Michigan State University students receiving waivers and those Michigan State University students who successfully completed Education 101A for admission into elementary teacher certification programs on attitude toward Education 101A and self stated motivation for teaching.

The null hypothesis was not rejected at the .05 level of significance.

The analysis of the results of this study indicate that:

1. There is a difference in opinion among the five groups studied on application of Education 101A to desire to teach.
2. There is a difference between male and female subjects on self stated motivation for teaching, application of

Education 101A to desire to teach, and attitude toward Education 101A when the three dependent variables are considered simultaneously.

3. There is a difference among those persons who have had no experience with children prior to Education 101A and those persons who have experience with children before taking Education 101A on self stated motivation for teaching.
4. There is no difference of opinion among the college class level students on self stated motivation for teaching, application of Education 101A to desire to teach and attitude toward Education 101A.
5. There is no difference among the waiver students and those completing Education 101A for admission into a teacher certification program.

CHAPTER V

SUMMARY AND CONCLUSIONS

A summary of the study, conclusions, discussion, implications and recommendations for further research are formal headings included in Chapter V.

Summary of the Study

The present study was an attempt to provide answers to the following questions:

1. What kind of successes are students having as a result of their Education 101A experience? i.e., what actually happened to those persons who successfully completed Education 101A?
2. What, if any, is the effect of Education 101A on the pursuit of an elementary teaching career?

The methodology used in answering these questions, the procedure by which the sample population and data were obtained, and a listing of the hypotheses to be researched are described in the Design of The Study. Pertinent terms are defined. The research design strengths and weaknesses and background information regarding the instrument are discussed.

The Analysis of Data consists of a demographic description of information collected and a comparison that contrasts independent and dependent variables.

Five groups of thirty students each were randomly selected from the final Education 101A grade list for the fall term 1971 through the fall term 1973, at Michigan State University. Each student was forwarded a pre-education clinical experience questionnaire designed to measure attitude toward Education 101A, self stated motivation for teaching, and application of Education 101A to desire to teach. Data collected was coded, key punched and analyzed through the use of the CDC 3600 IBM computer.

Conclusions

The findings of the Analysis of Data are presented in a discussion of the study hypotheses.

Hypotheses

Ho.1 There is a difference among the graduates, student teachers, continuing education majors, non-continuing education majors, and waiver students on self stated motivation for teaching, attitude toward Education 101A, and application of Education 101A to desire to teach.

Result--There is a difference in opinion among the five groups studied on application of Education 101A to desire to teach.

Conclusion--Education 101A does aid students in deciding to continue or discontinue elementary teacher certification programs. Examination of tables 4.9 and 4.11 indicated that prior to the Education 101A experience, no subject in this study was certain he or she did not want to teach elementary education. Fifty percent of the students were fairly certain about teaching and 27 percent were absolutely certain they wanted to teach elementary education. At the completion of the Education 101A experience, 9 percent of the population were certain they did not want to teach elementary education and 41 percent were certain they wanted to teach. Of the 9 percent, 0 percent was in the original certain I do not want to teach category and of the 41 percent, 27 percent was in the original absolutely certain category. The impact of the Education 101A experience was to move an additional 22 percent into the absolutely certain category and 9 percent into the certain I don't want to teach category. Hence, 50 percent of the students in this study made firm decisions about entering elementary teacher certification programs as a result of the Education 101A experience. Table 4.10 indicated that a

combined total of 16 percent of the students changed from one of the intended elementary certification programs to other majors as a result of Education 101A.

Ho.2 There is a difference between male and female on self stated motivation for teaching, attitude toward Education 101A, and application of Education 101A to desire to teach.

Result--There is a difference between male and female subjects on self stated motivation for teaching, attitude toward Education 101A, and application of Education 101A to desire to teach when the three dependent variables are considered simultaneously.

Conclusion--The instrument used in this study was not fine enough to detect the difference that exists among the three dependent variables. It is concluded that a simultaneous consideration of all the dependent variables has caused the multivariate F-test to be significant.

Ho.3 There is a difference between persons who have no experience with children prior to Education 101A and persons who have experience with children before Education 101A on self stated motivation for teaching, application of Education 101A to desire to teach, and attitude toward Education 101A.

Result--There is a difference among those persons who have had no experience with children prior to Education 101A and those persons who have experience with children before taking Education 101A on self stated motivation for teaching.

Conclusion--The more experience one has with children, the greater his self stated motivation for teaching. An inspection of tables 4.11 and 4.12 indicated that 63 percent of the students entering the Education 101A clinical experience course had prior experience with children and were fairly certain about elementary teaching. Table 4.10 indicated that 66 percent of the students who took the clinical experience successfully completed the course and continued the pursuit of elementary teacher certification training. A comparison of tables 4.9 and 4.10 indicated that 29 percent of the students who successfully completed Education 101A remained fairly certain and 6 percent undecided about elementary teaching.

Since experience with children tends to be a factor that influences self stated motivation for teaching, experience with children may be thought of as an important requirement in the selection and admission process.

Ho.4 There is a difference among the class levels, sophomore, junior, senior, and graduate student on self stated motivation for teaching, attitude toward Education 101A, and application of Education 101A to desire to teach.

Result--There is no difference among the students on self stated motivation for teaching, attitude toward Education 101A, and application of Education 101A to desire to teach due to college class level.

Conclusion--Students' classification level has little or no effect on their decision to enter an elementary teacher certification program.

Ho.5 There is no difference between Michigan State University students receiving waivers and those students who successfully complete Education 101A for admission into elementary teacher certification programs on self stated motivation for teaching and attitude toward Education 101A.

Result--There is no difference among the waiver and those students completing Education 101A for admission into a teacher certification program.

Conclusion--Students decision to enter an elementary teacher certification program is not affected by the method of entry.

Discussion

In this study, it was assumed that clinical experience courses are not the final station in the decision making process. Then what, if any, is the effect of Education 101A on the pursuit of an elementary teaching career? The data collected in this study supports the claim that Education 101A does aid students in making decisions about elementary teaching. Education 101A supplies an environment in which some students can make decisions about teaching. For other students, it acts as a mechanism through which the student can gain child-oriented experiences and insight into his interest for future decision making.

Of the students who successfully completed the Education 101A experience, 41 percent were certain about their decision to continue an elementary teacher certification program, 9 percent were certain they did not want elementary teaching, and 16 percent actually changed to majors other than those leading to elementary teacher certification. The Education 101A experience appears to be beneficial both to the student and to the teaching profession in that the clinical exposure of students to the realities of elementary teaching early in their college careers has enabled some students to realize that their true professional interest may not lie in elementary teaching but rather in secondary education or in teacher supportive areas, or completely away from teaching.

The successes students gained as a result of the Education 101A experience may be reflected in the trend noted in this study. The degree of self stated motivation for teaching tends to be directly

related to the amount of experience a student may have with children. This factor, prior experience with children, may be associated with the decision to pursue or decline the pursuit of elementary teaching as a career. From the admissions standpoint, the fact that the waiver students were not different than the persons admitted through Education 101A on any of the variables serves as a verification that the admissions process has some reliability. Entry into the elementary certification programs by either route produces no significantly different results.

Finally, Education 101A affords prospective elementary teacher candidates the advantage of not having to wait until their student teaching experience to find out that elementary teaching is not what they want as a life profession.

Implication for Change

1. Clinical experience courses similar to Education 101A should include provisions for the identification of students who have successfully completed the clinical experience and remain fairly certain or undecided about their commitment to teaching. This is because a large number of elementary teacher candidates who successfully complete the clinical experience are admitted to elementary teacher certification programs and remain undecided about their commitment to teaching.

It is with the undecided person that the least amount of commitment to teaching is likely to occur.

This undecided person may pursue a teaching career, be successful with course content, and measure high on the discipline's professional standards and criteria, only to become cognizant after his teacher certification that the job he is trained for is not what he wants.

The early identification of these teacher candidates can result in the collection of valuable information that may facilitate the counseling of weakly committed teacher candidates admitted to elementary teacher certification programs in such a manner as to benefit both the student and the teaching profession.

2. Because students who possess a high self stated motivation for teaching tend to have the most experience with children, caution should be exercised to insure that students entering clinical experience courses with no prior experience with children receive ample child-oriented experiences. This may take the form of more than one Education 101A type experience.

Although a large number of students entered the clinical experience course with prior experience with children, a large percentage of these students remained fairly certain or undecided about their commitment to teaching after the successful completion of the clinical experience. This may imply that the motivation for teaching may be low. These students may need a continuous

clinical exposure to child-oriented experiences during their college career in developing a desire to teach or deciding not to pursue a teaching profession.

Recommendations for Further Research

Additional studies as well as this study can be extended to form the basis for making recommendations for further research. The following are suggested for future study:

1. The area of desire to teach should be explored more thoroughly. Regardless of the decrease in demand for certified teachers, it is important that teacher education students be committed to the teaching profession. There is a need for a valid instrument that will determine a student's commitment to teaching, and to use this information in advising students who are in the process of making teacher career decisions.
2. The present study should be replicated with refined instruments. This may provide reliable information on the role of sex and maturation in the teacher decision making process.
3. A longitudinal research project should be conducted over a period of five to ten years. Such a study could follow one group of Pre-Elementary education students through their first year of teaching. This effort should be directed toward measurement of variables such as: commitment to teaching, self stated motivation

for teaching, and desire to teach.

4. A need exists for finding the relationship of experience, self stated motivation for teaching, and desire to teach as it may apply to a student's decision to commit himself to the teaching profession. The desire to teach may be the factor that influences commitment to teaching.

In today's search for effectiveness in teaching, new methodologies and approaches to teacher training are being developed. Students may master these methodologies and yet, may not be committed to the teaching profession. The question of commitment to teaching must be explored and solutions found, so that research in teacher education maintains relevance.

APPENDIX A

QUESTIONNAIRE AND COVER LETTERS SENT TO GRADUATES, STUDENT
TEACHERS, CONTINUING EDUCATION MAJORS, NON-CONTINU-
ING EDUCATION MAJORS, AND WAIVER STUDENTS

April , 1974

Dear

We are attempting to determine what effect Education 101A, Exploring Teaching, has had on your decision to continue or discontinue an elementary teacher certification program. Recently, you successfully completed the clinical experience course, Education 101A, pre-requisite for admission into an elementary certification program and you have been chosen as one of the 150 candidates for this study.

Would you please complete the enclosed questionnaire and return it by April , 1974. Enclosed is a postage paid return envelope for your convenience.

This information collected is for research purposes only. You are assured that no information identifying any individual will be published or used in any way other than to provide data for this sample.

Thank you in advance for your assistance in this research study.

Yours sincerely,

Charles H. Lowery
Administrative Assistant
Student Teaching

Encl: Questionnaire
Return envelope

CHL:hb

April 1, 1974

Dear

We are attempting to determine what effect Education 101A, Exploring Teaching, has had on students' decisions to continue or discontinue an elementary teacher certification program. Recently, you were admitted to an elementary certification program as a result of your equivalent Exploring Teaching experience and you have been chosen as one of the 150 candidates for this study.

Would you please complete the enclosed questionnaire and return it by April 1, 1974. Enclosed is a postage-paid return envelope for your convenience.

This information collected is for research purposes only. You are assured that no information identifying any individual will be published or used in any way other than to provide data for this sample.

Thank you in advance for your assistance in this research study.

Yours sincerely,

Charles H. Lowery
Administrative Assistant
Student Teaching

Encl: Questionnaire
Return envelope

CHL/jm

PRE-EDUCATION CLINICAL EXPERIENCE AND TEACHER CAREER DECISION

RESEARCH QUESTIONNAIRE

INSTRUCTIONS:

Place a (✓) in the appropriate parenthesis following each item.

Demographic Information

1. Your age group at this time.

19 () 20 () 21 () 22 () 23 () 24 () 25 () 26-30 () 31-35 () 36-41 () Over 41 ()

2. Sex.

Male () Female ()

3. Class standing.

Freshman () Sophomore () Junior () Senior ()
Graduate ()

4. Have you had teaching related experience with children before taking Exploring Teaching * or its waiver equivalent.

Yes () No ()

5. My classroom experience in Exploring Teaching was at the following grade(s).

K () 1 () 2 () 3 () 4 () 5 () 6 () 7 () 8 () 9 ()

6. Previous teaching related experience in education before taking Exploring Teaching was:

- A. Aide in elementary school ----- ()
B. Aide in nursery school ----- ()
C. Aide in Junior High School ----- ()
D. Cadet teaching while in high school ----- ()
E. Other ----- ()
F. No experience ----- ()

* At Michigan State University, Exploring Teaching is Education 101A.

7. I would prefer teaching in

- A. Junior High School 7-8-9 ----- ()
- B. Middle School 6-7-8 ----- ()
- C. Upper Elementary School 4-5-6 ----- ()
- D. Lower Elementary School K-1-2-3 ----- ()
- E. Special Education ----- ()
- F. None of the above ----- ()

Teacher Career Information8. Before my teacher aide experience in Exploring Teaching,
I was

- A. absolutely certain I wanted to be a pre-school,
elementary, Junior High, or Special Education
teacher ----- ()
- B. fairly certain I wanted to be a pre-school,
elementary, Junior High, or Special Education
teacher ----- ()
- C. undecided ----- ()
- D. certain I did not want to be a pre-school,
elementary, Junior High, or Special Education
teacher ----- ()
- E. Question is not applicable to me ----- ()

9. As a result of my teacher aide experience in Exploring
Teaching, I was

- A. absolutely certain I wanted to be a pre-school,
elementary, Junior High, or Special Education
teacher ----- ()
- B. fairly certain I wanted to be a pre-school,
elementary, Junior High, or Special Education
teacher ----- ()
- C. undecided ----- ()
- D. certain I did not want to be a pre-school,
elementary, Junior High, or Special Education
teacher ----- ()
- E. Question is not applicable ----- ()

10. Exploring Teaching significantly influenced my
decision to

- A. continue on an elementary certification program ----- ()
- B. change my major from elementary education ----- ()
- C. change my major from Special Education ----- ()
- D. change my major from pre-school education ----- ()

11. When I first entered Michigan State University, I wanted to major in

A. Elementary Education ----- ()
 B. Pre-school Education ----- ()
 C. Special Education ----- ()
 D. None of the above ----- ()

12. During my high school career, I thought I might go to college and become an

A. Elementary teacher ----- ()
 B. Pre-school teacher ----- ()
 C. Junior High school teacher ----- ()
 D. Special Education teacher ----- ()
 E. None of the above ----- ()

Use the following key in answering questions 13 thru 20.

Key:

S.A.= Strongly Agree A.= Agree N= Neither agree
 D.= Disagree S.A.= Strongly disagree nor disagree
 NA= not applicable

CHECK ONLY ONE ANSWER FOR EACH QUESTION

- | | SA | A | N | D | SD | NA |
|--|-----|-----|-----|-----|-----|-----|
| 13. I had experiences in Exploring Teaching that are similar to those I am experiencing as a teacher ----- | () | () | () | () | () | () |
| 14. I had experience in Exploring Teaching I think are examples of experiences I will probably have when I become a teacher -- | () | () | () | () | () | () |
| 15. I am certainly glad that Exploring Teaching is required of all persons planning to enter an elementary certification program ----- | () | () | () | () | () | () |
| 16. Exploring Teaching significantly influenced my decision to pursue elementary teaching - | () | () | () | () | () | () |
| 17. I decided to go into elementary teaching after attempting other careers ----- | () | () | () | () | () | () |

- | | SA | A | N | D | SD | NA |
|--|-----|-----|-----|-----|-----|-----|
| 18. The public school classroom experience in Exploring Teaching was a waste of my time ----- | () | () | () | () | () | () |
| 19. Teaching related experience prior to Exploring Teaching aided me in deciding to be an elementary teacher ----- | () | () | () | () | () | () |
| 20. I decided to go into elementary teaching after attempting other college majors ----- | () | () | () | () | () | () |

APPENDIX B

Contingency Tables

SUMMARY OF QUESTIONNAIRE ITEM RESPONSE

Table B.1. Analysis of Contingency Table for Age.

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
19	0	0	5	4	0	9	8
20	0	1	10	4	3	18	17
21	0	8	1	5	3	17	16
22	5	9	3	5	7	29	27
23	3	2	0	2	1	8	8
24	6	1	1	1	0	9	9
25	1	0	1	0	1	3	3
26-30	1	2	1	1	3	8	8
31-35	0	0	1	0	0	1	1
N/R	0	0	0	0	3	3	3
Total	16	23	24	22	21	106	100

N/R -- No Response.

Table B.2. Analysis of Contingency Table for Class Standing.

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Sophomore	0	1	7	4	1	13	12
Junior	0	4	14	6	2	26	24
Senior	0	17	3	8	12	40	38
Graduate	16	1	0	4	3	24	23
N/R	0	0	0	0	3	3	3
Total	16	23	24	22	21	106	100

N/R -- No Response.

Table B.3. Analysis of Contingency Table for the Level of Classroom Experience Participated in During Exploring Teaching.

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
K-1-2-3	9	10	10	13	6	48	45
4-5-6	5	4	8	4	5	26	24
7-8-9	1	2	1	1	0	5	5
K-6	1	5	3	3	5	17	16
4-9	0	1	2	1	1	5	5
N/R	0	1	0	0	4	5	5
Total	16	23	24	22	21	106	100

N/R -- No Response.

Table B.4. Analysis of Contingency Table for Previous Teaching Related Experience in Education before Taking Exploring Teaching.

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Elementary Education	5	5	5	4	3	22	20
Nursery	0	3	2	2	1	8	8
Junior Hi.	0	0	0	1	0	1	1
Cadet	0	2	0	1	0	3	3
Other	3	5	7	6	9	30	28
No experience	0	1	0	2	0	3	3
Elementary, Nursery, Cadet and Other	1	0	1	0	1	3	3
Elementary and Other	0	1	0	1	2	4	4
None of the Above	7	6	9	4	5	31	29
Total	16	23	24	22	21	106	100

Table B.5. Analysis of Contingency Table for Future Teaching Preference.

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
K-1-2-3	5	12	3	3	8	31	29
4-5-6	7	4	7	3	3	24	23
7-8-9	0	1	0	1	1	3	3
K-6	1	1	3	0	2	7	7
4-9	1	4	3	0	3	11	10
K-9	0	0	0	0	0	0	0
Special Education	0	1	5	2	1	9	8
Special & Elementary Education	1	0	0	2	0	3	3
None of the Above	1	0	3	11	3	18	17
Total	16	23	24	22	21	106	100

Table B.6. Analysis of Contingency Table for Preference of Major upon Initial Entry at Michigan State University.

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Elementary Education	2	6	10	3	10	31	29
Pre-school Education	0	4	1	0	0	5	5
Special Education	0	1	4	2	2	9	8
None of the Above	14	12	9	17	9	61	58
Total	16	23	24	22	21	106	100

Table B.7. Analysis of Preference for Teaching During High School Career.

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Elementary Teacher	4	4	3	3	7	21	20
Pre-school Teacher	0	1	0	1	0	2	2
Junior Hi. Teacher	0	2	1	0	0	3	3
Special Education Teacher	0	1	2	1	1	5	5
None of the Above	12	15	17	17	13	74	70
Total	16	23	24	22	21	106	100

Table B.8. Analysis of Contingency Table for the Similarity of Experience in Exploring Teaching to Actual Teaching Experience.

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Strongly Agree	3	3	3	1	0	10	9
Agree	6	7	3	3	3	22	21
Neutral	0	4	0	2	1	7	7
Disagree	5	1	0	0	3	9	8
Strongly Disagree	1	0	0	2	2	5	5
Not Applicable	1	8	18	14	12	53	50
Total	16	23	24	22	21	106	100

Table B.9. Analysis of Contingency Table for Experiences in Exploring Teaching that I Think are Examples of Experience I will Have when I Become a Teacher.

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Strongly Agree	1	7	10	6	2	26	24
Agree	4	9	13	6	7	39	37
Neutral	3	4	1	2	2	12	11
Disagree	0	3	0	0	3	6	6
Strongly Disagree	0	0	0	1	0	1	1
Not Applicable	8	0	0	7	7	22	21
Total	16	23	24	22	21	106	100

Table B.10. Analysis of Contingency Table for 'I Am Certainly Glad That Exploring Teaching is Required of All Persons Planning to Enter an Elementary Certification Program.'

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Strongly Agree	8	9	16	12	6	51	48
Agree	3	8	6	5	5	27	25
Neutral	3	3	1	2	2	11	10
Disagree	1	1	1	2	1	6	6
Strongly Disagree	1	2	0	1	0	4	4
Not Applicable	0	0	0	0	7	7	7
Total	16	23	24	22	21	106	100

Table B.11. Analysis of Contingency Table for 'Exploring Teaching Significantly Influenced my Decision to Pursue Elementary Teaching.'

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Strongly Agree	5	6	6	1	1	19	18
Agree	5	2	11	6	5	29	28
Neutral	3	8	3	2	3	19	18
Disagree	0	3	2	5	3	13	12
Strongly Disagree	3	3	1	4	1	12	11
Not Applicable	0	1	1	4	8	14	13
Total	16	23	24	22	21	106	100

Table B.12. Analysis of Contingency Table for 'I Decided to Go Into Elementary Teaching After Attempting Other Careers.'

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Strongly Agree	0	3	4	0	0	7	6
Agree	5	1	5	3	1	15	14
Neutral	2	4	0	2	3	11	10
Disagree	5	10	8	6	7	36	34
Strongly Disagree	2	2	0	3	3	10	9
Not Applicable	2	3	7	8	7	27	26
Total	16	23	24	22	21	106	100

Table B.13. Analysis of Contingency Table for 'The Public School Classroom Experience Was a Waste of My Time.'

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Strongly Agree	0	0	0	0	0	0	0
Agree	1	1	1	0	2	5	4
Neutral	0	1	0	0	1	2	2
Disagree	7	5	7	8	6	33	31
Strongly Disagree	8	16	16	13	5	58	55
Not Applicable	0	0	0	1	7	8	8
Total	16	23	24	22	21	106	100

Table B.14. Analysis of Contingency for 'Teaching Related Experience Prior to Education 101A Aided Me in Deciding To Be An Elementary Teacher.'

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Strongly Agree	1	3	4	1	5	14	13
Agree	5	10	7	11	7	40	38
Neutral	4	3	1	4	0	12	11
Disagree	2	3	4	1	1	11	10
Strongly Disagree	1	1	1	1	1	5	5
Not Applicable	3	3	7	4	7	24	23
Total	16	23	24	22	21	106	100

Table B.15. Analysis of Contingency Table for 'I Decided To Go Into Elementary Teaching After Attempting Other College Careers.'

	G ₁	G ₂	G ₃	G ₄	G ₅	Total	Percent
Strongly Agree	0	0	2	1	0	3	3
Agree	12	13	6	8	6	45	43
Neutral	0	1	1	0	1	3	3
Disagree	3	5	6	7	6	27	25
Strongly Disagree	0	4	3	3	2	12	11
Not Applicable	1	0	6	3	6	16	15
Total	16	23	24	22	21	106	100

Each question of the questionnaire was analyzed through the use of Kruskal-Wallis H-test for the development of contingency tables.

"The Kruskal-Wallis H-test is an extremely useful alternative to the technique of one-way analysis of variance. It is designed to determine whether K independent samples are taken from populations that have the same mean. Unlike the one-way analysis of variance, this test does not require the assumptions of normality of the population distribution and homogeneity of variance. All it assumes is that the random variable on which the various groups are to be compared is continuously distributed.

The test statistic H,....., is distributed approximately as χ^2 with K-1 degrees of freedom. For testing the null hypothesis that K samples are from populations with the same mean, we compare the value of H with the critical χ^2 value at a given level of significance.

The Kruskal-Wallis test is more powerful than a similar nonparametric test such as the median test when extended to three or more groups. Although it is somewhat less powerful than the parametric F-test, it is still often used because of its simplicity and ease of application."¹

¹Lincoln L. Chao, Statistics: Methods and Analysis, (McGraw-Hill, Inc., 1969), pp. 447-449.

Table B.16. Significance of Tabled Questionnaire Questions.

Question	Kruskal-Wallis h-Value	Chi Square Value	K - 1 df	Level of Significance
* 1.	19.350	18.467	4	.001
2.	8.566	7.77944	4	.100
* 3	49.580	18.467	4	.001
4.	2.965	1.92256	4	.750
5.	1.638	1.063623	4	.900
6.	6.922	5.38527	4	.250
7.	8.386	7.77944	4	.100
8.	7.568	5.38527	4	.250
* 9.	17.575	14.8603	4	.005
* 10.	23.435	18.467	4	.001
* 11.	14.466	13.2767	4	.010
12.	1.701	1.063623	4	.900
* 13.	19.355	18.467	4	.001
* 14.	24.682	18.467	4	.001
* 15.	11.916	11.1433	4	.025
* 16.	17.769	14.8603	4	.005
17.	7.544	5.38527	4	.250
* 18.	18.833	18.467	4	.001
19.	1.253	1.063623	4	.900
* 20.	10.593	9.48773	4	.050

APPENDIX C

ANALYSIS OF VARIANCE INTERACTION

Table C.1. Analysis of Variance Interaction.

Sources	df	Hypothesis Mean Square	Multivariate F-test	p	Univariate F-test	p
Interaction of Groups and Sex	12-217		1.778	.0532		
SELFST	4	53.140			3.968	.005
APPLIC	4	9.49			.656	.621
ATTITD	4	1.65			1.398	.242
 Interaction of Groups and Experience						
	12-217		.8184	.6314		
SELFST	4	17.962			1.341	.262
APPLIC	4	22.524			1.556	.194
ATTITD	4	.054			.046	.996
 Interaction of Sex and Experience						
	3-82		.2564	.8566		
SELFST	1	.0983			.007	.932
APPLIC	1	.1625			.001	.916
ATTITD	1	.8855			.752	.389
 Interaction of Groups, Sex and Experience						
	9-199		1.406	.1877		
SELFST	3	35.502			2.651	.054
APPLIC	3	9.893			.683	.565
ATTITD	3	1.013			.859	.466
 Error						
SELFST	84	13.392				
APPLIC	84	14.480				
ATTITD	84	1.085				

APPENDIX D

QUESTIONNAIRE APPROVAL

Dear Dr.

I am a doctoral student conducting research relative to early clinical experience programs.

You are associated with the Advisory Committee for Screening and Selection of Elementary Teacher Certification candidates.

I wish to survey persons who have completed course Education 101A. Your reviewing the enclosed list of questions and variables, which I am developing to conduct this research, and commenting on their usefulness as questionnaire would be most helpful.

The addition of questions you may deem necessary will be greatly appreciated.

Kindly forward your response in the enclosed self-addressed envelope.

Sincerely yours,

Charles H. Lowery
Graduate Assistant

Dr. Shirley Brahm
Dissertation Director

Directions to Screening and Selection and Advisory Committee Members.

The enclosed questions are being designed for questionnaire use to measure the following variables:

1. Self stated motivation for teaching
2. Attitude toward Education 101A
3. The application of Education 101A to desire to teach.

In order to have the best instrument possible, will you please react to the content and/or form of question. Your comments and suggestions on the use of the variables will be greatly appreciated.

If you think of additional questions that should be included, kindly list them in the comment space. Additional comment space is provided on the attached sheet.

Specific area of comment

- a. Is the question applicable for questionnaire use?
- b. Is the form of the question appropriate?
- c. Does the question include all persons concerned?
- d. Is the direction of the question appropriate?
- e. Is the question clearly stated?
- f. What recommendations do you have for additional questions?

April 8, 1974

Dear Dr.

Recently you were asked to examine a set of questions and comment on their possible use as questionnaire for my study.

For your information, I am sending you a copy of the questionnaire designed from the compiled list of suggestions received from the elementary education screening and selection committee.

Thank you for your contribution to this effort.

Yours sincerely,

Charles H. Lowery

To: Doctoral Committee
De: C. H. Lowery
Subj: Questionnaire Approval
Date: April 8, 1974

Dear Committee Members:

Attached is the revised copy of the questionnaire designed for use in my study. This questionnaire revision incorporates the suggestions for change.

Your approval of the questionnaire will be greatly appreciated.

Committee signatures

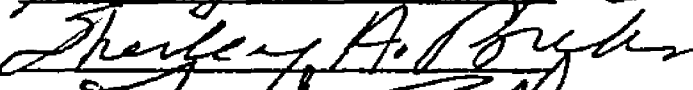
Dr. West



Dr. Myers



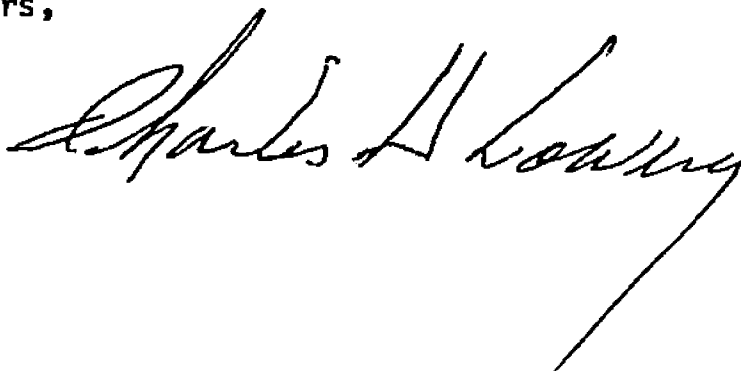
Dr. Brehm



Dr. Engelkes



Yours,



PRE-EDUCATION CLINICAL EXPERIENCE AND TEACHER CAREER DECISION

RESEARCH QUESTIONNAIRE

INSTRUCTIONS:

Place a (✓) in the appropriate parenthesis following each item.

Demographic Information

1. Your age group at this time.

19 () 20 () 21 () 22 () 23 () 24 () 25 () 26-30 () 31-35 () 36-41 () Over 41 ()

2. Sex.

Male () Female ()

3. Class standing.

Freshman () Sophomore () Junior () Senior ()
Graduate ()

4. Have you had teaching related experience with children before taking Exploring Teaching * or its waiver equivalent.

Yes () No ()

5. My classroom experience in Exploring Teaching was at the following grade(s).

K () 1 () 2 () 3 () 4 () 5 () 6 () 7 () 8 () 9 ()

6. Previous teaching related experience in education before taking Exploring Teaching was

A. Aide in elementary school ----- ()
B. Aide in nursery school ----- ()
C. Aide in Junior High school ----- ()
D. Cadet teaching while in high school ----- ()
E. Other ----- ()
F. No experience ----- ()

* At Michigan State University, Exploring Teaching is Education 101A.

7. I would prefer teaching in

- A. Junior High school 7-8-9 ----- ()
- B. Middle school 6-7-8 ----- ()
- C. Upper Elementary school 4-5-6 ----- ()
- D. Lower Elementary school K-1-2-3 ----- ()
- E. Special Education ----- ()
- F. None of the above ----- ()

Teacher Career Information8. Before my teacher aide experience in Exploring Teaching,
I was

- A. absolutely certain I wanted to be a pre-school,
elementary, Junior High, or Special Education
teacher ----- ()
- B. fairly certain I wanted to be a pre-school,
elementary, Junior High, or Special Education
teacher ----- ()
- C. undecided ----- ()
- D. certain I did not want to be a pre-school,
elementary, Junior High, or Special Education
teacher ----- ()
- E. Question is not applicable to me ----- ()

9. As a result of my teacher aide experience in Exploring
Teaching, I was

- A. absolutely certain I wanted to be a pre-school,
elementary, Junior High, or Special Education
teacher ----- ()
- B. fairly certain I wanted to be a pre-school,
elementary, Junior High, or Special Education
teacher ----- ()
- C. undecided ----- ()
- D. certain I did not want to be a pre-school,
elementary, Junior High, or Special Education
teacher ----- ()
- E. Question is not applicable ----- ()

10. Exploring Teaching significantly influenced my
decision to

- A. continue on an elementary certification program ----- ()
- B. change my major from elementary education ----- ()
- C. change my major from Special Education ----- ()
- D. change my major from pre-school education ----- ()

11. When I first entered Michigan State University,
I wanted to major in

A. Elementary Education ----- ()
 B. Pre-school Education ----- ()
 C. Special Education ----- ()
 D. None of the above ----- ()

12. During my high school career, I thought I might go
to college and become an

A. Elementary teacher ----- ()
 B. Pre-school teacher ----- ()
 C. Junior High school teacher ----- ()
 D. Special Education teacher ----- ()
 E. None of the above ----- ()

Use the following key in answering questions 13 thru 20.

Key:

S.A.= Strongly Agree A.= Agree N= Neither agree
 D.= Disagree S.A.= Strongly disagree nor disagree
 NA= not applicable

CHECK ONLY ONE ANSWER FOR EACH QUESTION

- | | SA | A | N | D | SD | NA |
|--|-----|-----|-----|-----|-----|-----|
| 13. I had experiences in Exploring Teaching that are similar to those I am experiencing as a teacher ----- | () | () | () | () | () | () |
| 14. I had experience in Exploring Teaching I think are examples of experiences I will probably have when I become a teacher --- | () | () | () | () | () | () |
| 15. I am certainly glad that Exploring Teaching is required of all persons planning to enter an elementary certification program ----- | () | () | () | () | () | () |
| 16. Exploring Teaching significantly influenced my decision to pursue elementary teaching -- | () | () | () | () | () | () |
| 17. I decided to go into elementary teaching after attempting other careers ----- | () | () | () | () | () | () |

- | | SA | A | N | D | SD | NA |
|--|-----|-----|-----|-----|-----|-----|
| 18. The public school classroom experience in Exploring Teaching was a waste of my time ----- | () | () | () | () | () | () |
| 19. Teaching related experience prior to Exploring Teaching aided me in deciding to be an elementary teacher ----- | () | () | () | () | () | () |
| 20. I decided to go into elementary teaching after attempting other college majors ----- | () | () | () | () | () | () |

BIBLIOGRAPHY

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- American Association of Colleges for Teacher Education, Revised Standards and Policies for Accrediting Colleges for Teacher Education of the American Association of Colleges for Teacher Education, Oneonta, New York: AACTE, 1951.
- Austin, Helen S., "Career Development During High School Years," The Journal of Counseling Psychology, 14: 94-98, March, 1967.
- _____. "Patterns of Career Choice Over Time," Personnel and Guidance Journal, 45: 541-546, February, 1967.
- Bennett, Don, "Teacher Commitment - Whose Responsibility?" The Journal of Teacher Education, 21: 515-518, Winter, 1970.
- Bidna, David B., and Hahn, Robert O., "Participating and Observing," The Journal of Teacher Education, 10: 319-325, September, 1959.
- _____. "A Proposal for a Pilot Study in the Preparation of Prospective Elementary Teachers," (Chicago: Department of Education, University of Chicago, Summer, 1954).
- Chao, Lincoln L., Statistics: Methods and Analysis, (New York: McGraw-Hill, Inc., 1969), pp. 447-449.
- Clark, Richard J., and Kingsbury, Donald J., "Simultaneous Alternative Teacher Preparation Programs," Phi Delta Kappan, 54: 477-480, March, 1973.
- Clemmons, James D., "An Analysis of Professional Laboratory Experiences Provided Prior to Student Teaching in Secondary Teacher Education Programs of Selected Institutions in Illinois," Dissertations Abstracts International, 30: 4302A, April, 1970.
- College of Education, "Education 101A Course Equivalency Guidelines," East Lansing: Michigan State University Publications, 1972.
- Colvin, Cynthia M., "Achieving Readiness for Student Teaching Through Direct Experience," Dissertation Abstracts International, 19: 3229, June, 1959.

- Delong, Greta, "Toward More Meaningful Teacher Preparation," The Journal of Teacher Education, 22: 15-17, Spring, 1971.
- Dutton, Wilber H., and Keislar, Evan R., "Attitudes Toward Teaching," The Journal of Teacher Education, 12: 165-171, June, 1961.
- Eduolino, Emilio Quial, "The Relationship Between Successful Student Teaching and Pre-Student Teaching Experiences with Children," Dissertation Abstracts International, 19: 486, September, 1958.
- Elton, Charles F., "Male Career Role and Vocational Choice: Their Prediction with Personality and Aptitude Variables," The Journal of Counseling Psychology, 14: 99-105, March, 1967.
- "Exploring Teacher," College of Education, Michigan State University, Unpublished Guidelines, September, 1971.
- Finn, Jeremy D., "Multivariate," Version 4 (Buffalo: State University of New York at Buffalo, Department of Educational Psychology, June, 1968).
- Gallegos, Arnold, "Teacher Training: The Realities," The Journal of Teacher Education, 23:43, Spring, 1972.
- Garry, Alice Walsh, "A Study of Significant Incidents in a Teacher Training Early Experiencing Program," Dissertation Abstracts International, 33: 4216A, February, 1973.
- Harrington, Nancy D., "A Challenge for Teacher Education," The Journal of Education, 152: 51-52, December, 1969.
- Hersh, Richard, "An Analytical Approach to the Professional Training of Teachers," Dissertation Abstracts International, 31: 265A, July, 1970.
- Hunter, Elizabeth, and Amidon, Edmund, "Direct Experience in Teacher Education: Innovation and Experimentation," The Journal of Teacher Education, 17: 282-289, Fall, 1966.
- Jones, Isabelle F., "A Study of the Various Types of Pre-Student Teaching Experiences to Success in Student Teaching," Dissertation Abstracts International, 16: 709, 1956.
- Jordaan, Jean Pierre, "The Vocational Choice," The Journal of Teacher Education, 6: 3, March, 1955.
- Kaczowski, Henry, George, Clifford, and Gallagher, Paul, "The Influence of an Exploratory Shop Course," Vocational Guidance Quarterly, 11: 202-203, Spring, 1963.

- Maul, Ray C., "How Many Teachers Do We Need?" The Journal of Teacher Education, 3: 94, June, 1952.
- Michigan State University Catalogue, Description of Courses Section, East Lansing: Michigan State University Publications, p. A38, 1973.
- Michigan State University Student Final Grade List for Education 101A, Office of the Registrar, Fall term 1971 - Fall term 1973, inclusive.
- Mosley, Aubrey H., "Teacher Education: The University and the School," Kappa Delta Pi, 8: 26-27, October, 1971.
- Olmsted, Ann G., Blackington, Frank H., III, and Houston W. Robert, "Stances Teachers Take: A Basis For Selective Admission," Phi Delta Kappan, 45: 330-334, January, 1974.
- Perry, James Z., "The Influence of Selected Factors on the Choice of Teaching as a Career," Dissertation Abstracts International, 33: 5606A, April, 1973.
- Raj, Des, The Design of Sample Surveys, (New York: McGraw-Hill, Inc., 1972), pp. 364-68.
- Robbins, Glaydon D., "New Preparation for Teachers," The Educational Forum, 36: 99-102, November, 1971.
- Sandefur, J. T., "Kansas State Teachers College Experimental Study of Professional Education for Secondary Teachers," The Journal of Teacher Education, 21: 386-395, Fall, 1970.
- Scrivner, A.W., "Professional Laboratory Experiences," The Journal of Teacher Education, 12: 48-53, March, 1961.
- Shuff, Marvin, and Shuff, Robert V., "Design for Excellence: A Program for Laboratory Experiences," The Journal of Teacher Education, 23: 215-219, Summer, 1972.
- Sinclair, William W., "An Analysis of Three Pre-Student Teaching Experiences in the Preparation of Elementary School Teachers," Unpublished Doctoral Dissertation, Michigan State University, 1961, p. 14.
- Turney, David, and Stoneking, Lewis W., "A Professional Sequence for the Development of Career Teachers," The Journal of Teacher Education, 16: 281-285, September, 1965.
- Undergraduate Student Affairs Office, Education 101A Waivers, College of Education, Fall 1971 - Fall 1973, inclusive.

- Walsh, Huber M., "Lets Move the Methods Course Off Campus," The Journal of Teacher Education, 21: 348-349, Fall, 1970.
- Wilcox, Isobel, and Beigel, Hugo G., "Motivations in the Choice of Teaching," The Journal of Teacher Education, 4: 106-109, March, 1953.
- Wish, Peter A., and Hasazi, Joseph E., "Motivational Determinants of Curricular Choice in College Males," The Journal of Counseling Psychology, 20: 121-131, March, 1973.
- Wood, Jerry Lee, "The Influence of Professional Laboratory Experiences Upon the Career Choice of Undergraduate Business Teacher Education Majors," Dissertation Abstracts International, 32: 831A, August, 1971.
- Worcester, Thomas K., "Preparing Students for Practice Teaching," The Journal of Teacher Education, 5: 323, December, 1954.
- Workman, Daniel W., "The Relationship of Selected Variables in Decision-Making Regarding Choice of a Career in Teaching," Dissertation Abstracts International, 33: 4233A, February, 1973.