A SURVEY OF MICHIGAN VOCATIONAL TEACHERS OF STUDENTS WITH SPECIAL NEEDS TO DETERMINE THE EFFECT OF SPECIALIZED INSERVICE TEACHER EDUCATION ON SELECTED INTERPERSONAL RELATIONSHIP FACTORS

By

Alsce Johnson, Jr.

A DISSERTATION

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

DOCTOR OF PHILOSOPHY

Department of Secondary Education and Curriculum

1976

ABSTRACT

A SURVEY OF MICHIGAN VOCATIONAL TEACHERS OF STUDENTS WITH SPECIAL NEEDS TO DETERMINE THE EFFECT OF SPECIALIZED INSERVICE TEACHER EDUCATION ON SELECTED INTERPERSONAL RELATIONSHIP FACTORS

By

Alsce Johnson, Jr.

The author's purpose in this study was to determine whether specialized inservice teacher education for instructional personnel in vocational programs for students with special needs has had a positive effect on selected interpersonal relationship factors (empathy and congruence). Based on the findings and a review of the literature, recommendations were made for decision makers and programmers in the field of vocational education for students with special needs, with emphasis on inservice teacher education at the secondary and post-secondary levels.

The study was also designed to discuss the relationships found between the normative data (age of the teacher, length of teaching experience, formal education level attained by the teacher, and the occupational cluster in which the teacher was employed) and the interpersonal relationship factors (empathy and congruence).

The descriptive-survey and experimental research methods using a questionnaire were employed to obtain the data in this study. In October 1975, 350 questionnaires were mailed to vocational

teachers of students with special needs in Michigan. Two hundred and sixty-four or 75 percent of the questionnaires were returned, providing the data used in this study.

A three-way analysis of variance was computed for the data collected in the study. In presenting the results of the analysis of data, a 0.10 level of confidence was used as the criterion of significance of the stated hypotheses.

The Pearson product-moment correlation coefficient was used to measure the relationships between the dependent variables (empathy and congruence) and normative data (age of the teacher, teaching experience, teacher's formal education level, and occupational cluster in which the teacher was employed). The independent variables in this study were program, cluster, and training.

Based on the results of the data gathered and analyzed in this study, it was concluded that:

1. Specialized training made no significant impact on the dependent variable, empathy.

2. Specialized training was effective for the dependent variable, congruence.

3. Vocational teachers employed in Health Occupations generally scored higher than other teachers on the empathy and congruence scales of the interpersonal relationship inventory.

4. Vocational teachers employed in handicapped programs generally scored higher than other teachers on the empathy and congruence scales of the interpersonal relationship inventory.

5. Vocational teachers who have not attained post-secondary formal educational levels are the best teachers for special needs programs.

6. Older teachers appear to be best for teaching in special needs programs in regard to congruence.

7. Vocational teachers employed in Distribution/Office and Business Occupations scored lower than other teachers on the empathy scale of the interpersonal relationship inventory.

In view of the researcher's findings in this study and the related research, the following recommendations were offered to decision makers and programmers in the field of vocational education, with emphasis on inservice teacher education. Decision makers and programmers should:

1. Survey vocational teachers in handicapped programs to determine why they scored higher on the empathy and congruence scales. This should produce information useful for planning future inservice training programs.

2. Survey vocational teachers employed in health occupations to determine why they scored higher on the empathy and congruence scales. This should produce information useful for planning future inservice training programs.

3. Recruit older teachers for their special needs programs in regard to the interpersonal relationship factor, congruence.

4. Recruit the teachers with less formal educational levels for teaching in their special needs programs.

5. Design their inservice workshops to emphasize changes in interpersonal relationship factors, since vocational teachers employed in Distribution and Office and Business Occupations scored lowest on the empathy scale.

The following recommendations are drawn from the review of literature. Decision makers and programmers should:

6. Seriously consider the possibility of developing a curriculum that will lead to certification in vocational and special education.

7. Design their curricula to include community work and/or field experience for prospective teachers.

8. Design their curricula to include sensitivity and/or human relations training for prospective teachers. This will serve to develop positive attitudes toward students with special needs.

9. Actively recruit prospective students for their vocational programs, which will prepare teachers for working with students who have special needs.

10. Improve the interpersonal relationship attributes of their special needs teachers through preservice and/or inservice training programs.

ACKNOWLEDGMENTS

The writer wishes to thank the members of his doctoral committee: Dr. Samuel Moore II, Dr. Alan Sliker, and Dr. John Fuzak. He especially wants to thank his doctoral committee chairman, Dr. George Ferns, for his advice and encouragement.

The local and state administrators, teachers, and coordinators of special needs programs in the State of Michigan contributed substantially to the success of this investigation.

The writer wishes to thank Ms. Charmaine Johnson for her consistent efforts in the early stages of this research.

Further, the writer wishes to thank Mr. John Frederick, Mr. Ralph Mixon, Mr. Will Johnson, Mr. Raymond Johnson, and Mrs. Mary Jane Johnson for their consistent efforts and support throughout this research.

Finally, he wishes to acknowledge the patience of his daughter, Aida-Kai, throughout this research.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

> What makes a person a special needs student in terms of vocational education is that he is receiving something special from vocational educators--something he needs in order to succeed in the regular program.[1]

It is extremely difficult to describe succinctly the population on which this study was focused. A review of literature indicated that such terms as academically disadvantaged, socially disadvantaged, disadvantaged, educable mentally handicapped, emotionally disturbed, and slow learner, among others, frequently are used interchangeably when referring to students with special needs. Group characteristics of these students include such problems as deficiencies in reading and other basic skills essential to learning, the lack of achievement motivation, and negative perceptions of self and education.

Background of the Study

It appears that people with a wide variety of backgrounds are being asked to teach and/or are assigned to teach in special needs programs. Many people currently occupying positions in special needs programs have come from business, the military, industry, and self-employment.

In many cases it appears these people were excited about special needs programs. In other cases, these people were innovative

individuals. However, it appears that in most cases they were not prepared for their new assignments.

The 1968 Vocational Education Amendments directed that each state develop programs for the disadvantaged. Federal funds from that same act were allocated to provide vocational education for handicapped persons. With release of these funds, the Vocational-Technical Education Service of the Michigan Department of Education moved to hire consultants to develop programs within the state for the disadvantaged and handicapped.

In 1971 Michigan legislators passed and the Governor signed Public Act 198 of 1971, the Mandatory Special Education Act. The Act includes these major provisions:

> The law requires that the State Board of Education write and continually modify a State Plan that will assure all persons, ages 0-25, who may have handicaps will be located and given the special education programs and services that will develop their maximum potential.
>
> The law also requires that each Intermediate School District Board of Education write an Intermediate School District Plan for the Delivery of Special Education Programs and Services. . . .[2]

The Evaluation Report of the Michigan Vocational Education Special Needs Programs for 1973-74 recommended that "The goals of the Special Needs programs with respect to the area of preservice teacher education for the handicapped and disadvantaged should be delineated. . . ."[3]

Concerning teachers for such programs, the Disadvantaged and Handicapped Programs Unit, Vocational-Technical Education Service of the Michigan Department of Education indicated, "Teachers

must be certified in accordance with the Michigan Department of Education code. . . ."[4]

The Administration Guide for Vocational-Technical Education, Michigan Department of Education, Vocational-Technical Education Service, stated, "All teachers who are teaching in a State reimbursed vocational classroom are to be vocationally certificated. . . ."[5]

However, neither the Guidelines for Vocational Education Programs for Persons with Special Needs for FY 1975-76 nor the Administration Guide for Vocational-Technical Education indicated the required characteristics for vocational teachers in special needs programs. Likewise, neither Public Act 198 nor the subsequent Special Education Code indicates the desired characteristics for vocational teachers in special education and/or special needs programs, nor do they indicate the desired characteristics for special education teachers teaching in special vocational education programs.

Jan Baxter stated:

> Public Act 198 and the subsequent Special Education Code do not specify who is responsible for providing the vocational instruction for handicapped students. The instruction can be provided by either special education or vocational teachers. Handicapped persons integrated in the regular vocational program will obviously receive their instruction from a certified vocational education teacher. . . .[6]

The Michigan Guidelines for Vocational Education Programs for Persons with Special Needs for FY 1975-76 indicated a local educational agency may be considered eligible to operate a special needs

preparatory and/or cooperative education program if the federal guidelines are met.

A number of special needs workshops have been conducted throughout the State of Michigan. They are of two types:

1. Instructional Strategies in Special Needs. The purposes of these workshops were:

> (a) to update local educators of the technical requirements associated with their projects, (b) train them in the completion of various forms, (c) provide some discussion of methods and resources which may be used to instruct the handicapped and disadvantaged, and (d) facilitate communication among the various project personnel and among those contemplating offering a Special Needs Program in the future.[7]

These workshops were attended by vocational and special education teachers, paraprofessionals, and administrators.

> The workshops were funded through local districts. . . . The local districts, sometimes with the aid of the Michigan State Department of Education and at times with the aid of temporary coordinators funded through Vocational-Technical Education Services, developed the agendas and handled the technical matters for the various workshops. . . .[8]

2. Vocational Education/Special Education Workshops. The purpose of these workshops was to train vocational and special education teachers to work cooperatively in occupational preparation of students with special needs.[9] These workshops are funded by the Michigan Department of Education, Vocational Education and Career Development Service, Special Needs Section. The educational agency for these workshops was Central Michigan University.

Statement of the Problem

The purpose of this study was to determine whether specialized inservice teacher education for instructional personnel in

vocational programs for students with special needs has had a positive effect on selected interpersonal relationship factors. The interpersonal relationship factors selected for this study were empathy and congruence. If a teacher scored high on a teacher-pupil relationship inventory, this was viewed as indicating a positive effect. The study was also designed to discuss the relationships found between the normative data (age of the teacher, teaching experience, occupational cluster in which the teacher was employed, and formal education level attained by the teacher) and the interpersonal relationship factors, empathy and congruence.

An additional purpose of the study was to provide information and recommendations for decision makers and programmers in the field of vocational education for students with special needs, with emphasis on inservice teacher education at the secondary and post-secondary levels.

Significance of the Study

Finding qualified teaching personnel for vocational programs for students with special needs has been rather difficult.[10] A few school districts have provided inservice training for their teachers, counselors, and other staff members who work with special needs students. However, results of such training are unknown. The typical goals and objectives of university preservice teacher education programs have not reflected implementation of preparation models for vocational teachers of special needs students.

Several individuals have indicated a need for studies such as the present one. The AMIDS Report, How to Plan-Conduct-Evaluate, indicated:

> . . . [For] vocational educators that are involved in implementing programs and services for the student with special needs--the disadvantaged and handicapped student--inservice training can fill a crucial need. This need is for new teaching methods and materials that will help the special needs student to succeed in overcoming learning limitations.[11]

Wampler supported this viewpoint in his study, in which the most consistent findings were as follows:

> . . . (1) those subjects with a substantial preservice experience in a disadvantaged school demonstrated a more positive attitude toward teaching in similar schools, [and were] more adequate in their teaching situation; (2) those subjects having a limited preservice experience did indicate that they were better prepared when compared with the no preservice group, but did not differ as markedly as did those subjects who had the student teaching experiences; and (3) those subjects with the preservice student teaching were found to be rated as more effective teachers and appeared to be more willing to accept a position in schools for disadvantaged following certification.[12]

The preceding partial literature review has shown that educators are concerned with the importance of inservice and preservice training for vocational teachers of students with special needs. The present study is significant in that it addresses that problem.

Hypotheses to Be Tested

The central hypothesis tested in this study was:

> Michigan vocational teachers who are teaching in special needs programs and who have completed specialized training will score significantly higher on an interpersonal relationship inventory than will vocational teachers in special needs programs who have had no specialized training.

For the purposes of this study, the central hypothesis was divided into the following subhypotheses:

1. Vocational teachers with specialized training will score significantly higher on an empathy scale of a teacher-pupil relationship inventory than will vocational teachers who have had no specialized training in dealing with special needs students.

2. Vocational teachers with specialized training will score significantly higher on a congruence scale of a teacher-pupil relationship inventory than will vocational teachers who have had no specialized training in dealing with special needs students.

3. Vocational teachers employed in certain vocational clusters will score significantly higher on an empathy scale of a teacher-pupil relationship inventory than will vocational teachers employed in other vocational clusters.

4. Vocational teachers employed in certain vocational clusters will score significantly higher on a congruence scale of a teacher-pupil relationship inventory than will vocational teachers employed in other vocational clusters.

5. Vocational teachers in three kinds of special needs programs* who have had specialized training will score significantly higher on an empathy scale of a teacher-pupil relationship inventory than will vocational teachers in three kinds of special needs programs who have had no specialized training.

6. Vocational teachers in three kinds of special needs programs who have had specialized training will score significantly higher on a congruence scale of a teacher-pupil relationship inventory than will vocational teachers in three kinds of special needs programs who have had no specialized training.

7. The age of vocational teachers in special needs programs is inversely related to empathy, as measured by a teacher-pupil relationship inventory, between teachers who have specialized training and teachers who have not had specialized training.

8. The age of vocational teachers in special needs programs is inversely related to congruence, as measured by a teacher-pupil relationship inventory, between teachers who have had specialized training and teachers who have not had specialized training.

---

*The three kinds of special needs programs considered in this study were handicapped, disadvantaged, and a combination of the two.

9. Vocational teachers in special needs programs who have attained post-secondary formal educational levels will score significantly higher on an empathy scale of a teacher-pupil relationship inventory than will vocational teachers with lower formal educational levels.

10. Vocational teachers in special needs programs who have attained post-secondary formal educational levels will score significantly higher on a congruence scale of a teacher-pupil relationship inventory than will vocational teachers with lower formal educational levels.

11. Vocational teachers in a special needs program who have two to nine years of teaching experience will score significantly higher on an empathy scale of a teacher-pupil relationship inventory than will vocational teachers with less than two years or more than nine years of teaching experience.

12. Vocational teachers in a special needs program who have two to nine years of teaching experience will score significantly higher on a congruence scale of a teacher-pupil relationship inventory than will vocational teachers with less than two years or more than nine years of teaching experience.

A three-way analysis of variance was computed for the data collected in this study. In presenting the results of the analysis of the data, a 0.10 confidence level was used as the criterion of significance of the stated hypotheses.

The Pearson product-moment correlation coefficient was used to measure the relationships between the dependent variables (empathy and congruence) and normative data (age of the teacher, occupational cluster in which the teacher was employed, teaching experience, and formal education level attained by the teacher). The independent variables were program, cluster, and training.

Basic Assumptions

The following basic assumptions underlay the study:

1. It was assumed that the instrument could be used as an indicator of positive teaching attitudes.
2. Another assumption was that positive teaching attitudes such as empathy and congruence affect the quality of teaching.
3. Finally, it was assumed that the respondents would answer questionnaire items honestly.

Research Methods

The research methods used in this study can be described as descriptive-survey and experimental. Good stated:

> Descriptive studies may include present facts or current conditions concerning the nature of a group of persons, a number of objects, or a class of events, and may involve the procedures of induction, analysis, classification, enumeration, or measurement. The terms survey and status suggest the gathering of evidence relating to current conditions. . . .[13]

Good further enumerated several purposes of descriptive-survey studies. They can be used:

> (1) To secure evidence concerning an existing situation or current condition; (2) To identify standards or norms with which to compare present conditions, in order to plan the next step; (3) To determine how to make the next step (having determined where we are and where we wish to go). . . .[14]

According to Van Dalen, the following tasks are performed when an experimental study is conducted:

1. Surveying the literature relating to the problem.
2. Identifying and defining the problem.
3. Formulating a problem hypothesis, deducing the consequences, and defining basic terms and variables.

4. Constructing an experimental plan that represents all the elements, conditions, and relations of the consequences, which may require that he (a) identify all nonexperimental variables that might contaminate the experiment, and determine how to control them; (b) select a research design; (c) select a sample of subjects to represent a given population, assign subjects to groups, and assign experimental treatments to groups; (d) select or construct and validate instruments to measure the outcomes of the experiment; (e) outline procedures for collecting the data, and possibly conduct a pilot or "trial run" test to perfect the instruments or design; and (f) state the statistical or null hypothesis.
5. Conducting the experiment.
6. Reducing the raw data in a manner that will produce the best appraisal of the effect which is presumed to exist.[15]

The portions of this study which can be identified as descriptive-survey are the background of the study, statement of the problem, definition of terms, significance of the study, and normative data collection, while the experimental component includes the review of literature, selection of instrument, research method, research hypotheses, data analysis, and population sample procedures. Conclusions and recommendations are drawn from data produced by both research methods.

Delimitations of the Study

The population of this study was limited to those special needs teachers in high schools and post-secondary institutions in the State of Michigan that are currently operating special needs programs under the guidelines for vocational education programs for persons with special needs. These guidelines are indicated by the Disadvantaged and Handicapped Programs Unit, Vocational-Technical Education Services, Michigan Department of Education.

Specialized training, as defined in the next section of this chapter, was also a limiting factor.

Definition of Terms

The following terms are defined in the context in which they were used in this study:

Cluster: A number of similar occupations considered as a group because of their relation to each other or for convenience in treatment or discussion.

Congruence: According to Scheuer,

> A highly congruent individual is one whose self-image corresponds with his expressed behavior, and who can therefore afford to be himself without the psychological threat of exposure. He is perceived by others as sincere, honest, genuine, direct, and without pretense.[16]

Disadvantaged persons: The Guidelines for Special Education Programs and Services set forth the following definition of disadvantaged persons:

> Disadvantaged persons means persons who have academic, socioeconomic, cultural, or other handicaps that prevent them from succeeding in vocational education or consumer and homemaking programs designed for persons without such handicap, and who for that reason require specially designed educational programs or related services. The term includes persons whose needs for such programs or services result from poverty, neglect, delinquency, or cultural or linguistic isolation from the community at large, but does not include physically or mentally handicapped persons unless such persons also suffer from the handicaps described in this paragraph.[17]

Empathic understanding: Scheuer defined empathic understanding as follows:

> The ability to accurately experience another's private world, and to sense the immediate affective quality and intensity of another's inner feelings. An overall sensitivity resulting

> from the awareness of another's unexpressed feelings in a given situation. The antithesis of intellectual understanding which connotes the objectivation of another person.[18]

Formal education: As defined in the Dictionary of Education, formal education is:

> Any training or education that is conventional, given in an orderly, logical, planned, and systematic manner; thus formal education is said to end with school attendance.[19]

Handicapped persons: The Guidelines for Special Education Programs and Services defined handicapped persons as follows:

> Handicapped persons means persons identified by an educational planning and placement committee for secondary programs or certified vocational rehabilitation staff for postsecondary programs as educable mentally impaired, emotionally disturbed, learning disabled, crippled, hearing, speech, visually, or other health impaired persons who by reason of their handicapping condition cannot succeed in a vocational education program designed for persons without such handicaps, and who for that reason require special educational assistance or a modified vocational or consumer and homemaking education program.[20]

Inservice: For the purpose of this study, inservice training includes workshops, conferences, and credit and noncredit courses aimed at improving interpersonal relationships for those teaching in a special needs programs.

Interpersonal relationship:

> Fritz Heider defined interpersonal relationship as denoting relations between "few" usually between "two" people. It signifies relationships among different persons in a group. It is a person-to-person relationship. It may appear between two persons or more. It may include the friendly as well as unfriendly relations.[21]

Mainstreaming: Mainstreaming is the integration of those persons who have disadvantages and/or handicaps into regular vocational programs designed for normal or average individuals.

Preservice training: For the purpose of this study, preservice training is considered to be that training aimed at preparing a person for an instructional position before that person is employed in a special needs program.

Special education programs. As delineated in the Public and Legal Acts of the Legislature of the State of Michigan,

> Educational and training programs and services designed for handicapped persons operated by local school districts, intermediate school districts, the Michigan School for the Blind, Department of Mental Health, Department of Social Services, or any combination thereof, and ancillary professional services for the handicapped persons rendered by agencies approved by the state board of education. Handicaps include, but are not limited to, mental, physical, emotional, behavioral, sensory and speech handicaps. The programs shall include vocational training, but need not include academic programs of college or university level.[22]

Special needs: The Vocational Education Amendments of 1974 gave the following definition of special needs:

> The term "person with special needs" means persons who are or have been adversely affected by physical, academic, socio-economic, or other factors and conditions which require special supportive educational assistance and services in order to succeed in vocational education programs. The term includes persons who are handicapped, that is, "persons who are mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled or other health impaired persons who by reason thereof require special services"; and persons who are disadvantaged, that is, "persons who have academic, socio-economic, or other disadvantagements which prevent them from succeeding in a regular vocational education program.[23]

Specialized training: Specialized training refers to workshops, professional field experiences, academic internship programs, institutes, and/or other recent and relevant formal experiences that deal specifically with training educational personnel to meet the educational needs of disadvantaged and handicapped people. The

training may or may not be for credit and/or use in lieu of a formal degree or certification requirements for a formal degree.

Vocational education: According to the Vocational Education Amendments of 1974,

> The term "vocational education" means vocational or technical training or retraining which is given in schools or classes (including field or laboratory work or remedial or related academic and technical instruction incident thereto) under public school supervision and control or, by private non-profit or proprietary schools under contract with a State Board or local educational agency and is conducted as part of a program designed to prepare individuals for gaining employment as semi-skilled or skilled workers or technicians or subprofessionals in recognized occupations in new and emerging occupations, . . . but excluding programs to prepare individuals for employment in occupations which . . . require a baccalaureate or higher degree. . . .[24]

Summary and Overview

In this chapter the researcher identified the need for educational goals that emphasize preparing vocational teachers to work with students who have special needs. Also identified was the need for in-service education that will modify teachers' empathy and congruence toward creating the optimum learning environment in which students can grow and attain their maximum potential. The results of this study could significantly influence the direction and objectives of future teacher training programs. The author's purposes in this study in relationship to the defined need were also described. The significance of the study, hypotheses, delimitations, and definition of terms were included as well.

Chapter II contains a review of the research literature related to the writer's purpose in this study. In Chapter III the design of the study is established by explaining the methodology and

procedures used to test the hypotheses formulated for the study. Detailed in Chapter IV are the findings and the interpretation of results, based on the analysis of the data obtained for this study. The hypotheses of the study are also tested. A summary of the study, conclusions, and recommendations are given in Chapter V.

Footnotes--Chapter I

[1]Barbara H. Kemp, "Where Vocational Education Is a Special Need," American Vocational Journal 42 (November 1967): 24.

[2]Public and Local Acts of the Legislature of the State of Michigan (Lansing, Michigan: Legislative Service Bureau, 1971), p. 11.

[3]Evaluation Report--Michigan Vocational Education Special Needs Programs, 1973-74 (Lansing: Michigan Department of Education, 1974), p. 4.

[4]Guidelines for Vocational Education Programs for Persons With Special Needs for FY 1975-76 (Lansing: Disadvantaged and Handicapped Programs Unit, Vocational-Technical Education Services, Michigan Department of Education, October 1974), p. 8.

[5]Administrative Guide for Vocational-Technical Education (Lansing: Vocational-Technical Education Service, Michigan Department of Education, 1974), p. L2.

[6]Jan Baxter, Development and Implementation of Secondary Special Education Programs (Lake Odessa, Mich.: E.B.I. Breakthru, Inc., 1975), p. 21.

[7]Evaluation Report, p. 33.

[8]Ibid., p. 34.

[9]Vocational Education/Special Education Project (Mt. Pleasant, Mich.: Central Michigan University, 1975), p. 2.

[10]Kemp, p. 52.

[11]The AMIDS In-Service Training Workshop for Vocational Educators of Disadvantaged and Handicapped Students: How to Plan-Conduct-Evaluate (Montgomery, Alabama, Link Enterprises, Inc., 1973), p. 3.

[12]David R. Wampler, "A Study of First Year Teachers in Disadvantaged Schools to Determine the Relationship of Preservice Preparation Experiences to Present Attitudes and Effectiveness," Dissertation Abstracts International (Ann Arbor, Mich: University Microfilms, 33/07-A, 1973), p. 3314.

[13]Carter V. Good, Essentials of Educational Research (New York: Appleton-Century-Crofts, 1966), p. 192.

[14]Ibid.

[15]Deobold Van Dalen, Understanding Educational Research (New York: McGraw-Hill, 1966), p. 242.

[16]Arnold L. Scheuer, "The Relationship Between Personal Attributes and Effectiveness in Teachers of the Emotionally Disturbed," Exceptional Children (Summer 1971): 726.

[17]Guidelines for Special Education Programs and Services (Lansing: Michigan Department of Education, 1974), p. 1.

[18]Scheuer, "Relationship," p. 726.

[19]Carter V. Good, ed., Dictionary of Education, 3rd ed. (New York: McGraw-Hill Book Co., 1973), p. 248.

[20]Guidelines for Special Education Programs and Services, p. 1.

[21]Mary E. James, "The Effects of Interpersonal Relations Training on Prospective Teachers," Dissertation Abstracts International (Ann Arbor, Mich.: University Microfilms, 32/02-A, 1971), p. 6.

[22]Public and Local Acts, p. 637.

[23]Vocational Education Amendments of 1974, 93d Congress (Washington, D.C.: Government Printing Office, 1975), p. 608.

[24]Ibid., p. 605.

CHAPTER II

REVIEW OF RELATED LITERATURE

The researcher's purpose in this chapter is to discuss the relevant literature that has implications for the topic under study--the effect of specialized inservice teacher education on selected interpersonal relationship factors.

The review of literature covers three areas of inquiry that are pertinent to the topic of this research. They are: literature on justification for the study, literature concerning recommendations to improve the preparation of teachers of students with special needs, and literature related to the effect of inservice training on interpersonal relationship factors.

Literature on Justification for the Study

In the past ten years a significant amount of literature has encouraged specialized training for vocational teachers of students with special needs. A publication entitled The AMIDS In-Service Training Workshop of Vocational Educators of Disadvantaged Students: Part B indicated:

> Individual students have individual needs. Students vary in interest and motivation as well as in learning capabilities. Students who encounter difficulties in achieving learning success because of their social, cultural, linguistic, or economic background, and students who are handicapped physically, mentally, or emotionally need special help and understanding.

> Teachers who can provide this help and understanding are the vital foundation of successful vocational programs or services for special needs students.[1]

The average teacher's cultural life is different from that of a student who has been identified as having special needs. One's teacher training (e.g., education courses and student teaching) seldom prepares him to meet the multiple problems associated with special needs students. Tiedt wrote:

> The teacher must be prepared to work with children whose values and attitudes are different from his. It would seem then that the teacher of the disadvantaged must be very carefully chosen and trained. . . .[2]

McCracken and Brown supported this position when they stated, "The essential ingredient underlying successful curriculum development and adoption rests heavily on the shoulders of well-prepared teachers. . . ."[3]

Benjamin Whittens, Superintendent of Vocational Education in the Baltimore City Public Schools, spoke at the Third Annual National Vocational-Technical Teacher Education Seminar and indicated:

> For too long it has been felt that the philosophy, psychology, and methodology of our instructional programs would adequately meet the needs of all pupils. . . . After all, vocational subjects were perceived to be the most meaningful and relevant subjects in the entire school curriculum. In addition, vocational educators had been successful for several generations and in two national emergencies in preparing people to perform the jobs that were needed for national survival.[4]

In 1973, Schmitt brought out the fact that teachers are not being prepared to meet the special needs of minority populations:

> Few university teacher education programs have adjusted their professional courses or field experiences to prepare "new" teachers to cope with the specific learning, cultural, sociological, behavioral and professional situations unique to specific minority populations. Consequently, many new teachers

> dealing with the culturally different have not received adequate or realistic teacher preparation in breaking down stereotyped thinking, in developing an appreciation of the resourcefulness of a culturally different society.[5]

One of the first innovative experimental programs in special needs teacher education was Operation Fair Chance, undertaken at two California State colleges. The objectives of that program were:

> . . . to help prospective and experienced teachers develop truly empathetic attitudes toward the culturally deprived, to find more effective ways of teaching disadvantaged children and youth and of working with their parents and community leaders, to emphasize realistic pupil orientation to the world of work and to produce new learning materials in this area. . . .[6]

With funds allocated under the Vocational Education Amendments of 1968, many school districts, colleges, and universities inaugurated vocational education programs for students with special needs. These programs created a need for instructional personnel with special training in this area.

The National Curriculum Development Project for Vocational Education of Disadvantaged and Handicapped Students comprised a series of one-week workshops held nationwide beginning in July 1971 and ending in November 1972; 1,224 vocational educators attended these sessions. The project was one of many endeavors designed to help train instructional personnel to teach students with special needs. Its goal was ". . . to train a nucleus of vocational educators in developing curriculum and learning materials for disadvantaged or handicapped students. . . ."[7] The project was unique in four respects:

1. It was a unified, concerted teacher-training and development effort conducted on a national scale.

2. It was planned specifically for in-service training of teachers of disadvantaged and/or handicapped students enrolled in vocational classes.
3. The project accomplished more than expected--at less cost than anticipated.
4. The training was conducted by personnel who are not formally associated with the staff or faculty of the traditional teacher training institution or universities.[8]

Typical comments made by those who participated in the "human awareness" learning activities component of Project workshops were:

> The workshop made me more aware of the unusual problems that the disdavantaged students face. I feel that I am better prepared to relate to these students now.
>
> I learned how to deal with students on a more personal, individual basis. I became more aware of the different learning capabilities of each student and how to handle each separately.
>
> I realized that disadvantaged and handicapped students do not need or want sympathy. I saw that empathy was a much more constructive attitude.[9]

The AMIDS Report: Part B corresponded to the preceding comment, and listed five levels of empathy:

> Level One--Does everything but listen, understand, or be sensitive to even the surface feelings of the other person. Words indicate disapproval of other person by offering unsolicited advice and telling him what would be "best" for him. Does not give the other person a chance to discuss personally relevant material.
> Level Two--Responds to surface feelings of the other person but ignores deeper feelings. Frequently misinterprets feeling of other person. Responds in a "purely professional manner." Responses have a rehearsed, false, quality. Displays a lack of concern or interest in many ways. Responds mechanically and remotely to personally relevant material introduced by the other person.
> Level Three--Almost always responds to surface feelings of the other person. Not really aware of who that other person really is like underneath. Appears to make appropriate responses which are sincere but which do not reflect any real involvement. Commits little of self. Communicates a positive caring, but with reservations and conditions. Responses by other person are cautious and without any deep revelation of inner feelings or personal experiences.

Level Four--Almost always responds with understanding to the surface feelings of the other person. Sometimes, but not always responds with empathy to the deeper feelings. Responds with many of his own feelings and means what he says. Responses indicate a genuineness of feeling. Can express even negative reactions in a non-threatening manner to the other person. Clearly communicates a very deep interest and concern. Sees himself as responsible to, not for, the other person. Enables the other person to express personal feelings freely and spontaneously.
Level Five--Responds with full awareness of the other person. Displays accurate and comprehensive understanding of the other person's deepest feelings. Open to experience of all types, both pleasant and hurtful. Comments are always constructive. Enables other person to engage in inward probing of newly discovered feelings about himself and his world. Communicates a very deep respect for the other person's worth and his rights as a free individual. Committed to the value of the other person as a human being.[10]

Literature Concerning Recommendations to Improve the Preparation of Teachers of Students With Special Needs

One of the greatest challenges for the teacher of students with special needs is helping pupils develop positive attitudes. The AMIDS Report indicated: ". . . The teacher of the special needs students needs new insight and increased sensitivity to the deep, inner feelings and attitudes of the disadvantaged or handicapped person."[11]

Hagadone supported this viewpoint when he wrote:

> There is little doubt that attitudes are, in large part, a major contributing factor to the effectiveness of the teacher and the learning process. The role of the teacher to each student and his responsiveness to this role is a unique occasion between these two people and cannot be duplicated.[12]

Schmitt concurred:

> It is imperative that attitudinal changes become the pinnacle for effective preparation of teachers serving culturally different populations. Acceptance, respect, compassion, understanding, and empathy are foremost attributes (attitudinal) with pedagogical skills representing secondary attributes. . . .[13]

Tuckman and O'Brian noted that "the all-important area of attitudes is one in which a teacher can make major inroads into this problem of the culturally deprived. . . ."[14]

In his five-point plan for teachers of the poor, Riessman supported this belief when he wrote, ". . . It is not enough to build respect and knowledge; teachers' attitudes must also be changed. . . ."[15]

Feck recommended that the teacher of disadvantaged youths must have faith in the students' ability to learn and succeed, a strong desire to teach the disadvantaged, and respect, understanding, and empathy for them.[16] Huff supported this recommendation:

> The teacher must honestly like and want to teach this student. In addition she must be shock-proof, not easily discouraged, emotionally stable, physically strong, and have personal convictions and control which command the respect of the student.[17]

Ryan included these qualities in his list of characteristics essential in the classroom behavior of teachers: "[classroom teachers should be] warm, understanding, systematic, responsible, stimulating, imaginative. . . ."[18]

Donald Maley, head of Industrial Education at the University of Maryland, indicated vocational teachers

> . . . will need specialized courses in the area of Special Education, Sociology, Economics, and Communication to prepare for teaching assignments in groups with special needs. This may involve one or more forms of community study or work experiences.[19]

Edmund Gordon, chairman of the Department of Guidance, Teachers College, Columbia University, in a presentation at the Second Annual National Vocational-Technical Teacher Education

Seminar, suggested ". . . sensitivity training [should be] an early and continuous part of teacher training programs."[20]

Scales supported this notion when he concluded: "All institutions educating teachers must continue to give attention to the personality of prospective teachers. . . ."[21]

Dixon and Morse found in their study that

> . . . pupils and supervising teachers considered student teachers with "good" empathy to be better teachers than those with "poor" empathy. In other words, the student teachers who developed very positive feelings toward their appraisal of themselves as teachers.[22]

Wampler's study supported Dixon and Morse's conclusions concerning preservice teacher empathy. The findings of Wampler's study showed

> . . . (1) those subjects with a substantial preservice experience in a disadvantaged school demonstrated a more positive attitude toward teaching in similar schools, had more positive attitudes about their students, and felt far more adequate in their teaching situation; (2) those subjects having a limited preservice experience did indicate that they were better prepared when compared with the no preservice group, but did not differ as markedly as did those subjects who had the student teaching experiences; and (3) those subjects with the preservice student teaching were found to be rated as more effective teachers and appeared to be more willing to accept a position in schools for the disadvantaged following certification.[23]

Zdunich further supported this finding when she concluded that ". . . Participants in the experimental program did [exhibit] some significant increases in attitude scores, while the control group showed no significant gains. . . ."[24]

Kemp noted that if teachers of the disadvantaged are to do an effective job, they must have the following qualifications:

1. Competence in the subject matter and work skills in the field of specialization.
2. Interest in working with young people who have special problems.

3. Ability to reinforce the slow learner and to refrain from responding only to those students who respond to them.
4. Ability to seek and find additional techniques to enable them to communicate with all students.
5. Skill in presenting goals to the students and in helping them to meet challenges.
6. Ability to measure students by their individual achievements without lowering the standards for the class.
7. Special training or knowledge for work with the disadvantaged, including an understanding of their way of life.
8. Ability to work with other school personnel to increase the effectiveness of their work.
9. Willingness to use instructional materials geared to the understanding of their students and patience to work with the slow learner.
10. Skill in working with students to build up their self-concept, in seeking hidden strengths, and in helping to channel these in productive directions.[25]

Schmitt made the following recommendations concerning teacher education programs to prepare teachers of culturally different individuals:

1. Vigorous efforts must be placed on recruiting and selecting teachers from the ranks whom they serve.
2. Professional teacher preparation curricula for the culturally different must provide a wide array of courses, field experiences, and activities.
3. Teacher preparation institutions and agencies for the culturally different must provide a continuum of educational experiences from entry to retirement.
4. Teacher preparation for the culturally different must prepare the teacher to genuinely utilize parental involvement in developing realistic educational experiences for their children.
5. Early involvement with culturally different children, youth, and adults must be an important element in teacher preparation for beginning teachers enrolled in agencies and institutions designed to meet the needs of the culturally different.
6. Teacher preparation programs for the culturally different must be designed so that the teacher has an excellent chance for success.
7. Beginning teachers of the culturally different must become increasingly "person oriented" and "student centered."
8. Teacher preparation for the culturally different must become a cooperative venture between local school systems, state departments of education, universities, industries, and community organizations.

9. Teacher education for the culturally different must establish state, regional and national councils to insure a political power base from which adequate financing can be secured.
10. Either a four-day teaching week or 15 to 20 percent of the culturally different teachers' contractual time should be spent cooperatively with the university, local school system and community in conduction of pre-service, in-service education, action oriented research and/or professional improvement activities.
11. Dissemination and sharing of successful teacher education programs must be made available to all agencies and institutions preparing quality teachers for these populations.[26]

In a study he conducted in Philadelphia, Hill listed the following requisites for preservice preparation programs for teachers of the underprivileged:

1. The pre-service preparatory programs of teachers of the underprivileged should provide for the development of special methods, and special experiences. . . .
2. Teachers should develop realistic expectations for the behavior of underprivileged children during their pre-service training.
3. Personnel selected to instruct in programs for teachers of the underprivileged should have experience in, and be acceptable in, both lower and middle class cultural patterns of behavior.[27]

In the same study, Hill made these recommendations for inservice training of teachers of the underprivileged:

1. One phase of a strong ongoing in-service program should be to acquaint the teachers with the specific characteristics of the community they serve and the implications of these characteristics for the school.
2. Each individual school should develop a curriculum emphasis designed to serve the needs and problems of underprivileged children in that school.
3. Administrators of schools serving underprivileged children should reinforce the idealistic beliefs and attitudes of their teachers by referring to the social significance of their service. . . .[28]

Tuckman and O'Brian summarized the belief that observation and participation in the disadvantaged community are basic steps in preparing teachers for the disadvantaged:

> An effective way in which the teacher can gain insight into the world of youth with special needs is to become involved in their world. Reading and discussion alone cannot bring about the understanding that is needed; experiencing is a vital link that must be included. To read, study, experience, live and become involved is the road to understanding, appreciation, and empathy. . . . A teacher of the disadvantaged must build a frame of reference upon which to base and from which he can project his expertise.[29]

Huffman and Welter supported the preceding viewpoint when they stated:

> The incorporation of clinical and field experiences (in the disadvantaged community) into the teacher education program is perhaps the most effective way that teacher-educators can help prospective teachers build an adequate frame of reference for teaching the disadvantaged.[30]

Huff had much the same philosophy: ". . . An effective working relationship with parents, counselors, and community leaders will facilitate program planning and community cooperation."[31] This concept received further support from Tiedt:

> . . . The training of teachers should include early and close contact with disadvantaged children. The prospective teacher must become involved in community activities involving not only the disadvantaged youngsters but their families as well. Home visits and community surveys should be an integral part of this training. . . .[32]

Dawson wrote that if vocational teachers are to be effective in teaching the disadvantaged and/or handicapped they must:

> . . . (1) understand the students and their problems; (2) be able to keep the students motivated; (3) possess a high level of competency in teaching; (4) keep the community involved in the program, at both the planning and implementation stages; (5) keep the curriculum adapted to the individual needs of the students, placing emphasis on the usage and implication; and (6) be able to earn the respect and confidence of the students.[33]

McCracken and Brown supported these criteria, and indicated that well-prepared vocational teachers ". . . must become

knowledgeable about the characteristics of the disadvantaged, their psychological responses, and the environment factors which create and extend disadvantagement."[34]

The primary objectives to be achieved in Operation Fair Chance, one of the first innovative programs in experimental teacher education, were to produce behavioral changes in the teacher and/or prospective teacher of special needs students that would:

1. Improve teachers' understanding and acceptance of children whose backgrounds and behavior patterns are drastically different from their own;
2. Improve teachers' ability to generate in such youngsters a real motivation to learn through greater creativity and skill in the design and use of novel and specialized teaching tools, methods, and techniques;
3. Create and maintain learning situations which will lead students to realistic vocational objectives, effective preparation for an occupation, pride in workmanship, and confidence in their ability to succeed in the vocation of their choice;
4. Increase the teachers' utilization of the possible contributions of all agencies in the community which usually become involved with such youngsters during their lifetime;
5. Increase the receptivity and capability of the participating school systems to implement and activate the new learning of teachers.[35]

Kruppa recommended that a curriculum for teachers of children with special needs should include three categories: "(1) General Education, (2) Professional Education, and (3) Specialization which could include either industrial arts, vocational education or both, and special education."[36]

The Educational Policies Commission of the National Education Association and the American Association of School Administrators published the following statements concerning the education of teachers of the disadvantaged:

1. The preservice program of teacher education should seek to develop in each student a sense of genuine respect and empathy for the children he will teach.
2. Teacher education should include observation and practice in teaching and otherwise working with the disadvantaged.
3. Teacher education should include experience in a disadvantaged community outside the school.
4. In-service education should enable teachers consistently to improve their understanding of their pupils. Teachers should acquaint themselves with the living conditions of their pupils and try to relate their knowledge of sociology and psychology to those conditions.[37]

In a five-point plan for preservice and/or inservice training of teachers of the poor, Riessman included the following:

1. Building teacher respect for disadvantaged children and their families. This involves attitude change and a proposed method of producing it.
2. Supplying teacher experiences with the disadvantaged.
3. Some general do's and don'ts in teaching the urban poor.
4. A teaching technology appropriate for low-income youngsters.
5. The development of a variety of teacher styles through integrating other parts of the plan with the idiosyncratic potential of each teacher. This concerns the art of teaching and how it can be developed and organized.[38]

Sciara conducted a study to develop guidelines for a preservice teacher education program for elementary teachers of the disadvantaged. As a result of the research, he formulated the following objectives:

1. The teacher education program should provide opportunities for self-understanding as it relates to thinking.
2. The teacher education program should provide all kinds of educational experiences including direct experiences which aid in preparing prospective teachers mentally, attitudinally, and emotionally to teach disadvantaged children.
3. The teacher education program should help the prospective teacher understand the effects of deprivation and poverty.
4. The teacher education program should help the prospective teacher understand the effects of prejudice and minority group membership.
5. The teacher education program should help the prospective teacher understand the strengths of disadvantaged students.

6. The teacher education program should help the prospective teacher develop skill in the application of diagnostic and remedial techniques.
7. The teacher education program should help the prospective teacher develop skills in effecting positive human relations with children.
8. The teacher education program should help the prospective teacher develop skills in establishing and maintaining positive parent-teacher relationships.
9. The teacher education program should help the prospective teacher develop skills in advancing the needed language arts skills of students.
10. The teacher education program should help the prospective teacher develop skills in selecting and adapting curriculum appropriate to the needs of the students.
11. The teacher education program should help the prospective teacher develop skills in organizing the classroom for efficient learning.
12. The teacher education program should provide the prospective teacher with a series of relevant direct experiences.[39]

Dawson indicated that the specific objectives of an institute under his directorship were:

1. To further develop an ideal philosophy and commitment of vocational teachers in teaching the disadvantaged and handicapped.
2. To enable vocational education teachers to better understand the disadvantaged and handicapped individuals, and understand their social, cultural, and socio-economic problems.
3. To develop an understanding of the psychology of learning of the disadvantaged and handicapped; including psychological, sociological, and cultural influences on learning.
4. To acquaint the teachers with methods and techniques of effectively communicating with the disadvantaged and handicapped.
5. To extend the teachers' expertise in counseling the disadvantaged and handicapped.
6. To further develop the vocational education teacher's ability to motivate the disadvantaged and handicapped.
7. To extend the teacher's knowledge of developing and implementing a program based on special needs of the disadvantaged and handicapped.
8. To develop the ability to utilize community resources in developing and implementing programs for the disadvantaged and handicapped.
9. To enable the teachers to use a variety of measurement and evaluation instruments in determining the strengths

and weaknesses of programs for the disadvantaged and handicapped.

10. To better acquaint vocational education teachers with methods and techniques of using individualized instruction for teaching disadvantaged and handicapped students.[40]

Literature Related to the Effect of Inservice Training on Interpersonal Relationship Factors

> No program of teacher education can be defended if it presumes to give a beginning teacher all the knowledge and all the skill he will ever need to have. Nor does any school system ever get all the expert teachers it needs. Schools do not get expert teachers--they develop them.[41]

Teacher training is a difficult task; the assignment can be even more difficult when it entails training teachers to work with students who have special needs.

Inservice training, as it is now conducted, is far from adequate for teachers of students with special needs. Rivlin spoke to this problem: "Most existing in-service programs are weak because they tend to stress regulations and procedures and lose sight of the basic purpose. . . ."[42] Rivlin's view was supported by Powell, in a study of the role of the university in the education of inservice teachers; he concluded: "The role of higher education institutions in in-service teacher education has undergone no significant change since the beginning of the twentieth century. . . ."[43]

In a study to evaluate the preservice and inservice education of English teachers of culturally disadvantaged students in Georgia, Wilder reported that:

> . . . In-service programs lack continuity, purpose, and direction. Furthermore, it was rare that these programs had significant bearing on the problems of teaching English to the disadvantaged. . . .[44]

After completing a study that involved designing an inservice training package for teachers of children with learning disabilities, Wilson concluded:

> . . . The inservice package developed and revised in this study has been shown to provide an effective method for presenting theories and models which teachers can apply to the educational needs of learning disabled children. . . .[45]

Young supported this viewpoint; she concluded:

> . . . It may be stated that this in-service education and consultation program was highly effective with respect to development of positive teachers' attitudes and abilities to recognize and accommodate problem learners. . . .[46]

In a study entitled "The Development and Evaluation of a Special Education In-Service Training Program for Regular Classroom Teachers," Soloway found:

> . . . A special education in-service training program can be effective in improving reactions and attitudes of regular classroom teachers related to integration of EMR and EH children into regular classrooms. . . .[47]

Ponder conducted research on the effects of special in-service training programs for work with disadvantaged children. He indicated:

> . . . There is a critical need for colleges and school systems, in partnership, to plan and implement a deliberate well-organized ongoing in-service education program for all teachers to attack the over-all problems of educating children in slum and racial minority ghetto environs.[48]

As a result of his study of the effects of interpersonal relations training on prospective teachers, James found:

> . . . Fifty-four hours of interpersonal relations training . . . was adequate in significantly increasing levels of accurate empathy, non-possessive warmth, and total interpersonal skills. . . .[49]

Fischle's study of attitude and behavior change of teachers attending an NDEA institute for teachers of disadvantaged children led her to conclude that "There was a significant change (.01 level) in teachers' attitudes toward the teacher-pupil relationship as measured on the MTAI. . . ."[50] She also reported the following experiences were valuable in promoting the desired changes in attitudes and behavior:

1. The in-residence experience afforded continuous interaction with other inner city teachers and staff members.
2. Practicum experiences which included working with one child, groups of children, and observation of children in the child's environment fostered a greater understanding and acceptance of children.[51]

Bishop supported the preceding observation when he reported:

> Positive significant relationships were found between the ratings of white teachers by the white students with respect to empathy, congruence, and student regard and a positive significant relationship between black teachers and black students with respect to student regard was found.[52]

In a study that examined the effects of Minnesota's mandatory human relations training on the attitudes of the state's certificated teachers, Blackburn reported the following findings:

1. . . . Trained teachers tend to be more aware of discrimination in the school setting than teachers who have not completed human relations training. . . .
2. . . . New teachers and teachers with eleven years of experience tended to score lower than teachers in the middle ranges of years of teaching.
3. Several significant interactions also occurred. . . . These interactions suggest that human relations training had differential effects on specified groups of teachers.[53]

Lee reported similar findings in his study of the effectiveness of sensitivity training in a human relations program for inservice teachers; he made the following comparisons:

> Comparing the effectiveness of sensitivity training with the control group it was found that teachers in sensitivity training improved their scores on the MTAI significantly more than did those in the control group. . . . Teachers in sensitivity training increased in self-esteem, or self-value, . . . significantly more than did those in the control group. . . .
>
> Comparing the effectiveness of sensitivity training with the conventional class in human relations, sensitivity training was found superior in reducing student absenteeism . . . with near significant trends favoring sensitivity training in improving MTAI scores and teachers' self-esteem measures on the Q-Sort instrument.[54]

Summary

The literature reviewed in this chapter indicated a number of colleges and universities, school districts, state departments of education, and individuals have developed preservice and inservice programs with objectives centered around preparing more effective vocational teachers for service to students who have special needs. However, the results of those training programs are not known.

Some of the research findings have important implications for vocational educators, as well as for decision makers and programmers in the field of vocational education for secondary and post-secondary students who have special needs.

Many articles and studies have been discussed in this chapter. The following implications were selected as being the most pertinent to the present study:

1. There is a climate that supports the need to recruit vocational teachers for programs intended to serve students with special needs.

2. Preservice preparatory programs for vocational teachers of students with special needs should provide for the development

of special knowledge, methods, and experiences, i.e., field experience, idealistic beliefs and attitudes, and creative programs.

3. Inservice programs should be developed and/or designed to serve the needs and problems of special needs students in individual school districts and/or schools.

4. Vocational programs for special needs students should continuously be evaluated to determine their effectiveness.

5. Colleges and universities with preservice preparatory programs for vocational teachers should design a curriculum that will lead to dual certification in vocational education and special education.

6. Colleges and universities with preservice teacher education programs for vocational education teachers should design their curricula to include sensitivity and/or human relations training for prospective teachers.

In Chapter III the design of the study is established by explaining the methodology and procedures used to test the hypotheses formulated for the research.

Footnotes--Chapter II

[1]AMIDS In-Service Training Workshop for Vocational Educators of Disadvantaged and Handicapped Students: Supplementary Materials--Part B (Montgomery, Alabama, Link Enterprises, Inc., 1973), p. 25.

[2]Sidney Tiedt, ed., Teaching the Disadvantaged Child (New York: Oxford University Press, 1968), p. 16.

[3]J. David McCracken and Alice J. Brown, Career Education for Disadvantaged Students, Final Report (Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education 1973), p. 2.

[4]James W. Hensel and Garry R. Bice, Proceedings of the Annual National Vocational Technical Education Seminar, Chicago, October 21-24, 1968 (Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1969), p. 41.

[5]Henry E. Schmitt, Teacher Education for the Culturally Different; Appendix C of a Final Report (Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1973), p. 5.

[6]Operation Fair Chance: The Establishment of Two Centers to Improve the Preparation of Teachers of Culturally Disadvantaged Students, Emphasizing Occupational Understanding Leading to Technical Vocational Competence; Final Report. Fresno and Hayward, California: California State Colleges at Fresno and Hayward, 1969), p. 3.

[7]Edward G. Olsen, "Teacher Education for the Deprived: A New Pattern," School and Society (April 1967): 3.

[8]National Curriculum Development Project for Vocational Educators of Disadvantaged and Handicapped Students; Final Report (Montgomery, Alabama: Link Enterprises, Inc., 1973), p. 7.

[9]Ibid., p. 5.

[10]AMIDS In-Service Training Workshop--Part B, p. 37.

[11]AMIDS In-Service Training Workshop for Vocational Educators of Disadvantaged and Handicapped Students: How to Plan-Conduct-Evaluate (Montgomery, Alabama: Link Enterprises, Inc., 1973), p. 3.

[12]Theodore E. Hagadone, "A Study of Teacher Personal and Professional Attitudes as They Relate to Student Self-Concepts and Attitudes Toward School in the Six Highest Achieving Schools in Flint, Michigan" (Ph.D. dissertation, Michigan State University, 1967), p. 49.

[13]Schmitt, Teacher Education for the Culturally Different, p. 8.

[14]Bruce W. Tuckman and John O'Brian, eds., Preparing to Teach the Disadvantaged (New York: The Free Press, 1969).

[15]Frank Riessman, "Teachers of the Poor: A Five-Point Plan," Journal of Teacher Education (Fall 1967): 326.

[16]Vincent Feck, What Vocational Education Teachers and Counselors Should Know About Urban Disadvantaged Youth (Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, October 1971), p. 37.

[17]Marie Davis Huff, "What Youth Have Special Needs for Living, Learning, Earning," American Vocational Journal 42 (November 1967): 57.

[18]David G. Ryan, "Assessment of Teacher Behavior and Instruction," Review of Educational Research 33 (October 1963): 417.

[19]Tuckman and O'Brian, Preparing to Teach, p. 100.

[20]Hensel and Bice, Proceedings, p. 108.

[21]Douglas E. Scales, "Significant Factors in Teachers' Classroom Attitudes," Journal of Teacher Education 7 (1956): 279.

[22]Robert W. Dixon and William C. Morse, "The Prediction of Teaching Performance: Empathic Potential," Journal of Teacher Education 12 (September 1961): 328.

[23]David R. Wampler, "A Study of First Year Teachers in Disadvantaged Schools to Determine the Relationship of Pre-Service Preparation Experiences to Present Attitudes and Effectiveness," Dissertation Abstracts International (Ann Arbor, Mich.: University Microfilms, 33/07-A, 1973), p. 3314.

[24]Louise J. Zdunich, "A Relationship of Selected Personality Variables of Secondary School Student Teachers Enrolled in a Specialized Training program and Their Experienced Attitudes Toward the Disadvantaged," Dissertation Abstracts International (Ann Arbor, Mich.: University Microfilms, 1973), p. 4025.

[25]Barbara H. Kemp, The Youth We Haven't Served, Catalog No. FS 5.280:80038 (Washington, D.C.: Government Printing Office, 1966), p. 12.

[26]Schmitt, Teacher Education for the Culturally Different, p. 30.

[27]Russell A. Hill, "The Professional Adjustment of Teachers in Philadelphia Secondary Schools Serving Underprivileged Children as Reported by Selected Respondents" (Ph.D. dissertation, Temple University, 1963), p. 143.

[28]Ibid., p. 144.

[29]Tuckman and O'Brian, Preparing to Teach, p. 169.

[30]Harry Huffman and Clyde W. Welter, Designs for the Preparation of Vocational and Technical Teachers of Socioeconomically Disadvantaged Youth--Final Report (Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1972), p. 8.

[31]Huff, "What Youth Have Special Needs," p. 57.

[32]Tiedt, Teaching the Disadvantaged Child, p. 17.

[33]James I. Dawson, "Inservice Re-training of Vocational Education Personnel to Amplify and Enhance Their Role in Working With Disadvantaged and Handicapped Learners" (Huntsville, Alabama: Alabama Agricultural and Mechanical University, 1971), p. 11.

[34]McCracken and Brown, Career Education, p. 2.

[35]Operation Fair Chance, p. 2.

[36]J. Russell Kruppa, Preparing Teachers of Industrial Education for Disadvantaged and Handicapped Children at the Secondary Level; Final Report (New Jersey: Department of Education, 1973), p. 79.

[37]Educational Policies Commission of the NEA and the American Association of School Administrators, "The Education of Teachers of the Disadvantaged," NEA Journal 54 (September 1965): 13.

[38]Riessman, "Teachers of the Poor," p. 326.

[39]Frank J. Sciara, "Guidelines for a Pre-Service Teacher Education Program by Elementary Teachers of the Disadvantaged," Dissertation Abstracts International (Ann Arbor, Mich.: University Microfilms, 1968), p. 3538-A.

[40]Dawson, "Inservice Re-training," p. 12.

[41]Harry N. Rivlin, "A New Pattern for Urban Teacher Education," Journal of Teacher Education (Summer 1966): 181.

[42]Ibid., p. 182.

[43]Douglas R. Powell, "A Study of the Role of the University in the Education of Teachers In-service," Dissertation Abstracts International (Ann Arbor, Mich: University Microfilms, 35-06-A, 1974), p. 3568-A.

[44]Mary R. Wilder, "An Evaluation of the Pre-service and In-service Academic Preparation in English for Teachers of Disadvantaged Students in Selected Colleges in the State of Georgia," Dissertation Abstracts International (Ann Arbor, Mich.: University Microfilms, 31-09-A, 1971), p. 4398-A.

[45]Judith A. Wilson, "An In-service Training Package for Teachers of Children With Learning Disabilities," Dissertation Abstracts International (Ann Arbor, Mich.: University Microfilms, 36/07-A, 1976), p. 4412-A.

[46]Dorothy M. W. Young, "The Effectiveness of an In-service Education Program for Regular Classroom Primary Teachers Regarding the Recognition and Accommodation of Children With Learning Problems," Dissertation Abstracts International (Ann Arbor, Mich.: University Microfilms, 34/06-A, 1973), p. 3226-A.

[47]Michael M. Soloway, "The Development and Evaluation of a Special Education In-service Training Program for Regular Classroom Teachers," Dissertation Abstracts International (Ann Arbor, Mich.: University Microfilms, 36/07-A, 1976), pp. 4425-A.

[48]Edward G. Ponder, "An Investigation of the Effects of Special In-service Training Program for Work With Disadvantaged Children as Viewed by Directors and Participants," Dissertation Abstracts International (Ann Arbor, Mich.: University Microfilms, 28/09-A, 1968), p. 3535-A.

[49]Mary E. James, "The Effects of Interpersonal Relations Training on Prospective Teachers," Dissertation Abstracts International (Ann Arbor, Mich.: University Microfilms, 32/02-A, 1971), p. 820-A.

[50]Mildred J. Fischle, "A Study of Attitudes and Behavior Change of Teachers Attending an NDEA Institute for Teachers of Disadvantaged Children," Dissertation Abstracts International (Ann Arbor, Mich.: University Microfilms, 28/10-A, 1968), p. 4023-A.

[51]Ibid.

[52]Frank A. Bishop, "A Study of Selected Student-Perceived Teacher Interpersonal Characteristics With Reference to Teacher Demographic Characteristics and the Academic Progress of Low Achieving Secondary Students," Dissertation Abstracts International (Ann Arbor, Mich.: University Microfilms, 33/03-A, 1972), p. 1070-A.

[53]Guy J. Blackburn, "An Examination of the Efforts of Human Relations Training on the Attitudes of Certificated Inservice Teachers in Minnesota," Dissertation Abstracts International (Ann Arbor, Mich.: University Microfilms, 36/06-A, 1976), p. 3575-A.

[54]Walter S. Lee, "A Study of the Effectiveness of Sensitivity Training in an Inservice Teacher-Training Program in Human Relations," Dissertation Abstracts International (Ann Arbor, Mich.: University Microfilms, 28/05-A, 1967), p. 1680-A.

CHAPTER III

DESIGN OF THE STUDY

In the preceding two chapters, the problem and the review of the literature in related areas were presented. In this chapter the author details specifically the manner in which the sample group for the study was selected, how the instrument was chosen, the manner in which the data for the study were collected, and the procedures followed in handling the data.

This study was exploratory in nature; in it answers to many specific questions were sought. Beyond this, trends and implications were examined to find answers to questions generated and/or presented. The study was equally concerned with generating new questions. It is hoped the data presented in this study will lead other researchers to probe further and to seek additional information about problems related to education for vocational teachers of students with special needs. In this sense, this study is only an incipient effort; the investigation of other researchers into its findings is invited.

One of the researcher's purposes in the study was to determine whether specialized inservice teacher education for instructional personnel in vocational programs for students with special needs has had a positive effect on selected interpersonal relationship factors. The selected interpersonal relationship factors used in the study were

empathy and congruence; these were the dependent variables. Normative data used in this study were age of the teacher, occupational cluster in which the teacher was employed, teaching experience, and formal educational level attained by the teacher. The independent variables were program, cluster, and training.

Another purpose of the research was to provide information and recommendations for decision makers and programmers in the field of vocational education for students with special needs, with emphasis on inservice teacher education at the secondary and post-secondary levels.

Research Hypotheses

The central hypothesis tested in this study was:

> Michigan vocational teachers who are teaching in special needs programs and who have completed specialized training will score significantly higher on an interpersonal relationship inventory than will vocational teachers in special needs programs who have had no specialized training.

For the purposes of the research, the central hypothesis was divided into the following subhypotheses:

1. Vocational teachers with specialized training will score significantly higher on an empathy scale of a teacher-pupil relationship inventory than will vocational teachers who have had no specialized training in dealing with special needs students.

2. Vocational teachers with specialized training will score significantly higher on a congruence scale of a teacher-pupil relationship inventory than will vocational teachers who have had no specialized training in dealing with special needs students.

3. Vocational teachers employed in certain vocational clusters will score significantly higher on an empathy scale of a teacher-pupil relationship inventory than will vocational teachers employed in other vocational clusters.

4. Vocational teachers employed in certain vocational clusters will score significantly higher on a congruence scale of a teacher-pupil relationship inventory than will vocational teachers employed in other vocational clusters.

5. Vocational teachers in three kinds of special needs programs who have had specialized training will score significantly higher on an empathy scale of a teacher-pupil relationship inventory than will vocational teachers in three kinds of special needs programs who have had no specialized training.

6. Vocational teachers in three kinds of special needs programs who have had specialized training will score significantly higher on a congruence scale of a teacher-pupil relationship inventory than will vocational teachers in three kinds of special needs programs who have had no specialized training.

7. The age of vocational teachers in special needs programs is inversely related to empathy, as measured by a teacher-pupil relationship inventory, between teachers who have specialized training and teachers who have not had specialized training.

8. The age of vocational teachers in special needs programs is inversely related to congruence, as measured by a teacher-pupil relationship inventory, between teachers who have had specialized training and teachers who have not had specialized training.

9. Vocational teachers in special needs programs who have attained post-secondary formal educational levels will score significantly higher on an empathy scale of a teacher-pupil relationship inventory than will vocational teachers with lower formal educational levels.

10. Vocational teachers in special needs programs who have attained post-secondary formal educational levels will score significantly higher on a congruence scale of a teacher-pupil relationship inventory than will vocational teachers with lower formal educational levels.

11. Vocational teachers in a special needs program who have two to nine years of teaching experience will score significantly higher on an empathy scale of a teacher-pupil relationship inventory than will vocational teachers with less than two years or more than nine years of teaching experience.

12. Vocational teachers in a special needs program who have two to nine years of teaching experience will score significantly higher on a congruence scale of a teacher-pupil relationship inventory than will vocational teachers with less than two years or more than nine years of teaching experience.

Analysis Procedures

An analysis of variance was employed to retain or not retain the hypotheses of this study. A 0.10 confidence level was selected as the criterion of significance. Post hoc procedures were applied to the analyses that were significant. The design of the study is illustrated in Table 3.1.

Population

The population included all vocational teachers for special needs programs in Michigan schools operating state-reimbursed special needs programs during the 1975-76 regular school year. The eligible funding categories for the reimbursed programs are:

> State aid membership. Special Education Services supported by state Special Education and Intermediate reimbursement in most districts. Intermediate Vocational Education millage where applicable. Vocational Education program funds for districts and programs that qualify. . . . Vocational Education Special Needs Funds for approved projects. Eligible Vocational Rehabilitation clients may receive supportive services needed to maintain them in on the job training programs.[1]

A distinction was made between the types of students served--handicapped and disadvantaged. Individual programs were grouped according to whether they served handicapped students only, disadvantaged students only, or a combination of handicapped and disadvantaged students.[2]

Table 3.1.--Design of the study.

Independent Variables			Dependent Variables		Normative Data		
Treatment Group	Training	Occupational Clusters	Empathy	Congruence	Age	Educational Level	Teaching Experience
Handicapped	Trained	1 n=1 2 n=11 3 n=2 4 n=2 5 n=1					
	Untrained	1 n=1 2 n=7 3 n=2 4 n=1 5 n=2					
Disadvantaged	Trained	1 n=2 2 n=11 3 n=4 4 n=6 5 n=10					
	Untrained	1 n=1 2 n=19 3 n=4 4 n=3 5 n=9					
Handicapped and Disadvantaged	Trained	1 n=5 2 n=32 3 n=15 4 n=12 5 n=12					
	Untrained	1 n=3 2 n=42 3 n=12 4 n=12 5 n=20					
TOTAL		n=264					

Sampling Procedures

Best defined a sample as "a small proportion of a population selected for analysis."[3] Van Dalen suggested that to construct a representative sample, a researcher should:

> (1) define his population, (2) procure an accurate and complete list of the units in the population, (3) draw representative units from the list, and (4) obtain a sufficiently large sample to represent the characteristics of the population.[4]

A list of all vocational teachers who had attended specialized workshops (Instructional Strategies in Special Needs and/or Vocational Education/Special Education) during the 1973-74 and 1974-75 regular school years was obtained from the coordinator of the specialized workshops at the Michigan Department of Education and Central Michigan University. That list yielded 431 names, which composed the group of teachers with specialized training.

The names of all administrators (contact person) of special needs programs in school districts and post-secondary institutions in Michigan were obtained from the Disadvantaged and Handicapped Programs Unit, Vocational-Technical Education Services, Michigan Department of Education. One hundred forty-four administrators were asked to supply the names and addresses of vocational teachers employed in their special needs programs. One hundred four or 72 percent of the administrators returned the information. This request yielded 914 names, making up the group of potential teachers with no specialized training.

The two lists of names were compared to determine if any names appeared on both lists; 131 duplications were omitted from the

list of untrained teachers. Hence, the resulting list of untrained teachers comprised 783 names.

A systematic random sampling procedure was used to select a representative sample of 175 individuals from each of the two groups of vocational teachers. The number of members on each list, i.e., trained and untrained teachers, was divided by 175 to determine the sampling interval for that group.

Three hundred and fifty questionnaires were mailed on October 15, 1975, with instructions to return them in two weeks (see Appendix A). Two hundred twenty-nine instruments (65 percent) were returned; 19 could not be used for the following reasons: improper addresses, completing questionnaires was against local school policies, incomplete forms, refusal to complete forms, and special needs programs were not funded for the 1975-76 regular school year.

In December, 92 instruments were mailed to nonrespondents in an attempt to increase the number of responses (see Appendix A). Sixty-two of these instruments (67 percent) were returned; eight of them could not be used in the analysis because they were returned after the data had been processed.

In summary, 350 teachers were sent questionnaires. Two hundred ninety-one questionnaires (83.1 percent) were returned, of which 264 (75 percent) were used in computing the data for this study.

Once the instruments were returned, they were grouped by training (specialized or no specialized training) and program (handicapped, disadvantaged, or both), and were then hand scored (see Appendix C).

The Instrument

The instrument used to measure the interpersonal relationship factors in this study was the Barrett-Lennard Teacher-Pupil Relationship Inventory: Teacher Form. About 130 studies have been completed and perhaps another 100 are in progress using this Inventory and direct adaptations of it.[5] The Inventory is available in two forms, each of which includes four variables. The teacher form assesses the teacher's self-perception with regard to the variables "congruence," "empathic understanding," "level of regard," and "unconditionality." The pupil form of the same questionnaire measures the student's perception of the teacher on the same personality dimensions.[6] Only the teacher form of the instrument was used in this study because of varying policies related to the use of students in surveys within local school districts.

After consultation with Dr. Barrett-Lennard, the author of the instrument, the writer decided to use two of the instrument's four scales--the empathic understanding and the congruence scales. This decision reduced the instrument to 32 items, which were scored on a six-point agreement-disagreement scale, yielding total scores ranging from +96 to -96 and subscores of +48 to -48 for each of the two attitudinal variables.

In addition to the empathic understanding and congruence scales, selected normative data (age of the teacher, number of years teaching, formal educational level, and occupational cluster in which the teacher was employed) were also solicited (see Appendix C).

The reliability coefficients of the 64-item revision of the Inventory for three studies were cited in the technical note to the Inventory.[7] They are as follows:

		Reliability Coefficient
Study 1 Form OS	Level of Regard	.88
	Empathic Understanding	.86
	Unconditionality of Regard	.86
	Congruence	.92
	Total Score	.92
Study 2 Form MO	Level of Regard	.79
	Empathic Understanding	.91
	Unconditionality of Regard	.86
	Congruence	.85
	Total Score	.89

		Reliability Coefficient	
		Form OS	Form MO
Study 3	Level of Regard	.74	.86
	Empathic Understanding	.90	.84
	Unconditionality of Regard	.80	.80
	Congruence	.88	.87

The issue of validity, as stated by Barrett-Lennard, involved investigating associations between measures of functioning based on Rogers' psychotherapy process scale and the Relationship Inventory. The findings of that report were as follows:

> . . . The positive findings of association between these two theoretically related classes of measures are viewed as lending further support to the measuring procedures as well as the theory. Cahoon (1962) found that experiencing levels (Process Scale) and open-mindedness (Dogmatism Scale) of practicum counsellors were, in general, significantly related to the client-perceived quality of their counselling relationships as measured by the R.I. scales.[8]

A pilot study was conducted during July 1975 to determine if the instrument could be used in the present study. The pilot study

population comprised vocational teachers in special needs programs from four Michigan school districts. Participants were instructed to make comments that dealt with the clarity, appropriateness, and comprehensiveness of instructions of the instrument. In light of their comments and answers, no adjustments to the instrument were made before mailing it to the study sample.

Research Analysis

A three-way analysis of variance was computed for the data collected in the study. The computer program included adjustments for unequal cell frequencies. In presenting the results of the analysis of data, a 0.10 confidence level was used as the criterion of significance of the stated hypotheses. That confidence level was selected because the research was exploratory.

The Pearson product-moment correlation coefficient was used to measure the relationships between the variables and normative data.

The ten clusters included in the Vocational Education/Special Education Project at Central Michigan University[9] were consolidated into five for computation purposes, to eliminate the possibility of having empty cells. The consolidation was as follows, with number of subjects in each cluster:

Cluster 1	Agriculture/Natural Resources	N=13
Cluster 2	Automotive and Power Services Construction Graphics and Communication Media Manufacturing	N=122
Cluster 3	Clothing and Textile Services Food Preparation and Services	N=39

Cluster 4	Health Occupations	N=36
Cluster 5	Distribution Office and Business Occupations	N=54

Summary

Described in this chapter were the research methodology, the instrument used in gathering data necessary to test the hypotheses, and the type of statistical analysis used in treating the data gathered. Chapter IV details the findings and the interpretation of results based on the analysis of the data. Also, the hypotheses of the study are tested.

Footnotes--Chapter III

[1]Jan Baxter, Development and Implementation of Secondary Special Education Programs (Lake Odessa, Mich.: E.B.I. Breakthru, Inc., 1975), p. 22.

[2]Evaluation Report--Michigan Vocational Education Special Needs Programs, 1973-74 (Lansing: Michigan Department of Education, 1974), p. 8.

[3]John W. Best, Research in Education (Englewood Cliffs, N.J.: Prentice-Hall, 1956), p. 263.

[4]Deobold Van Dalen, Understanding Educational Research (New York: McGraw-Hill, 1966), p. 296.

[5]G. T. Barrett-Lennard, Resource Bibliography of Reported Studies Using the Relationship Inventory (Waterloo, Ontario, Canada: University of Waterloo, 1972), p. 1.

[6]Arnold L. Scheuer, "The Relationship Between Personal Attributes and Effectiveness in Teachers of the Emotionally Disturbed," Exceptional Children (Summer 1971): 725.

[7]G. T. Barrett-Lennard, Technical Note on the 64-Item Revision of the Relationship Inventory (Waterloo, Ontario, Canada: University of Waterloo, 1969), p. 4.

[8]Ibid., pp. 6-7.

[9]Vocational Education/Special Education Project (Mt. Pleasant, Mich.: Central Michigan University, 1975).

CHAPTER IV

FINDINGS OF THE STUDY

One of the researcher's purposes in this study was to determine whether specialized inservice teacher education for instructional personnel in vocational programs for students with special needs has had a positive effect on selected interpersonal relationship factors. Another purpose was to provide information and recommendations for decision makers and programmers in the field of vocational education for students with special needs, with emphasis on inservice teacher education at the secondary and post-secondary levels. The study was also designed to discuss the relationships found between the interpersonal relationship factors--empathic understanding and congruence. The normative data used for this study were age of the teacher, teaching experience, occupational cluster in which the teacher is employed, and education level attained by the teacher.

The Teacher-Pupil Relationship Inventory: Teacher Form was used to obtain empirical data. The Inventory contains 32 items designed to measure the teacher's self-perception with regard to empathic understanding and congruence. The Inventory was scored on a 6-point agreement-disagreement scale and yielded total scores ranging from +96 to -96 and subscores of +48 to -48 for each of the two attitudinal variables.

Data Analysis

In this chapter the data collected for the study are reported in an order related to the design. The results of the statistical analysis are presented in tabular form. Tables revealing significant data, pertinent to the topic of this study, are included and discussed in the text; other tables are mentioned in the text but are included for reference in Appendix D.

Normative Data

Personal characteristics of the sample, which were used as normative data, were obtained from the personal data sheet attached to the instrument (see Appendix C).

The sample distribution by formal educational level showed that nearly one-half (42.04 percent) of the sample held bachelor's degrees and less than 4 percent had a twelfth-grade education or less. See Table 4.1.

Table 4.1.--Distribution of sample by formal educational levels.

Educational Level	Number	Percent
Eighth grade	1	.4
Tenth grade	1	.4
Twelfth grade	6	2.3
One year college or less	9	3.4
Two years college or associate degree	15	5.7
Four years college or less	17	6.4
Bachelor's degree	111	42.0
Master's degree	85	32.2
Advanced degree	19	7.2
Total	264	100.0

The distribution of the sample by number of years teaching experience revealed that 84 (31.8 percent) of the vocational teachers in the sample had been teaching for ten or more years. See Table 4.2.

Table 4.2.--Distribution of sample by number of years teaching experience.

Number of Years Teaching	Number	Percent
1 or less	31	11.7
2-3	51	19.3
4-5	52	19.8
6-9	46	17.4
10 or more	84	31.8
Total	264	100.0

The distribution of the sample by age revealed that 85 (32.2 percent) of the vocational teachers in the sample were between the ages of 30 and 39. See Table 4.3.

Table 4.3.--Distribution of sample by age.

Age	Number	Percent
Below 20	2	.8
20-29	77	29.2
30-39	85	32.2
40-49	62	23.5
50-59	32	12.0
60 or above	6	2.3
Total	264	100.0

The distribution of the sample by type of program in which they taught showed that the majority (62.5 percent) of the vocational teachers in the sample taught in programs that included both handicapped and disadvantaged students. See Table 4.4.

Table 4.4.--Distribution of sample by program.

Program	Number	Percent
Handicapped	30	11.4
Disadvantaged	69	26.1
Combination	165	62.5
Total	264	100.0

As shown in Table 4.5, the distribution of the respondents by training revealed that slightly more than one-half of the vocational teachers in the sample (52.3 percent) did not have specialized training.

Table 4.5.--Distribution of sample by training.

Training	Number	Percent
Specialized training	126	47.7
No specialized training	138	52.3
Total	264	100.0

Distribution by vocational clusters in which respondents taught revealed that nearly one-half of the vocational teachers in the sample (46.2 percent) taught in Cluster 2, which included the areas of automotive and power services, construction, and graphics and communication media (Table 4.6).

Table 4.6.--Distribution of sample by clusters.

Cluster	Number	Percent
1	13	4.9
2	122	46.2
3	39	14.8
4	36	13.6
5	54	20.5
Total	264	100.0

Other noteworthy observations related to workshops attended, location of workshops, and the length of workshops are as follows:

1. Forty-six percent of all trained teachers attended the Vocational Education/Special Education workshop.

2. Twenty-five percent of all trained teachers attended the Instructional Strategies in Special Needs workshop.

3. Twenty-nine percent of all trained teachers attended special needs workshops other than the Vocational Education/Special Education workshop and the Instructional Strategies in Special Needs workshop.

4. Seven universities and colleges in the State of Michigan offered courses and/or workshops in special needs.

5. Forty-five percent of all trained teachers attended workshops for three days.

6. Twenty-three percent of all trained teachers attended workshops for one day or less.

7. Seventeen percent of all trained teachers attended workshops for two weeks or more. Twenty of those attended workshops other than the Vocational Education/Special Education and the Instructional Strategies in Special Needs workshops.

Testing of the Hypotheses

In presenting the results of the data analysis, an $\alpha.10$ level was used as the criterion of significance of the stated hypotheses. The Pearson product-moment correlation coefficient was used to measure the relationships between the variables (empathy and congruence) and the normative data.

The central hypothesis tested in this study was:

> Michigan vocational teachers who are teaching in special needs programs and who have completed specialized training will score significantly higher on an interpersonal relationship inventory than will vocational teachers in special needs programs who have had no specialized training.

Hypothesis 1 stated:

> Vocational teachers with specialized training will score significantly higher on an empathy scale of a teacher-pupil relationship inventory than will vocational teachers who have had no specialized training in dealing with special needs students.

Hypothesis 1 was not substantiated by the analysis of the data. As indicated in Table 4.7, the value required to retain the

hypothesis with F=1,234; α=0.10 was 2.71. The computed F ratio obtained for the data in this study, related to empathy and specialized training, was 1.36.

Table 4.7.--Analysis of variance summary table for variable--empathy.

Source	df	SS	MS	F	P
Program	2	212.41	106.20	1.50	.2253
Training	1	96.36	96.36	1.36	.2446
Cluster	4	268.41	67.10	.95	.4371
Program x Cluster	8	1187.00	148.37	2.10	.0371
Program x Training	2	68.04	34.02	.48	.6192
Training x Cluster	4	252.42	63.11	.89	.4699
Program x Training x Cluster	8	697.94	87.24	1.23	.2810
Within cells	234	16567.67	70.802		
Total	263	19350.25			

Note: df = degrees of freedom
SS = sums of squares
MS = mean square
F = F ratio
P = probability

Hypothesis 2 stated:

> Vocational teachers with specialized training will score significantly higher on a congruence scale of a teacher-pupil relationship inventory than will vocational teachers who have had no specialized training in dealing with special needs students.

Hypothesis 2 was supported by the analysis of the data. The value required to retain the hypothesis with F=1,234; α=0.10 was 2.71. The computed F ratio obtained for the data in this study, as it relates to congruence and specialized training, was 3.00. See Table 4.8.

Table 4.8.--Analysis of variance summary table for variable--congruence.

Source	df	SS	MS	F	P
Program	2	354.80	177.40	1.95	.1449
Training	1	273.43	273.43	3.00	.0845
Cluster	4	96.67	24.17	.27	.9000
Program x Cluster	8	1270.56	158.82	1.74	.0893
Program x Training	2	166.06	83.03	.91	.4033
Training x Cluster	4	554.28	138.57	1.52	.1966
Program x Training x Cluster	8	1207.31	150.91	1.66	.1098
Within cells	234	21308.27	91.06		
Total	263	25231.38			

Hypothesis 3 stated:

> Vocational teachers employed in certain vocational clusters will score significantly higher on an empathy scale of a teacher-pupil relationship inventory than will vocational teachers employed in other vocational clusters.

This hypothesis was not substantiated by the analysis of the data. The value required to retain the hypothesis with F=4,234; α=0.10 was 1.94. The computed F ratio obtained for the data in this study, as it relates to vocational clusters and empathy, was .95. See Table 4.7.

Hypothesis 4 stated:

> Vocational teachers employed in certain vocational clusters will score significantly higher on a congruence scale of a teacher-pupil relationship inventory than will vocational teachers employed in other vocational clusters.

Hypothesis 4 was not supported by the analysis of the data. The value required to retain the hypothesis was F=4,234; α=0.10 was 1.94. The computed F ratio obtained for the data in this study, relating to vocational clusters and congruence, was .27. See Table 4.8.

Hypothesis 5 stated:

> Vocational teachers in three kinds of special needs programs who have had specialized training will score significantly higher on an empathy scale of a teacher-pupil relationship inventory than will vocational teachers in three kinds of special needs programs who have had no specialized training.

A comparison of teachers from three types of programs--handicapped, disadvantaged, and a combination of the two--is illustrated in Table 4.9. Hypothesis 5 was not supported by the analysis of the data. The value required to retain the hypothesis with F=2,234; α=0.10 was 2.30. The computed F ratio obtained for the data in this

study, as it relates to specialized training in three kinds of special needs programs and empathy, was .48. See Table 4.7.

Table 4.9.--Means for the factors--program x training.

Program	Training	Empathy	Congruence
Handicapped	Trained	16.06	25.88
	Untrained	16.69	27.38
Disadvantaged	Trained	13.76	24.64
	Untrained	12.67	21.75
Combination	Trained	15.30	24.07
	Untrained	13.71	21.74

Hypothesis 6 stated:

> Vocational teachers in three kinds of special needs programs who have had specialized training will score significantly higher on a congruence scale of a teacher-pupil relationship inventory than will vocational teachers in three kinds of special needs programs who have had no specialized training.

Hypothesis 6 was not supported by the analysis of the data. The value required to retain the hypothesis with $F=2,234$; $\alpha=0.10$ was 2.30. The computed F ratio obtained for the data in this study, relating to specialized training in three kinds of special needs programs and congruence, was .91. See Table 4.8.

Hypothesis 7 stated:

> The age of vocational teachers in special needs programs is inversely related to empathy, as measured by a teacher-pupil relationship inventory, between teachers who have specialized training and teachers who have not had specialized training.

The analysis of the data did not support Hypothesis 7. As indicated in Table 4.10, the correlation of age with empathy yielded an r of -0.008 at the 0.10 level of confidence. The r value required to retain the hypothesis at that level was .160.

Table 4.10.--Pearson product-moment correlations of vocational teachers' scores on the Teacher-Pupil Relationship Inventory and age.

	Empathy	Congruence
Age	-.008	.177

N = 264 r = 0.16038 at 0.10 level

Hypothesis 8 stated:

> The age of vocational teachers in special needs programs is inversely related to congruence, as measured by a teacher-pupil relationship inventory, between teachers who have had specialized training and teachers who have not had specialized training.

Hypothesis 8 was supported by the analysis of the data. The correlation of age with congruence yielded an r of 0.177, which was significant at the 0.10 level of confidence. The r value required to retain the correlation of age and congruence at the 0.10 level was .160 (Table 4.10).

Hypothesis 9 stated:

> Vocational teachers in special needs programs who have attained post-secondary formal educational levels will score significantly higher on an empathy scale of a teacher-pupil relationship inventory than will vocational teachers with lower formal educational levels.

Hypothesis 9 was not substantiated by the analysis of the data. The correlation of formal educational level with empathy yielded an r of .029 at the 0.10 level of confidence. The r value required to retain the correlation of formal educational level and empathy at that level was .160. See Table 4.11.

Table 4.11.--Pearson product-moment correlations of vocational teachers' scores on the Teacher-Pupil Relationship Inventory and formal educational level.

	Empathy	Congruence
Formal educational level	.029	.011

N = 264 r = 0.16038 at 0.10 level

Hypothesis 10 stated:

> Vocational teachers in special needs programs who have attained post-secondary formal educational levels will score significantly higher on a congruence scale of a teacher-pupil relationship inventory than will vocational teachers with lower formal educational levels.

This hypothesis was not substantiated by the analysis of the data. The correlation of formal educational level with congruence yielded an r of .011 at the 0.10 level of confidence. The r value required to retain the correlation of formal educational level with congruence at that level was .160. See Table 4.11.

Hypothesis 11 stated:

> Vocational teachers in a special needs program who have two to nine years of teaching experience will score significantly higher on an empathy scale of a teacher-pupil relationship inventory than will vocational teachers with less than two years or more than nine years of teaching experience.

Hypothesis 11 was not supported by the analysis of the data. The correlation of teaching experience with empathy yielded an r of .043 at the 0.10 level. The r value required to retain the correlation of teaching experience and empathy was .160. See Table 4.12.

Table 4.12.--Pearson product-moment correlations of vocational teachers' scores on the Teacher-Pupil Relationship Inventory and teaching experience.

	Empathy	Congruence
Teaching experience	.043	.071

N = 264 r = .16038 at 0.10 level

Hypothesis 12 stated:

> Vocational teachers in a special needs program who have two to nine years of teaching experience will score significantly higher on a congruence scale of a teacher-pupil relationship inventory than will vocational teachers with less than two years or more than nine years of teaching experience.

Hypothesis 12 was not substantiated by the analysis of the data. The correlation of teaching experience with congruence yielded an r of .071 at the 0.10 level. The r value required to retain the correlation of teaching experience with congruence was .160. See Table 4.12. Two of the twelve subhypotheses tested in this study were retained.

Interpretation of Data

Based upon the data gathered in this study, it was found that there was no statistically significant difference between

Michigan vocational teachers with specialized training and those with no specialized training, as measured by the Barrett-Lennard Inventory, for the interpersonal relationship factor empathy. There was a significant difference between the interpersonal relationship factor congruence and the independent variable training. An analysis of the data in Table D1 (Appendix D) shows that the untrained teachers in handicapped programs who were employed in Cluster 4 (Health Occupations) scored higher (32.00) on the empathy scale while trained teachers in Cluster 5 (Distribution/Office and Business Occupations) scored lowest (0.00). The data also indicated that the trained teachers in disadvantaged programs who were employed in Cluster 1 (Agriculture/Natural Resources) scored higher (21.00) on the empathy scale while untrained teachers in Cluster 4 (Health Occupations) scored lowest (7.67). In addition, trained teachers in combination programs who were employed in Cluster 4 (Health Occupations) scored higher (20.58) on the empathy scale while untrained teachers in Cluster 3 (Clothing and Textile Services/Food Preparation and Services) scored lowest (9.83).

As indicated in Table D2 (Appendix D), the untrained teachers in handicapped programs who were employed in Cluster 3 (Clothing and Textile Services/Food Preparation and Services) scored higher* (40.50) on the congruence scale while trained teachers in Cluster 5 (Distribution/Office and Business Occupations) scored lowest (8.00).

---

*In a telephone conversation with Dr. Barrett-Lennard in April 1975, he indicated that a score of +20 is considered an above-average score on any of the four scales of the TPRI.

The trained teachers in disadvantaged programs who were employed in Cluster 1 (Agriculture/Natural Resources) scored significantly higher (30.50) on the congruence scale while untrained teachers in Cluster 4 (Health Occupations) scored lowest (15.67). Furthermore, trained teachers in combination programs who were employed in Cluster 5 (Distribution/Office and Business Occupations) scored higher (28.42) on the congruence scale while untrained teachers in Cluster 1 (Agriculture/Natural Resources) scored lowest (15.33).

The data in Table D3 show that the greatest variation in scores on the empathy scale was in the handicapped program, between trained teachers (17.68) and untrained teachers (0.00).

As shown in Table D4, the greatest variation in scores on the congruence scale was in the handicapped program, between trained teachers (20.51) and untrained teachers (0.00). The scores for the cluster factor were slightly higher in both empathy (16.81) and congruence (24.78) in Cluster 4 (Health Occupations).

Teachers in Cluster 5 (Distribution/Office and Business Occupations) scored lowest on the empathy scale (13.50) while teachers in Cluster 2 (Automotive and Power Services Construction/ Graphics and Communication Media Manufacturing) scored lowest on the congruence scale (22.93). See Table D5.

The information in Table D6 indicates that untrained teachers in handicapped programs scored slightly higher on the congruence scale (27.38) and the empathy scale (16.69) for the program and training factors. Furthermore, the data indicate that untrained teachers in disadvantaged programs scored lowest (12.67)

on the empathy scale while teachers in combination programs scored lowest (21.74) on the congruence scale.

As shown in Table D7, the teachers in handicapped programs who were employed in Cluster 4 (Health Occupations) scored higher on the empathy scale (25.33) and the congruence scale (38.33) than did teachers in the other clusters.

However, teachers in combination programs scored higher on the empathy scale (18.37) and the congruence scale (25.29) than did teachers in the disadvantaged programs.

The data in Table D8 show that the scores for the training and clusters factors were higher for trained teachers on the empathy scale (17.80) in Cluster 4 (Health Occupations) and on the congruence scale (27.50) in Cluster 1 (Agriculture/Natural Resources).

Trained teachers scored lowest on the empathy scale (13.54) and on the congruence scale (22.57) in Cluster 2 (Automotive and Power Services Construction/Graphics and Communication Media Manufacturing).

The data also indicate that untrained teachers in Cluster 4 (Health Occupations) scored higher on the empathy scale (15.56) and the congruence scale (23.75). Untrained teachers teaching in Cluster 5 (Distribution/Office and Business Occupations) scored lowest on the empathy scale (11.84) while untrained teachers in Cluster 1 (Agriculture/Natural Resources) scored lowest on the congruence scale (18.40) factors training and cluster.

According to Table D9, the mean scores for the program factor were higher in the handicapped program on the empathy scale (16.33) and the congruence scale (26.53).

The data also indicate teachers in disadvantaged programs scored lowest on the empathy scale (13.19) and teachers in combination programs scored lowest on the congruence scale (22.81) for the program factor.

The data in Table D10 show that trained teachers' mean scores for the training factor were higher than those of untrained teachers on both the empathy scale (15.00) and the congruence scale (24.46).

An analysis of correlations between the interpersonal relationship factors (empathy and congruence) and the normative data (age of teacher, formal educational level, and teaching experience) indicated a significant correlation between teaching experience and age, congruence and age, and teaching experience and formal educational level. See Table D11.

The correlation between age and teaching experience paralleled that reported in a study by Blackburn; he noted, ". . . New teachers and teachers with eleven years of teaching experience tended to score lower than teachers in the middle ranges of years of teaching."[1]

The analysis of the data also indicated there was significant interaction between the independent variables, program and cluster, and the dependent variables, empathy and congruence.

The data for this research were computed and a F ratio of 2.10 was obtained with 8 and 234 degrees of freedom for the

interaction of the independent variables program and cluster and the dependent variable empathy.

A F ratio of 1.74 was obtained with 8 and 234 degrees of freedom for the interaction of the independent variables program and cluster and the dependent variable congruence.

According to Glass and Stanley,[2] the critical value of F for 8 and 234 degrees of freedom at the .10 level of significance is 1.67. See Tables 4.7 and 4.8.

Summary

The hypotheses of this study were designed to determine whether or not there was a significant difference in interpersonal relationship factors between Michigan vocational teachers in special needs programs who have had specialized training and those who have not had such training. The study was also designed to discuss the relationship between normative data and the interpersonal relationship factors.

The standard for retaining or not retaining a hypothesis was the 0.10 level of confidence. The dependent variables (empathy and congruence) were measured by an adapted form of the Barrett-Lennard Teacher-Pupil Relationship Inventory: Teacher Form.

Based upon the data gathered in this study, it was found that there was no statistically significant difference between Michigan vocational teachers with specialized training and those with no specialized training, as measured by the Barrett-Lennard Inventory, for the interpersonal relationship factor empathy. There was

a significant difference between the interpersonal relationship factor congruence and the independent variable training. There also was a significant correlation between the interpersonal relationship factor congruence and the normative data age.

The data also indicated that untrained teachers employed in handicapped programs who were employed in Cluster 4 (Health Occupations) scored higher on the empathy scale than trained teachers. Untrained teachers in handicapped programs who were employed in Cluster 3 (Clothing and Textile Services/Food Preparation Services) scored higher on the congruence scale than trained teachers.

Trained teachers in handicapped programs who were employed in Cluster 5 (Distribution/Office and Business Occupations) scored lower on the empathy and congruence scales than other teachers.

Teachers in Cluster 4 (Health Occupations) scored higher on both the empathy and congruence scales.

An analysis of correlations showed a significant correlation between teaching experience and age and teaching experience and formal education level, as measured by the Barrett-Lennard Teacher-Pupil Relationship Inventory: Teacher Form.

Footnote--Chapter IV

[1]Guy J. Blackburn, "An Examination of the Efforts of Human Relations Training on the Attitudes of Certificated Inservice Teachers in Minnesota," Dissertation Abstracts International (Ann Arbor, Mich.: University Microfilms, 30/06-A, 1976), p. 3575-A.

[2]Gene V. Glass and Julian C. Stanley, Statistical Methods in Education and Psychology (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970), p. 523.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Included in this chapter is a brief review of the purposes, design, treatment, and the experimental hypotheses tested in the study. Conclusions based on the analysis of the data described in Chapter IV are stated. Also presented are recommendations for the field of vocational education, with emphasis on students with special needs, and suggestions for further research. These are drawn from review of literature and analysis of data described in Chapter IV.

The author's purposes in the study were (1) to determine whether specialized inservice teacher education for instructional personnel in vocational programs for students with special needs has had a positive effect on selected interpersonal relationship factors, and (2) to provide information and recommendations for decision makers and programmers in the field of vocational education for students with special needs, with emphasis on inservice teacher education at the secondary and post-secondary levels. The study was also designed to determine the relationship between the normative data and the interpersonal relationship factors.

The central hypothesis tested in this study was:

> Michigan vocational teachers who are teaching in special needs programs and who have completed specialized training will score significantly higher on an interpersonal relationship inventory than will vocational teachers in special needs programs who have had no specialized training.

There were twelve subhypotheses, two of which were retained.

An analysis of variance was employed to retain or not retain the hypotheses of this study. The Pearson product-moment correlation coefficient was used to measure the relationship between the dependent variables (congruence and empathy) and normative data (age of teacher, length of teaching experience, occupational cluster, and formal education level).

The independent variables of the study were program, cluster, and training.

Conclusions

Based on the results of the data gathered and analyzed in this study, the following conclusions were formulated:

1. Based on the researcher's findings in this study, it appears that specialized training made no significant impact on the dependent variable empathy.

2. Based on the researcher's findings in this study, it appears that specialized training was effective for the dependent variable congruence.

3. Vocational teachers employed in Health Occupations generally scored higher than other teachers on the empathy and congruence scales of the interpersonal relationship inventory.

4. Vocational teachers employed in handicapped programs generally scored higher than other teachers on the empathy and congruence scales of the interpersonal relationship inventory.

5. Vocational teachers who have not attained post-secondary formal educational levels are the best teachers for special needs programs.

6. Older teachers appear to be best for teaching in special needs programs as regards congruence.

7. Vocational teachers employed in Distribution/Office and Business Occupations scored lower than other teachers on the empathy scale of the interpersonal relationship inventory.

Recommendations

Based on the researcher's findings in this study and the related research, it appears that specialized training made no significant impact on the dependent variable, empathy. There was a significant difference between the interpersonal relationship factor congruence and the independent variable training. There also was a significant correlation between the interpersonal relationship factor congruence and the normative data age. Hence the following recommendations were formulated:

1. Decision makers and programmers in special needs programs should survey vocational teachers in handicapped programs to determine why they scored higher on the empathy and congruence scales. This should produce information useful for planning future inservice training programs.

2. Decision makers and programmers in special needs programs should survey vocational teachers employed in health occupations to determine why they scored higher on the empathy and congruence scales.

This should produce information useful for planning future inservice training programs.

3. Decision makers and programmers in special needs programs should recruit older teachers for their special needs programs.

4. Decision makers and programmers in special needs programs should recruit the teachers with less formal education levels for teaching in their special needs programs.

5. Decision makers and programmers should design their inservice workshops to emphasize changes in interpersonal relationship factors, since vocational teachers employed in distribution and office and business occupations scored lowest on the empathy scale.

The following recommendations are drawn from the review of literature:

6. Decision makers and programmers at the college and university levels should seriously consider the possibility of developing a curriculum that will lead to certification in vocational and special education.[1]

7. Decision makers and programmers at colleges and universities with preservice teacher education programs in vocational education should design their curricula to include community work and/or field experience for prospective teachers.[2]

8. Decision makers and programmers at colleges and universities with preservice teacher education programs in vocational education should design their curricula to include sensitivity

and/or human relations training for prospective teachers. This will serve to develop positive attitudes toward students with special needs.[3]

9. Decision makers and programmers at the university level should actively recruit prospective students for their vocational programs, which will prepare teachers for working with students who have special needs.[4]

10. Decision makers and programmers should improve the interpersonal relationship attributes of their special needs teachers through preservice and/or inservice training programs.

Recommendations for Future Research

This study was exploratory in nature; in it answers to many specific questions were sought. Beyond this, trends and implications were examined to find answers to questions generated and/or presented. The study was equally concerned with generating new questions. It is hoped the data presented in the study will lead other researchers to probe further and to seek additional information about problems related to education for vocational teachers of students with special needs. In this sense, this study is only an incipient effort; the investigation of other researchers into its findings is invited.

It is therefore suggested that future researchers investigate other dimensions and relationships of this phenomenon. The following are possible areas for further investigation:

1. Survey special needs students to determine the desired characteristics of special needs teachers.

2. Develop an instrument to measure the personality traits of special needs teachers and/or administrators.

3. Survey special needs administrators to determine what impact the federal guidelines have on local special needs programs.

4. Survey current preservice teacher education training programs for those who teach students with special needs, to determine the effectiveness of such programs.

5. Survey special needs administrators to determine the effect of specialized training (inservice and/or preservice) on selected interpersonal relationship factors.

6. Develop a checklist of desired characteristics for instructional and noninstructional personnel, to be used in selecting, promoting, and recruiting teachers and administrators in special needs programs.

7. Survey special needs teachers to determine if there are any background experiences and/or factors that seem to influence the success of special needs teachers such as religion, economic status, sex, and race.

Footnotes--Chapter V

[1]J. Russell Kruppa, Preparing Teachers of Industrial Education for Disadvantaged and Handicapped Children at the Secondary Level; Final Report (New Jersey: Department of Education, 1973), p. 2.

[2]Harry Huffman and Clyde W. Welter, Designs for the Preparation of Vocational and Technical Teachers of Socioeconomically Disadvantaged Youth--Final Report (Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1972), p. 8.

[3]Walter S. Lee, "A Study of the Effectiveness of Sensitivity Training in an Inservice Teacher-Training Program in Human Relations," Dissertation Abstracts International (Ann Arbor, Mich.: University Microfilms, 28/05-A, 1967), p. 1680-A.

[4]Henry E. Schmitt, Teacher Education for the Culturally Different; Appendix C of A Final Report (Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1973), p. 30.

APPENDICES

APPENDIX A

LETTERS

APPENDIX A

LETTERS

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF SECONDARY EDUCATION AND CURRICULUM
ERICKSON HALL

EAST LANSING · MICHIGAN · 48824

September 4, 1975

Dear Special Needs Administrator:

The problem of finding qualified teaching personnel for vocational programs for special needs has been rather difficult. Federal funds allocated under the 1968 Vocational Educational Amendments and Public Act 198 of 1971 have placed the State of Michigan in a unique position as far as the training of qualified personnel for special needs programs.

Under the direction of a Doctoral Committee, Drs. George Ferns, John Fuzak, Samuel Moore, and Alan Sliker, I am conducting a research study to determine the success of teacher training programs for students with special needs in the State of Michigan.

The purpose of this study is to determine whether specialized teacher training (inservice) for instructional personnel in vocational programs for special needs has had a positive effect on select interpersonal relationship factors.

You are listed as the Special Needs Administrator (contact person) in your school district. I would appreciate your cooperation in supplying the names and addresses (school) of vocational teachers of special needs students in your school district. A stamped, self-addressed envelope has been enclosed for your convenience. I realize that this imposes on your already busy schedule, but I feel that your personal cooperation is extremely important to the development of teacher training programs for students with special needs in the State of Michigan.

Your cooperation and tolerance are greatly appreciated. Please return by September 15, 1975.

Respectfully,

Alsce Johnson, Jr.
2945 Field
Detroit, Michigan 48214

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF SECONDARY EDUCATION AND CURRICULUM
ERICKSON HALL

EAST LANSING · MICHIGAN · 48824

October 15, 1975

Dear Special Needs Teacher:

The problem of finding qualified teaching personnel for vocational programs for special needs has been rather difficult. Federal funds allocated under the 1968 Vocational Educational Amendments and Public Act 198 of 1971 have placed the State of Michigan in a unique position as far as the training of qualified personnel for special needs programs.

Under the direction of a Doctoral Committee, Drs. George Ferns, John Fuzak, Samuel Moore, and Alan Sliker, I am conducting a research study to determine the success of teacher training programs for students with special needs in the State of Michigan.

The purpose of this study is to determine whether specialized teacher training (inservice) for instructional personnel in vocational programs for special needs has had a positive effect on select interpersonal relationship factors.

Attached is a questionnaire which will serve as the basic data-collecting instrument. I would appreciate your cooperation in completing and returning this form as soon as possible. A stamped, self-addressed envelope has been enclosed for your convenience. I realize that this imposes on your already busy schedule, but I feel that your personal cooperation is extremely important to the development of teacher training programs for students with special needs in the State of Michigan.

Your cooperation and tolerance are greatly appreciated. Please return by October 30, 1975.

Respectfully,

Alsce Johnson, Jr.
2945 Field
Detroit, Michigan 48214

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF SECONDARY EDUCATION AND CURRICULUM
ERICKSON HALL

EAST LANSING · MICHIGAN · 48824

December 1, 1975

Dear Special Needs Teacher:

A completed Teacher-Pupil Relationship Inventory, Teacher Form, has not been received from you. An additional form is attached to this letter for your use in case the previous form was misplaced.

I would appreciate your cooperation in completing and returning this as soon as possible. A stamped, self-addressed envelope has been enclosed for your convenience. I realize that this imposes on your already busy schedule, but I feel that your personal cooperation is extremely important to the development of teacher training programs for students with special needs in the State of Michigan.

Your cooperation and tolerance are greatly appreciated. Please return completed form by Monday, December 15, 1975.

Respectfully,

Alsce Johnson, Jr.
1933 Orleans #121
Detroit, Michigan 48207

APPENDIX B

TEACHER-PUPIL RELATIONSHIP INVENTORY: TEACHER FORM

AND AUTHORIZATION LETTER

APPENDIX B

University of Waterloo

Waterloo, Ontario, Canada
N2L 3G1

Faculty of Arts
Department of Human Relations
and Counselling Studies
519/885-1211

April 23, 1975.

Mr. Al Johnson,
330 Erikson,
College of Education,
Michigan State University,
East Lansing, Michigan,
U.S.A. 48823

Dear Mr. Johnson:

Thank you for your inquiry regarding the Relationship Inventory. I am enclosing principal R.I. forms, and related information at hand. If you have decided, or should decide, to make use of the R.I. --

1. It would be quite agreeable with me for you to reduplicate the relevant form(s) of the Inventory for your own research. In return, please would you send me a copy of any reports of your work, using the R.I.

2. Because the R.I. has passed through two revisions, appears in several forms in the current (1964) revision, and has been adapted by some investigators for special-purpose applications, it would be important to indicate clearly the specific form(s) that you used (e.g., Form OS-64), when you report your findings.

3. Should you consider adapting the R.I. in any substantive way (especially, any way that would affect item content or answer categories) please write to me about your plan or need. I may be able to provide relevant further information, comment or advice.

I do look forward to knowing in due course, the specific methods and results of your research, using the R.I. - including aspects that may add to knowledge of characteristics and uses of the instrument itself.

Sincerely yours,

G. T. Barrett-Lennard,
Professor.

gh
Encl.

Code: Date:

TEACHER-PUPIL RELATIONSHIP INVENTORY
TEACHER FORM

Below are listed a number of ways that one person may feel or behave in relation to another person.

Please consider each statement with reference to your relationship to your students.

Mark each statement in the left margin, according to how strongly you feel that it is true, or not true in this relationship. Please mark every statement. Write in +3, +2, +1, or -1, -2, -3, to stand for the following answers:

+3:	Yes, I feel strongly that it is true.	-1:	No, I feel that it is probably untrue, or more untrue than true.
+2:	Yes, I feel it is true.	-2:	No, I feel it is not true.
+1:	Yes, I feel that it is probably true, or more true than untrue.	-3:	No, I strongly feel that it is not true.

_____ 1 I respect them as persons.

_____ 2 I want to understand how they see things.

_____ 3 The interest I feel in them depends on what they say and do.

_____ 4 I feel at ease with them.

_____ 5 I really like them.

_____ 6 I can generally cope with their behavior but I don't really understand how they feel about things.

_____ 7 Whether they seem pleased or unhappy with themselves doesn't change the way I feel about them.

_____ 8 I'm inclined to play a role when I'm in front of them.

_____ 9 I feel impatient with them.

_____ 10 I nearly always know exactly what they're trying to tell me.

_____ 11 Depending on their actions I have a better opinion of them sometimes than I do at other times.

_____ 12 I feel that I'm real and genuine with them.

_____ 13 I appreciate them as persons.

_____ 14 I evaluate what they do from my own point of view.

_____ 15 The way I feel towards them doesn't depend on their feelings towards me.

_____ 16 It bothers me when they ask or talk about certain things.

_____ 17 Most days I generally feel indifferent towards them.

_____ 18 I usually sense how they feel about things.

_____ 19 I want them to develop along specific lines that I know will be best for them.

_____ 20 I feel that I can be sincere and direct with them.

_____ 21 On the whole, I do find the youngsters rather dull and uninteresting.

_____ 22 Sometimes they arouse feelings in me that prevent me from understanding them.

_____ 23 My feelings towards them are not affected by how they feel about me.

_____ 24 Sometimes I try to get them to think that I like and understand them, even when I don't really feel that way.

_____ 25 I really care for them.

_____ 26 Sometimes I think they feel a certain way because I happen to feel that way at that time.

_____ 27 I like them in some ways, while there are other things about them I do not like.

_____ 28 I don't feel that I have been postponing or putting off anything that might make for better classroom rapport.

_____ 29 Actually, I do disapprove of their behavior.

_____ 30 I understand what they're trying to say, even when they can't put their feelings into words.

_____ 31 My feelings towards them stay about the same: I'm not sympathetic with them one time and impatient with them another.

_____ 32 Sometimes I don't feel comfortable with them, but I go on outwardly ignoring it.

_____ 33 I put up with them.

_____ 34 I'm usually able to understand what's bothering them, even though they only give me scattered "verbal clues."

_____ 35 If they really act hostile towards me I get upset.

_____ 36 I'm generally able to be sincere and honest with them.

_____ 37 I feel friendly and warm towards them as a group.

_____ 38 I ignore some of their feelings.

_____ 39 My liking or disliking them isn't affected by what they reveal about themselves to me.

_____ 40 At times I'm not sure, or don't realize until later, what my feelings are about them.

_____ 41 I value the relationships I have with them.

_____ 42 I appreciate what they must be going through emotionally.

_____ 43 Sometimes I'm pleased with them and other times they disappoint me.

_____ 44 I feel comfortable telling them personal things about myself or about them.

_____ 45 I don't really like them as persons.

_____ 46 Sometimes I find I've misjudged how they really felt about certain things.

_____ 47 Whether they're feeling "high" or "low on certain days doesn't change how I really feel about them.

_____ 48 I feel I can be myself with them.

_____ 49 Somehow they irritate me.

_____ 50 At times I don't realize how sensitive they are about some of the things we discuss in class.

_____ 51 Whether their behavior and feelings are "good" or bad" doesn't basically alter how I feel about them.

_____ 52 At times my outward responses to them are quite different from the way I feel inside.

_____ 53 At times I feel contempt for them.

_____ 54 I understand them.

_____ 55 Sometimes they seem more "worthwhile" to me - as persons - than they do at other times.

_____ 56 I don't sense any feelings in relation to them that I'm reluctant to admit to myself.

_____ 57 I'm really interested in them.

_____ 58 Often I respond to them rather automatically, without sensing what they're experiencing.

_____ 59 I don't think that anything they could say or do would change the way I really feel about them.

_____ 60 What I say to them often gives a wrong impression of my actual feelings at the time.

_____ 61 I feel a deep sort of affection for these youngsters.

_____ 62 When they're hurt or deeply upset, I'm able to feel for them, without actually getting upset myself.

_____ 63 The way other teachers feel about them colors my own feelings towards them.

_____ 64 I feel that there are things that we don't get around to talking about in class that make my relationship with them strained.

Code:.....

RELATIONSHIP INVENTORY

SCORING SHEET

64 item forms

Form:.....

Date answered:

.....

Type of relationship (e.g. husband/wife). . . . . .

Respondent's position in relationship (e.g. husband). . . . .

	Level of Regard		Empathy		Unconditionality		Congruence	
	Positive items	Answer	Positive items	Answer	Positive items	Answer	Positive items	Answer
	1		2		7		4	
	5		10		15		12	
	13		18		23		20	
	25		30		31		28	
	37		34		39		36	
	41		42		47		44	
	57		54		51		48	
	61		62		59		56	
Sum: Sub-total #1								
	Negative items	Answer	Negative items	Answer	Negative items	Answer	Negative items	Answer
	9		6		3		8	
	17		14		11		16	
	21		22		19		24	
	29		26		27		32	
	33		38		35		40	
	45		46		43		52	
	49		50		55		60	
	53		58		63		64	
Sum (for neg. items)								
-1 x Sum: Sub-total #2								
Sub-total #1 + #2: Scale Score								

APPENDIX C

TEACHER-PUPIL RELATIONSHIP INVENTORY: TEACHER FORM,

ADAPTED FORM USED FOR THIS STUDY

APPENDIX C

Below are listed a number of ways that one person may feel or behave in relation to another person.

Please consider each statement with reference to your relationship to your students.

Mark each statement in the left margin, according to how strongly you feel that it is true, or not true in this relationship. Please mark every statement. Write in +3, +2, +1, or -1, -2, -3, to stand for the following answers:

+3: Yes, I feel strongly that it is true.

+2: Yes, I feel it is true.

+1: Yes, I feel that it is probably true, or more true than untrue.

-1: No, I feel that it is probabl untrue, or more untrue than t

-2: No, I feel it is not true.

-3: No, I strongly feel that it i not true.

____ 1 I want to understand how they see things.

____ 2 I feel at ease with them.

____ 3 I can generally cope with their behavior but I don't really understand how they feel about things.

____ 4 I'm inclined to play a role when I'm in front of them.

____ 5 I nearly always know exactly what they're trying to tell me.

____ 6 I feel that I'm real and genuine with them.

____ 7 I evaluate what they do from my own point of view.

____ 8 It bothers me when they ask or talk about certain things.

____ 9 I usually sense how they feel about things.

____ 10 I feel that I can be sincere and direct with them.

____ 11 Sometimes they arouse feelings in me that prevent me from understanding them.

____ 12 Sometimes I try to get them to think that I like and understand them, even when I don't really feel that way.

____ 13 Sometimes I think they feel a certain way because I happen to feel that way at that time.

____ 14 I don't feel that I have been postponing or putting off anything that might make for better classroom rapport.

____ 15 I understand what they're trying to say, even when they can't put their feelings into words.

____ 16 Sometimes I don't feel comfortable with them, but I go on outwardly ignoring it.

____ 17 I'm usually able to understand what's bothering them, even though they only give me scattered "verbal clues."

____ 18 I'm generally able to be sincere and honest with them.

____ 19 I ignore some of their feelings.

____ 20 At times I'm not sure, or don't realize until later, what my feelings are about them.

____ 21 I appreciate what they must be going through emotionally.

____ 22 I feel comfortable telling them personal things about myself or about them.

____ 23 Sometimes I find I've misjudged how they really felt about certain things.

____ 24 I feel I can be myself with them.

____ 25 At times I don't realize how sensitive they are about some of the things we discuss in class.

____ 26 At times my outward responses to them are quite different from the way I feel inside.

____ 27 I understand them.

____ 28 I don't sense any feelings in relation to them that I'm reluctant to admit to myself.

____ 29 Often I respond to them rather automatically, without sensing what they're experiencing.

____ 30 What I say to them often gives a wrong impression of my actual feelings at the time.

____ 31 When they're hurt or deeply upset, I'm able to feel <u>for</u> them, without actually getting upset myself.

____ 32 I feel that there are things that we don't get around to talking about in class that make my relationship with them strained.

Code:.....

RELATIONSHIP INVENTORY

SCORING SHEET

64 item forms

Form:.....

Date answered:

.....

Type of relationship (e.g. husband/wife). . . . . .

Respondent's position in relationship (e.g. husband). . . . .

	Level of Regard		Empathy		Unconditionality		Congruence	
	Positive items	Answer	Positive items	Answer	Positive items	Answer	Positive items	Answer
	1	3	2		7		4	
	5	3	10		15		12	
	13	3	18		23		20	
	25	1	30		31		28	
	37	3	34		39		36	
	41	2	42		47		44	
	57	3	54		51		48	
	61	-2	62		59		56	
Sum: Sub-total #1		15						
	Negative items	Answer	Negative items	Answer	Negative items	Answer	Negative items	Answer
	9	-3	6		3		8	
	17	-2	14		11		16	
	21	-3	22		19		24	
	29	-3	26		27		32	
	33	-3	38		35		40	
	45	1	46		43		52	
	49	-3	50		55		60	
	53	2	58		63		64	
Sum (for neg. items)		-14						
-1 x Sum: Sub-total #2		14						
Sub-total #1 + #2: Scale Score		29						

Please provide the following information about yourself.

1. Age:
   ____below 20
   ____20-29
   ____30-39
   ____40-49
   ____50-59
   ____60 or above

2. What occupational cluster do you teach?
   ____Agriculture/Natural Resources
   ____Automotive and Power Service
   ____Clothing and Textile Service
   ____Construction
   ____Distribution
   ____Graphics and Communication Med
   ____Health Occupations
   ____Food Prepartion and Service
   ____Manufacturing
   ____Office and Business Occupation

3. Number of years of teaching completed:
   ____1 or less
   ____2-3
   ____4-5
   ____6-9
   ____10 or more

4. Level of formal education completed:
   ____8th
   ____10
   ____12

   College
   ____1 year or less
   ____2 years or Associate Degree
   ____4 years or less
   ____Bachelor's Degree
   ____Master's Degree
   ____Advanced Degree

5. Specialized Inservice Instruction: eg. workshops, courses, etc.

TITLE	SPONSORING AGENT/CONTRACTOR	COORDINAT CONSULTA
____Instructional Strategies in Special Needs	Jackson ISD	Linda McFa
____Vocational Education/Special Education	Central Mich. U.	Cleo Johns
____Other(give brief description)		

Length of Workshop:
   ____1 day or less
   ____3 days or less
   ____5 days or less
   ____1 week
   ____2 weeks or more

APPENDIX D

OBSERVED CELL MEANS FOR VARIABLES, STANDARD DEVIATIONS, FACTORS, AND SUBJECT NUMBER

APPENDIX D

OBSERVED CELL MEANS FOR VARIABLES, STANDARD DEVIATIONS, FACTORS, AND SUBJECT NUMBER

Table D1.--Observed cell means for variable--empathy.

Program		Clusters					Row Means
		1	2	3	4	5	
Handicapped	Trained	15.00	15.55	21.50	22.00	0.00	14.81
	Untrained	12.00	15.14	25.00	32.00	8.50	18.53
Disadvantaged	Trained	21.00	14.64	11.50	10.83	14.00	14.39
	Untrained	12.00	12.42	15.00	7.67	13.89	12.20
Combination	Trained	13.80	12.47	15.07	20.58	18.50	16.08
	Untrained	17.00	15.05	9.83	16.17	11.25	13.86

Table D2.--Observed cell means for variable--congruence.

Program		Clusters					Row Means
		1	2	3	4	5	
Handicapped	Trained	23.00	25.64	25.50	38.00	8.00	24.03
	Untrained	30.00	23.00	40.50	39.00	22.50	31.00
Disadvantaged	Trained	30.50	24.27	24.75	20.50	26.30	25.26
	Untrained	16.00	21.42	22.50	15.67	24.42	20.00
Combination	Trained	27.20	20.94	24.60	26.08	28.42	25.49
	Untrained	15.33	24.05	18.50	24.50	18.15	20.11

Table D3.--Observed standard deviation for variable--empathy.

Program		Clusters				
		1	2	3	4	5
Handicapped	Trained	0.00	8.34	17.68	14.14	0.00
	Untrained	0.00	10.35	2.83	0.00	7.78
Disadvantaged	Trained	1.41	6.62	5.00	4.40	4.99
	Untrained	0.00	7.71	8.16	7.09	11.52
Combination	Trained	6.61	6.95	10.56	10.34	10.05
	Untrained	4.58	9.29	4.13	8.02	8.53

Table D4.--Observed standard deviation for variable--congruence.

Program		Clusters				
		1	2	3	4	5
Handicapped	Trained	0.00	10.57	20.51	2.83	0.00
	Untrained	0.00	9.33	0.71	0.00	3.54
Disadvantaged	Trained	10.61	6.12	9.57	4.64	11.08
	Untrained	0.00	9.66	9.95	1.15	9.11
Combination	Trained	11.99	8.57	12.65	7.05	9.83
	Untrained	14.29	10.84	5.25	8.01	9.39

Table D5.--Number of subjects and means for the factor--cluster.

Cluster	N	Empathy	Congruence
1	13	15.46	24.00
2	122	13.98	22.93
3	39	13.92	23.38
4	36	16.81	24.78
5	54	13.50	23.02
Total	264		

Table D6.--Number of subjects and means for the factors--program x training.

Program	Training	N	Empathy	Congruence
Handicapped	Trained	17	16.06	25.88
	Untrained	13	16.69	27.38
Disadvantaged	Trained	33	13.76	24.64
	Untrained	36	12.67	21.75
Combination	Trained	76	15.30	24.07
	Untrained	89	13.71	21.74
Total		264		

Table D7.--Number of subjects and means for the factors--program x cluster.

Program	Variables	Clusters					Row Means
		1	2	3	4	5	
Handicapped	Empathy	n=2 13.50	n=18 15.39	n=4 23.25	n=3 25.33	n=3 5.667	16.63
	Congruence	26.50	24.61	33.00	38.33	17.67	27.96
Disadvantaged	Empathy	n=3 18.00	n=30 13.23	n=8 13.25	n=9 9.78	n=19 13.95	13.64
	Congruence	25.67	22.47	23.62	18.89	25.58	23.25
Combination	Empathy	n=8 15.00	n=72 13.93	n=27 12.74	n=24 18.37	n=32 13.97	14.80
	Congruence	22.75	22.70	21.89	25.29	22.00	22.93

Table D8.--Number of subjects and means for the factors--training x cluster.

Training	Variables	Clusters					Row Means
		1	2	3	4	5	
Trained	Empathy	n=8 15.75	n=54 13.54	n=21 15.00	n=20 17.80	n=23 15.74	15.57
	Congruence	27.50	22.57	24.71	25.60	26.61	21.66
Untrained	Empathy	n=5 15.00	n=68 14.32	n=18 12.67	n=16 15.56	n=31 11.84	13.88
	Congruence	18.40	23.21	21.83	23.75	20.35	21.51

Table D9.--Number of subjects and means for the factor--program.

Program	N	Empathy	Congruence
Handicapped	30	16.33	26.53
Disadvantaged	69	13.19	23.13
Combination	165	14.44	22.81
Total	264		

Table D10.--Number of subjects and means for the factor--training.

Training	N	Empathy	Congruence
Untrained	138	13.72	22.28
Trained	126	15.00	24.46
Total	264		

Table D11.--Pearson product-moment correlations of vocational teachers' scores on the Teacher-Pupil Relationship Inventory and normative data.

	Age	Teaching Experience	Educational Levels	Empathy	Congruence
Age	1.000				
Teaching Experience	.510	1.000			
Educational Levels	-.015	.444	1.000		
Empathy	-.008	.043	.029	1.000	
Congruence	.177	.071	.011	.554	1.000

N = 264 r = 0.16038 at 0.10 level

BIBLIOGRAPHY

BIBLIOGRAPHY

Administrative Guide for Vocational-Technical Education. Lansing, Michigan: Michigan Department of Education, Vocational-Technical Education Service, 1974.

AMIDS In-Service Training Workshop for Vocational Educators of Disadvantaged and Handicapped Students: How to Plan-Conduct-Evaluate. Montgomery, Alabama: Link Enterprises, Inc., 1973.

AMIDS In-Service Training Workshop for Vocational Educators of Disadvantaged and Handicapped Students: Supplementary Materials--Part B. Montgomery, Alabama: Link Enterprises, Inc., n.d.

Barrett-Lennard, G. T. Resource Bibliography of Reported Studies Using the Relationship Inventory. Waterloo, Ontario, Canada: University of Waterloo, 1972.

_____. Technical Note on the 64-Item Revision of the Relationship Inventory. Waterloo, Ontario, Canada: University of Waterloo, 1969.

Baxter, Jan. Development and Implementation of Secondary Special Education Programs. Lake Odessa, Michigan: E.B.I. Breakthru, Inc., 1975.

Best, John W. Research in Education. Englewood Cliffs, N.J.: Prentice-Hall, 1956.

Bishop, Frank A. "A Study of Selected Student-Perceived Teacher Interpersonal Characteristics With Reference to Teacher Demographic Characteristics and the Academic Progress of Low Achieving Secondary Students." Dissertation Abstracts International. Ann Arbor, Michigan: University Microfilms, 33/03-A, 1972.

Blackburn, Guy J. "An Examination of the Efforts of Human Relations Training on the Attitudes of Certificated Inservice Teachers in Minnesota." Dissertation Abstracts International. Ann Arbor, Mich.: University Microfilms, 36/06-A, 1976.

Dawson, James I. "Inservice Re-training of Vocational Education Personnel to Amplify and Enhance Their Role in Working With Disadvantaged and Handicapped Learners." Huntsville, Alabama: Alabama Agricultural and Mechanical University, 1971.

Dayton, C. Mitchell. The Design of Educational Experiments. New York: McGraw-Hill Book Company, 1970.

Dixon, W. Robert, and Morse, William C. "The Prediction of Teaching Performance: Empathic Potential." Journal of Teacher Education 12 (Spetember 1961).

Educational Policies Commission of the NEA and the American Association of School Administrators. "The Education of Teachers of the Disadvantaged." NEA Journal 54 (September 1965).

Evaluation Report--Michigan Vocational Education Special Needs Programs, 1973-74. Lansing: Michigan Department of Education, 1974.

Feck, Vincent. What Vocational Education Teachers and Counselors Should Know About Urban Disadvantaged Youth. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1971.

Ferguson, Edward T., and Bice, Garry R., eds. Proceedings of the Annual National Vocational-Teacher Education Seminar: Teaching Disadvantaged Youth, Miami Beach, Florida, October 20-23, 1959. Final Report, June 1969. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1969.

Fischle, Mildred J. "A Study of Attitudes and Behavior Change of Teachers Attending an NEDA Institute for Teachers of Disadvantaged Children." Dissertation Abstracts International Ann Arbor, Michigan: University Microfilms, 28/10-A, 1968.

Gillie, Angelo C. "Needed: A New Program of General Education for Ghetto Youth." American Vocational Journal 42 (November 1967).

Glass, Gene V., and Stanley, Julian C. Statistical Methods in Education and Psychology. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970.

Good, Carter V., ed. Dictionary of Education. 3rd ed. New York: McGraw-Hill Book Co., 1973.

_____. Essentials of Educational Research. New York: Appleton-Century-Crofts, 1966.

Gove, Phillip B., ed. Webster's Third New International Dictionary. Springfield, Mass.: G. & C. Merriam Co., 1966.

Guidelines for Special Education Programs and Services. Lansing: Michigan Department of Education, 1974.

Guidelines for Vocational Education Programs for Persons With Special Needs for FY 1975-76. Lansing: Disadvantaged and Handicapped Programs Unit, Vocational-Technical Education Services, Michigan Department of Education, 1974.

Hagadone, Theodore E. "A Study of Teacher Personal and Professional Attitudes as They Relate to Student Self-Concepts and Attitudes Toward School in the Six Highest Achieving Schools in Flint, Michigan." Ph.D. dissertation, Michigan State University, 1967.

Hensel, James W., and Bice, Garry R. Proceedings of the Annual National Vocational-Technical Education Seminar. Chicago, October 21-24, 1968. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1969.

Hicks, Charles J. "The Effects of Short-Term Group Counseling on the Interpersonal Behaviors of Urban Teacher Education Students." Dissertation Abstracts International. Ann Arbor, Michigan: University Microfilms, 32/07-A, 1972.

Hill, Russell A. "The Professional Adjustment of Teachers in Philadelphia Secondary Schools Serving Underprivileged Children as Reported by Selected Respondents." Ph.D. dissertation, Temple University, 1963.

Huff, Marie Davis. "When Youth Have Special Needs for Living, Learning, Earning." American Vocational Journal 42 (November 1967).

Huffman, Harry, and Welter, Clyde W. Designs for the Preparation of Vocational and Technical Teachers of Socioeconomically Disadvantaged Youth--Final Report. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1972.

James, Mary E. "The Effects of Interpersonal Relations Training on Prospective Teachers." Dissertation Abstracts International. Ann Arbor, Michigan: University Microfilms, 32/02-A, 1971.

Kemp, Barbara H. "Where Vocational Education Is a Special Need." American Vocational Journal 42 (November 1967).

_____. The Youth We Haven't Served. Catalog Number FS 5.280;80038. Washington, D.C.: Government Printing Office, 1966.

Kruppa, J. Russell. Preparing Teachers of Industrial Education for Disadvantaged and Handicapped Children at the Secondary Level; Final Report. New Jersey: Department of Education, 1973.

Lee, Walter S. "A Study of the Effectiveness of Sensitivity Training in an Inservice Teacher-Training Program in Human Relations." Dissertation Abstracts International. Ann Arbor, Michigan: University Microfilms, 28/05-A, 1967.

Malhotra, Sudha. Interpersonal Relationship--Educational Studies No. 1. Allahabd, India: United Publishers, 1969.

Parent Handbook. Royal Oak, Michigan: Michigan Association for Children With Learning Disabilities, 1974.

Public and Local Acts of the Legislature of the State of Michigan. Lansing: Legislative Service Bureau, 1971.

Scales, Douglas E. "Significant Factors in Teachers' Classroom Attitudes." Journal of Teacher Education 7 (1956).

Scheuer, Arnold L. "The Relationship Between Personal Attributes and Effectiveness in Teachers of the Emotionally Disturbed." Exceptional Children (Summer 1971).

Schmitt, Henry E. Teacher Education for the Culturally Different; Appendix C of A Final Report. Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1973.

Sciara, Frank J. "Guidelines for a Pre-Service Teacher Education Program by Elementary Teachers of the Disadvantaged." Dissertation Abstracts International. Ann Arbor, Michigan: University Microfilms, 28/09-A, 1968.

Soloway, Michael M. "The Development and Evaluation of a Special Education In-Service Training Program for Regular Classroom Teachers." Dissertation Abstracts International. Ann Arbor, Michigan: University Microfilms, 36/07-A, 1976.

Tiedt, Sidney, ed. Teaching the Disadvantaged Child. New York: Oxford University Press, 1968.

Tuckman, Bruce W., and O'Brian, John, eds. Preparing to Teach the Disadvantaged. New York: The Free Press, 1969.

Van Dalen, Deobold. Understanding Educational Research. New York: McGraw-Hill, 1966.

Vocational Education Amendments of 1974. 93d Congress. Washington, D.C.: Government Printing Office, 1975.

Vocational Education/Special Education Project. Mt. Pleasant, Michigan: Central Michigan University, 1975.

Wampler, David R. "A Study of First Year Teachers in Disadvantaged Schools to Determine the Relationship of Pre-service Preparation Experiences to Present Attitudes and Effectiveness." Dissertation Abstracts International. Ann Arbor, Michigan: University Microfilms, 33/07-A, 1973.

Wilder, Mary R. "An Evaluation of the Pre-service and In-service Academic Preparation in English for Teachers of Disadvantaged Students in Selected Colleges in the State of Georgia." Dissertation Abstracts International. Ann Arbor, Michigan: University Microfilms, 31/09-A, 1971.

Wilson, Judith A. "An In-service Training Package for Teachers of Children With Learning Disabilities." Dissertation Abstracts International. Ann Arbor, Michigan: University Microfilms, 36/07-A, 1976.

Young, Dorothy M. W. "The Effectiveness of an In-service Education Program for Regular Classroom Primary Teachers Regarding the Recognition and Accommodation of Children With Learning Problems." Dissertation Abstracts International. Ann Arbor, Michigan: University Microfilms, 34/06-A, 1973.

Zdunich, Louise J. "A Relationship of Selected Personality Variables of Secondary School Student Teachers Enrolled in a Specialized Training Program and Their Experienced Attitudes Toward the Disadvantaged." Dissertation Abstracts International. Ann Arbor, Michigan: University Microfilms, 33/07-A, 1973.