THE DEVELOPMENT OF TEACHING COMPETENCIES: A STUDY OF TEACHERS OF THE MENTALLY IMPAIRED

Dissertation for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
THOMAS BRIAN HOEKSEMA
1975

LIBRARY
Michigan State
University

This is to certify that the

thesis entitled

THE DEVELOPMENT OF TEACHING COMPETENCIES:
A STUDY OF TEACHERS OF THE MENTALLY IMPAIRED

presented by

THOMAS BRIAN HOEKSEMA

has been accepted towards fulfillment
of the requirements for

PH.D. degree in SPECIAL EDUCATION

Donald Burke
Major professor

Date July 25, 1975

O-7639

BINDING BY
HOAG & SONS
BOOK BINDERY INC.
LIBRARY BINDERS
SPRINGPORT, MICHIGAN

OVERDUE FINES:
25¢ per day per item

RETURNING LIBRARY MATERIALS:
Place in book return to remove charge from circulation records

3 1293 10020 1957

778 A141

ABSTRACT

THE DEVELOPMENT OF TEACHING COMPETENCIES:
A STUDY OF TEACHERS OF
THE MENTALLY RETARDED

By

Thomas Brian Hoeksema

This research was a survey of teachers of the mentally impaired who were graduates of Michigan State University. The study determined the specific teaching competencies which were perceived to be important for teachers of the mentally impaired and identified the needs of teachers in respect to the continued development of skill in specific teaching competencies. Further, this study identified the perceptions of teachers concerning the role of various preparation settings in the development of teaching competency, determined teachers' perceptions of appropriate emphases for undergraduate teacher preparation programs, and obtained suggestions for the improvement of undergraduate teacher education.

The subjects for this study were drawn from the entire population of teachers who graduated from the teacher preparation program in mental retardation at Michigan State University from Fall Term, 1971 through Spring Term, 1974. All respondents were required to have earned approval as part of a regular, undergraduate degree program and to have had actual teaching experience with mentally impaired

children since graduation. A total of 83.2 percent of the teachers who met the above criteria returned the mailed questionnaire.

The sixty-three competency statements included in the questionnaire were ranked according to their average degree of importance using mean scores. The Chi-Square Test of Homogeneity was used to determine the significance of differences between educable and trainable teachers and between experienced and inexperienced teachers on their importance ratings of thirty-four of the competency statements. Similarly, mean scores were used to rank the sixty-three competency statements according to their degree of priority for self development. Chi-Square tests again were used to determine the significance of differences between teachers categorized according to the independent variables Type of Program and Years of Experience on sixty-one of the competency statements. The Friedman Two-Way Analysis of Variance was used to determine if there were differences in the role of various preparation settings in the development of teaching competencies as perceived by experienced teachers. Post hoc procedures, setting up orthogonal contrasts, were used to determine where significant differences occurred. The perceptions of teachers concerning the amount of emphasis each of the seven major competency areas should receive during an undergraduate program were studied using Kendall's Coefficient of Concordance and Spearman's Rank Correlation Coefficient. Respondents also listed areas in which they felt teachers of the mentally impaired needed to improve; and they suggested changes in undergraduate teacher education. Those open-ended responses were described using content analysis procedures.

Major Findings

1. The five competencies perceived as being most important for teachers of the mentally impaired were:

   a) Promoting children's independence;
   b) Individualizing instruction;
   c) Helping children accept themselves;
   d) Handling unacceptable behavior;
   e) Making learning tasks clear to children.

2. The five competencies perceived to be least important for teachers of the mentally impaired were:

   a) Conducting large group learning activities;
   b) Operating audio-visual equipment;
   c) Writing behaviorally stated objectives;
   d) Preparing written lesson plans;
   e) Administering commercially prepared tests.

3. Two competencies were rated as being more important by teachers of the trainable than by teachers of the educable:

   a) Working with teacher aides;
   b) Conducting large group learning activities.

4. Three competencies were rated as being more important by educable teachers than by trainable teachers:

   a) Consulting with regular classroom teachers;
   b) Interpreting data from formal tests administered by a diagnostician in developing educational plans for children;
   c) Administering commercially prepared tests.

5. Only one competency was perceived to be more important by experienced than by inexperienced teachers:

   Consulting with regular classroom teachers.

6. The five competencies rated highest in terms of self development priorities were:

   a) Originating new materials;
   b) Implementing instructional activities which promote the awareness and expression of personal values, attitudes, and feelings;

c) Helping students become aware of the values, attitudes, and feelings of others;
d) Helping parents to deal with their children at home;
e) Using a multi-sensory approach for children with sensory deficits.

7. The five competencies rate lowest in terms of self development priorities were:

a) Asking for help or ideas from other staff;
b) Operating audio-visual equipment;
c) Following administrative directives;
d) Getting to know other teachers;
e) Preparing written lesson plans.

8. Teachers of trainable children had higher self development priorities than educable teachers on two of the teaching competencies:

a) Choosing instructional methods for specific lessons;
b) Seeking help for students from agencies outside the school.

9. Inexperienced teachers rated nine competencies higher in terms of self development priorities than did experienced teachers:

a) Using a variety of methods for motivating students;
b) Using the results of teacher-administered test to develop educational plans for children;
c) Arranging the physical props in the classroom to facilitate learning;
e) Knowing the principal's expectations;
f) Handling administrators' observations of your teaching;
g) Asking for help or ideas from other staff;
h) Following administrative directives;
i) Getting to know other teachers.

10. Experienced teachers indicated that a major portion of the development of competence in the seven competency areas could realistically occur through on-the-job experience. The undergraduate teacher education program was perceived to be the setting where the second largest amount of competency development could occur. Both inservice training and graduate level programs were perceived to be less important to the development of teaching competency.

11. There was a high correlation in rankings by educable, trainable, experienced, and inexperienced teachers of the seven major competency areas according to the degree of emphasis they should receive during undergraduate teacher education. The rankings below, based upon mean rankings of all the respondents, are listed in order from "most" to "least" emphasis:

    Planning Instruction
    Classroom Management
    Assessing and Evaluating Behavior
    Conducting Instruction
    Facilitating Social-Emotional Maturity
    Working With Parents
    Dealing and Relating With Other Professionals

12. Respondents indicated that the major emphasis of undergraduate teacher education should be on developing competence in instructional roles rather than in working well with parents or in working with other professionals.

13. The major competency area, Working With Parents, was rated "high" in importance and in priority by the respondents in this study. The respondents indicated, however, that this area should not be a major emphasis at the undergraduate level of preparation. In addition, they indicated that a major portion of the development of competence in this area could occur primarily through on-the-job experience and through inservice training.

14. The most frequent response to the first open-ended question was that teachers of the mentally impaired needed to become more competent in assessing and evaluating student behavior. Competence in classroom management was the second most frequently mentioned teacher need.

15. Teachers of the mentally impaired suggested several changes in undergraduate teacher education:

a) More emphasis should be placed on methods of teaching the mentally impaired;
b) More emphasis should be directed to meeting the affective needs of children;
c) Less emphasis should be placed on theory, lesson planning, and behavioral objectives;
d) More field experience, exposing students to mentally impaired persons in different age and ability groups in diverse kinds of settings, should be built into teacher education programs.

THE DEVELOPMENT OF TEACHING COMPETENCIES: A STUDY OF TEACHERS OF THE MENTALLY IMPAIRED

By

Thomas Brian Hoeksema

A DISSERTATION

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

DOCTOR OF PHILOSOPHY

Department of Elementary and Special Education

1975

ACKNOWLEDGMENTS

Many individuals have assisted me in the completion of this dissertation. Some have contributed in a conceptual sense, others have offered advice concerning the design of the study, and many have provided consistent support when humane concern was most needed.

I wish to express gratitude to Dr. Donald Burke, a good friend and major advisor, for assisting me in all of the ways mentioned above. He cared when I was discouraged, shared my excitement as progress was made, gave helpful advice on many occasions, and provided enough positive reinforcement to enable me to complete this project.

I would also like to thank the other members of my guidance committee. Dr. Edwin Keller was a source of valuable advice concerning both the design of this study and the statistical analysis of the data. Dr. Donald Melcer and Dr. Charles Blackman made qualitative contributions through comments and suggestions in response to the initial research proposal and through their counsel during later phases of the study.

I am also indebted to Mr. Steve Olejnik of the Office of Research Consultation for his patient and non-condescending counsel in selecting and conducting the statistical procedures used in this research. Mr. William Frey also provided much help during the data analysis phase of this study. The use of the Computer Center at

Michigan State University was made possible, in part, through funds provided by the National Science Foundation.

I would like to express my appreciation to Dr. Charles Mange, Chairman of the Department of Special Education, Michigan State University, for his encouragement and financial support. He not only provided the job which put bread on my table but also ferreted out enough discretionary funds to cover mailing and printing costs for the survey questionnaire.

Finally, and certainly not perfunctorily, I express gratitude to Mary, my wife, and to my son, Tommy. Mary helped in many practical ways such as keypunching, collating, typing, and editing; but even more importantly, she provided help in ways which only a wife can know. I thank Tommy for the many days on which he relieved my tension with his laughter, hugs, and joyful responses to life. He often reminded me to put my dissertation into my life, rather than the other way around.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

A criticism frequently voiced by teachers, administrators, and teacher educators in special education is that teacher preparation programs have not been evaluated adequately. It is apparent that the process of program evaluation is complex, necessitating the collection and analysis of many different types of data from many different sources. The evaluation models of Stake (1967) and Stufflebeam (1968) focus attention on input, process, and product variables which should be considered in any comprehensive evaluation effort.

The present study, as only one aspect of program evaluation, obtained the perceptions of graduates who have tested the efficacy of their preparation pragmatically in the field. Specifically, it determined which competencies were perceived to be important for teachers of the mentally impaired and which competencies were perceived to be in need of continued development. A visible and vital relationship between the needs of teachers and an institution's teacher education program was judged to be imperative for considering that program adequate.

This research represents a survey of teachers who had completed their undergraduate preparation program in mental retardation at Michigan State University. It was intended to provide data which

would be useful in reviewing the content of that program as well as the content of programs at other universities.

Purpose of the Study

This study was exploratory and descriptive in nature. It was designed to survey individuals who had completed their undergraduate teacher education programs in order to identify: 1) specific teaching competencies which were perceived to be important for teachers of the mentally impaired, and 2) the needs of teachers of the mentally impaired in respect to the continued development of their skill in specific teaching competencies. This study investigated differences among teachers of the mentally impaired who were categorized on the basis of the type of program in which they taught and on the basis of the number of years of teaching experience. Those variables were examined in relation to both the perceived importance of selected teaching competencies and to perceived personal priorities for the continued development of specific competencies.

An additional purpose of this study was to arrive at an estimation of the relative amount of competency which could be developed in various preparation settings. It is important to note that in this study it was not assumed that teachers should be totally prepared (past tense) at the time of graduation from their undergraduate programs. Recognition was given to the fact that the development of teaching competence is a continuing process which extends into the actual employment period. It was assumed, however, that teacher preparation experiences should be selected and ordered at least partially

on the basis of systematically surveyed teacher concerns and the priorities for competency development indicated by the teacher population served.

The following objectives further clarify the purposes of the study:

1. to identify the perceptions of teachers of the mentally impaired concerning the importance or value of selected teaching competencies;

2. to compare the perceptions of teachers of the mentally impaired, categorized by the type of program in which they are teaching, concerning the importance or value of selected teaching competencies;

3. to compare the perceptions of teachers of the mentally impaired, categorized by years of teaching experience, concerning the importance or value of selected teaching competencies;

4. to determine which competencies teachers of the mentally impaired wish to develop beyond their present level of skill (Self Development Priorities);

5. to compare the perceptions of teachers of the mentally impaired, categorized by the type of program in which they are teaching, concerning their self development priorities;

6. to compare the perceptions of teachers of the mentally impaired, categorized by years of teaching experience, concerning their self development priorities;

7. to determine graduates' perceptions concerning the role of various preparation settings in the development of competency in each of the seven major competency areas;

8. to determine the perceptions of graduates concerning the degree of emphasis each of the seven major competency areas should receive during an undergraduate program;

9. to obtain the suggestions of program graduates concerning possible changes in undergraduate teacher education.

Rationale and Justification for the Study

The processes employed in making decisions about the preservice or undergraduate curriculum for teachers of the mentally impaired often do not include careful attention to the collection and analysis of evaluative information. Some institutions unilaterally assess strengths and weaknesses in their programs and make decisions accordingly. Others provide program components and training experiences on the basis of accessibility of resources or the particular expertise of existing faculty. Still others consider feedback from teachers who have been involved in providing field experiences for future teachers. However, there has been little systematic effort to obtain the perceptions of people who have gone through programs as one important type of input bearing directly on curricular and methodological decisions (Haring and Fargo, 1969).

The Professional Standards and Guidelines Project sponsored by the Council for Exceptional Children has recently published Guidelines for Personnel in the Education of Exceptional Children (December, 1974). These guidelines, which are intended to be useful in such activities as self-study, the planning of teacher preparation programs, accreditation, and other kinds of developmental work, are oriented toward processes by which preparation centers might make decisions about curriculum and instruction in preparation programs. A heavy emphasis on systematic and regular input by the consumers of teacher preparation programs is reflected in Guideline 2.6.1:

> Preparation programs for special education personnel should be evaluated systematically and continuously. Such evaluation should involve representatives of all constituencies affected by the preparation programs, including students in the programs (p.44).

Guideline 2.6.1 clearly recommends that:

> . . . representatives of all persons affected by preparation programs should be involved in planning the preparation . . . . It is assumed . . . that trainees always will be involved (p. 44).

Institutional follow-up study is supported further by the need to justify the objectives of preparation programs, i.e. the intended outcomes, behaviors, skills, and competencies expected of program graduates. Addressing itself to this concern, Guideline 2.4.2 states:

> Preparation centers should justify program goals, objectives, and instructional procedures and systematically modify them on the basis of accumulating information (p. 34).

The rationale for this guideline continues:

> The validation of objectives is partly a research problem, but sometimes no more than consensus by leading practitioners will be possible. In some measure, each trainee demonstrates the validity of the program . . . . Thus follow-up data are also relevant to the justification process (p. 34).

Although it is logical that feedback from students and former students is important to consider in program planning, it is not true that all types of feedback are equally valuable. Many studies of a follow-up nature ask respondents to make retrospective judgments concerning the degree to which they were prepared at the end of their programs (Foos, 1972; Bourne, 1972). The assumption is that teacher education programs are designed to prepare finished products. This, as Briscoe (1972) notes, is not their intention. A teacher preparation program cannot be expected to develop total competence in all areas by the time of graduation. "The very nature of teaching and teacher education makes this impossible, for the effective teacher is himself a continuing

learner" (Briscoe, 1972, p. 1). Therefore, studies which ask graduates how well they were prepared reinforce unrealistic expectations for teacher education programs and yield data which is of limited value.

The perspective of the present study differs in that it does not allow respondents to make comments about their preparation programs directly. Rather, respondents are asked to indicate which teaching competencies are important in their jobs as teachers of the mentally impaired and also to indicate those competencies which are in need of continued development at this particular point in their professional career. The salient difference of this perspective is its recognition of the fact that competence in the tasks of teaching develops over a long period of time as a result of both formal preparation and experience. It is up to the investigator to draw inferences from the data and to determine the ramifications for preparation programs.

A major value of the present study is that it seeks to determind what practicing teachers are concerned about. Learning theorists and educational psychologists have conceded the influence of motivation on learning for so long that it hardly needs documentation. Fuller (1969) suggests that frequent criticisms about education courses being simplistic and irrelevant are due to the failure of teacher educators to recognize the basic role that motivation plays in learning.

> Like other students, they [education majors] learn what they want to learn but have difficulty learning what does not interest them. Education courses may be answering quite well questions students are not asking (p. 208).

In other words, one possible reason for dissatisfaction with teacher education courses is a discrepancy between what students feel they need and what they actually get in their undergraduate programs. Perhaps education majors are not able to benefit from education courses as they are now taught. This study determined the concerns of teachers of the mentally impaired in order to draw inferences about what they might be ready to learn as undergraduates. Are typical undergraduates unready to benefit from "conventional" teacher preparation programs? What are the concerns and needs of inexperienced teachers? Are there regular interests of beginning teachers which might guide teacher educators in planning the curriculum for teacher preparation programs? What are the needs of more experienced teachers and what are the implications for in-service planning and graduate level programs?

There are additional reasons which justify conducting the present research. One of these is reflected in Guideline 2.4.3 of the Professional Standards and Guidelines Project (1974):

> In order to demonstrate a model of instruction, preparation programs for special education personnel should provide . . . methods of instruction which are systematically evaluated (p. 35).

A spirit of inquiry concerning instruction is a highly desirable characteristic for both teacher educators and their students. This spirit is communicated to future teachers when their preparation program is subject to continuing evaluation and modification. The present research contributes to that ideal.

A final facet of the rationale underlying this study relates to recent discussion of the need to revise teacher approval practices in special education. Graduates of colleges of education within the

State of Michigan presently are certified by the State Department of Education to teach at the elementary and/or secondary level. Approval to teach children who have a particular disability or handicap may also be granted upon completion of an academic major in a specific disability area. This approval is an additional endorsement to the general education certificate which is prerequisite to approval in an area of special education. A major difference is that approval in special education is a "blanket" endorsement to teach children in grades kindergarten through twelve. No further distinctions are made on the basis of elementary or secondary grade level.

Graduates of teacher education programs in mental retardation are employed to teach children with varying degrees of mental impairment in a variety of educational settings and at both elementary and secondary levels. Employment settings include programs for the severely mentally impaired; programs for the trainable mentally impaired at the elementary, secondary, pre-vocational, and vocational levels; and elementary, secondary, and work-study or vocational programs for the educable mentally impaired.

This diversity in educational programs for the mentally impaired has been increased by the passage of mandatory special education legislation (Public Act 198-1971) in Michigan. Mandatory educational programs for handicapped persons from birth through age twenty-five include new programs for the under five and over eighteen age groups as well as programs for the severely mentally and multiply impaired. This multifaceted employment marketplace has ramifications for teacher education programs and for state certification and approval practices.

What type of preparation will be helpful to the persons to be employed in these varied programs? Do existing teacher education institutions graduate persons with sufficient skill to be effective in all of these roles? Do current certification and approval practices ensure that only persons with the needed competencies are employed in each type of program?

The preparation program in mental retardation at Michigan State University makes no differentiation in its requirements for undergraduates and does not individualize the development of competencies based on future job preferences or aptitudes. The State of Michigan makes no differentiation in its approval process for teachers of the mentally impaired which would recognize specific competencies with specific subgroups of the retarded population. It is not known whether different competencies actually are needed in different teaching situations with the mentally impaired or if graduates are competent to teach equally well in all of the situations in which they are being employed. Some graduates in some job settings may find it necessary to learn skills after graduation which could have been part of their undergraduate preparation programs. Data from this study can be applied directly to the decision-making process regarding modification in the content and structure of preparation programs in mental retardation and to deliberations concerning revision in teacher certification and approval practices in Michigan. It is with these intentions that this survey was designed.

In summary, the preceding discussion delineates several important implications of this study:

1. For Teacher Educators in Mental Retardation:

   With knowledge of the degree of importance which teachers of the mentally impaired assign to specific teaching competencies and with knowledge of those teachers' personal, self-development needs, university faculty in mental retardation will be enabled to assess the needs of their preparation program, leading to changes in the content and process of programs for preparing prospective teachers of the mentally impaired. The data also should serve as a guide in the development of in-service experiences which are designed to continue the development of teaching competencies which could only be begun during the undergraduate program or which only become apparent after actual teaching experience.

2. For the Michigan Department of Education:

   This research should provide relevant information to the Michigan Department of Education, assisting them in the improvement of pre-service and in-service experiences for teachers of the mentally impaired on a statewide basis. The data obtained also may provice compelling reasons for revising present approval practices in the area of mental retardation.

3. For Students in Mental Retardation:

   An instructional system which includes a proper emphasis on evaluation and developmental activities

provides a model for students which encourages them to imitate that behavior in the design and implementation of their own instruction.

4. For Teachers of the Mentally Impaired:
   This study should provide information to teachers of the mentally impaired, enabling them to critically assess their roles in the schools. By pointing out the relative importance of teacher competencies as perceived by the respondents, this study should help teachers analyze their own behavior in the light of identified priorities and stimulate continued development of competence beyond initial undergraduate preparation.

The present research is seen as a first step in the iterative process of reviewing and developing teacher education programs in mental retardation. This process can be broken down into the following steps:

1. First, teachers of the mentally impaired should be surveyed to determine their perceptions of important competencies required in the performance of their jobs. At the same time, those teachers should be asked to appraise their personal needs in specific competency areas and to indicate personal priorities in terms of the continued development of those competencies. Perceptions related to the timing of the development of competencies should also be solicited.

2. Second, competencies which are perceived to be important for teachers of the mentally impaired should be validated through actual observation in educational settings to determine if they are, in fact, needed and used in teaching retarded persons.
3. Third, it should be determined whether the behavior of pupils is changed as a result of the application of the competencies identified above.
4. Fourth, undergraduate preparation programs should be modified, if necessary, to include opportunities for the development of validated competencies, and continuously monitored as to its success in developing competencies to the extent that students are sufficiently ready to enter the professions.

The comprehensive and on-going nature of the above process precludes its completion by a single investigator. By identifying the perceptions of graduates of the program in mental retardation at Michigan State University, it is hoped that a solid beginning will have been made in isolating important competencies for teachers of the mentally impaired and in determining proper emphases for undergraduate programs in beginning the development of competencies.

Overview of the Study

The remainder of this thesis is organized in the following manner:

In Chapter II relevant literature is reviewed.

In Chapter III the methodology of this research is presented. The questionnaire, "A Survey of Teachers of the Mentally Impaired," is described; and data collection and analysis procedures are presented.

The results of the statistical analysis of the data obtained are reported in Chapter IV.

Chapter V contains a summary of the findings, the conclusions reached, the limitations of the study, and recommendations for further research.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

In this review of the literature major efforts toward the identification of teaching competencies will be summarized, and studies of the professional needs of experienced and inexperienced teachers will be examined. The first section discusses procedures which have been used or recommended for use in identifying teacher competencies, reviews studies of the competencies of special education teachers generally, and examines studies which focus specifically on competencies for teachers of the mentally impaired. The second section reviews those studies which have attempted to identify and delineate the needs of inexperienced and experienced teachers regarding the development of further teaching competence. A summary of the literature reviewed concludes the chapter.

Identification of Teaching Competencies

Competency based teacher education has been the focus of much research and experimentation during the last several years. The The complexity of the issues surrounding competency based instruction and the difficulty inherent in making systemic change are both reflected in the voluminous literature on the subject. The literature reviewed

here will be limited to those studies which are relevant to the purposes of the present research; those studies can be categorized into three areas of concern: procedures for identifying competencies, competencies for special education teachers, and competencies for teachers of the mentally impaired.

Procedures for Identifying Teacher Competencies

Shores, Cegelka, and Nelson (1973) examined the literature dealing with competency based teacher education (CBTE) in order to take a critical look at "the derivation and validation of teacher competencies." They found that competency statements varied widely in their level of specificity, ranging from broad standards such as those by Cruickshank (1966) to specific behavioral statements such as those reported by Rosenshine and Furst (1971). Shores, et al. (1973) pointed out a similarity in a number of the competency statements which they found:

> The majority were grounded on 'expert' opinion (i.e., those of teacher educators, state department leaders, and researchers in special education) p. 193.

Conceding that "expert" opinion is an appropriate place to begin in identifying teacher competencies, Shores, et al. (1973) assert that such opinion is not a sufficient validation of critical teaching skills; and they note that some teacher educators have taken a further step by verifying competencies derived by experts against the opinions or judgment of practicing teachers (e.g. Mackie, Kvaraceus, and Williams, 1957; Dorwood, 1963; Bullock and Whelan, 1971).

The efforts of faculty in the Department of Special Education at the University of Missouri-Columbia to develop and implement a CBTE program at the graduate level also exemplifies a twofold approach to competency identification (Altman and Meyen, 1974). The initial phase of this project involved the systematic identification of competencies through empirical research. First, relevant literature in education, sociology, psychology, and business was explored; second, structured interviews were conducted with 587 public school personnel in nine different educational roles.

Public school personnel were asked to respond in two ways to a questionnaire containing 100 competency statements: 1) an importance ranking on a scale from zero to four, and 2) a trainability index using the following categories:

OC -- best developed through on-campus curriculum

JT -- best developed through on-the-job training

SG -- not amenable to training; a matter of self-growth. Altman and Meyen (1974) note that "the eliciting of information from the field adds significantly to the competency identification process;" and the analysis of the data "yielded meaningful guidelines for both module development and student counseling relative to the training objectives."

An approach similar to that used at the University of Missouri-Columbia (Altman and Meyen, 1974) was used by Mackie, Williams and Dunn (1957) in their nationwide survey of teachers of the mentally impaired. Competencies identified by experts were verified by asking classroom teachers to rate their importance. Anttoven (1972) surveyed

building principals as well as teacher educators and special class teachers, adding a third group to the process of competency identification.

Although subjecting the competency statements of experts to the judgment of practicing teachers is an improvement, this procedure does not lead to completely validated statements (Shores, et al., 1973).

> Before a competency statement is considered valid, it should be demonstrated that successful teachers actually engage in the behavior or skill described, that the skill discriminates between successful and unsuccessful teachers, and that it has the desired effect on children's classroom performance (p. 193).

Rotberg (1968) moved in this direction when he identified tasks which teachers of the educable mentally impaired need using a "critical incident technique." Four groups of professional observers made direct observations of teacher behavior in the classroom and thus determined which competencies are essential for teachers of educable children.

One of the more comprehensive efforts in terms of the number of sources used in identifying competencies occurred as part of the development of an experimental program for preparing teachers of the trainable mentally impaired (San Jose State College, 1971). Competencies were identified through 1) the observation of teacher behavior in classrooms, 2) a study of course outlines, 3) collaboration of teacher educators and public school personnel, and 4) study of the literature.

A similar approach was reported in a recent doctoral dissertation (Foos, 1972):

> By surveying the literature, interviewing professionals, examining course objectives . . ., and by observing teachers of the trainable retarded in the classroom, the writer gathered a diverse list of skills and competencies thought to be important for the teacher of the trainable mentally impaired (p. 48).

Foos incorporated ninety-two competencies identified in this way into a questionnaire which was completed by teachers of trainable children. A portion of this questionnaire sought to further validate the competencies by asking the respondents to rate the value of the competencies in respect to working with the trainable.

Competencies of Special Education Teachers

The literature contains a number of studies directed to the identification of skills needed for special education teachers generally. Obviously, the competencies required of teachers of the mentally impaired are not entirely idiosyncratic; there is a certain amount of overlap with competencies required of all teachers of the handicapped.

Several studies of special education teachers pre-date the era of behaviorally stated, operationalized objectives. Although these studies dealt with characteristics of "good" special educators, their orientation was toward qualifications of a general nature rather than toward performance-oriented statements of competencies. Lord and Kirk (1950), for example, listed qualifications which they felt were of increased importance for teachers of exceptional children:

1) capacity for self-direction
2) patience and perseverence
3) experimentally minded
4) physical fitness
5) personal adjustment and security

In the section of her book dealing with program evaluation, Gartner (1960) included a "Check List for Program Quality." A portion of this Check List focused on the special education teacher; and, since twenty-two statements were included, a greater degree of specificity than found in Lord and Kirk(1950) can be noted.

The school employs a certified special education teacher who:

1) understands child growth and development
2) meets the needs of children within a particular age range (both chronological age and mental age)
3) uses physical movement in activities
4) uses music constructively
5) makes skillful use of time
6) observes and records behavior
7) likes children and does not make them aware that he does not like all children equally
8) ladles out affection freely
9) gives the child guidelines for behavior
10) maintains a balance between leaving the child free to find his own structure and giving him one to use
11) enjoys seeing children in action
12) does not readily become involved emotionally with individual children
13) communicates on child's level of understanding
14) has physical stamina
15) is human (may be frustrated on some occasions and maintain sense of humor on other)
16) is shockproof (has ability to suppress fears and revulsions)
17) is realistic in seeing children in relation to others
18) subordinates himself in a child-centered approach
19) provides sufficient opportunity for parent-teacher interaction
20) establishes good relationships with co-workers
21) views his own feelings toward child realistically
22) plans and activates a consistent program that has continuity (with long-term and short-term goals) [p. 63]

A comprehensive overview of common competencies important to all teachers of exceptional children was provided by Mackie, Dunn, and Cain (1959) as part of a nationwide study of the qualifications and preparation of special education teachers. Opinions of the relative

importance of competencies and of the professional preparation in both initial undergraduate programs and in later on-the-job settings were solicited in a questionnaire sent to 1600 respondents in four groups: 1) superior teachers in ten disability areas, 2) college faculty, 3) state department of education personnel, and 4) directors and supervisors in local school systems.

The number of competencies for each disability area varied from 72-103; and they fell into the following groupings:

1) Technical Knowledge
    a) causes, effects, and treatment of disabling conditions
    b) legal provisions, research, and terminology
2) Understanding the Child and His Deviation
    a) interpret physical and psychological behavior of children
    b) provide for individual differences
    c) recognize the need for referral to other professionals
3) Curriculum Adjustment and Teaching Methods
    a) create a classroom environment favorable to growth and development
    b) individualize the curriculum
    c) help children develop skills to compensate for their disability
    d) stimulate social growth
4) Specialized Equipment and Materials
    a) knowing the types, sources and areas of specialized teaching aids

5) Counseling and Guiding
   a) counsel pupils in regard to attitudes toward their disabilities and toward their social and educational problems
   b) counsel pupils on vocational problems and life goals
6) Using Tests and Records
   a) interpret and use test results and cumulative records to individualize curriculum
7) Working With Adults and Organizations
   a) working with other school staff
   b) working with other professionals
   c) working with parents

In a book directed primarily toward administrators, Voelker (1967) claimed that successful teachers in special education need the following six qualities:

1) High intelligence
2) Strong social feeling
3) Warm and friendly personality
4) Genuine interest in handicapped children
5) Technical skills in an area of specialization
6) Ability to adjust will in the school and community

Rotberg (1968) utilized a critical incident technique to delineate the tasks of teachers of the educable mentally retarded children. However, he identified skills in classroom management, planning to meet the need of the learner, and adapting instruction to meet those needs as fundamental to all teacher preparation programs.

Competencies of Teachers of the Mentally Impaired

Several researchers have directed their attention to the identification of qualifications, skills, and competencies which are needed particularly by teachers of mentally impaired children. Again, the earlier reports found in the literature tend to be more global than specific, and they identify teacher characteristics as well as teacher behaviors.

One study which sought to identify characteristics of successful teachers of mentally or physically handicapped children investigated five dimensions of behavior: scholastic aptitude, scholastic achievement, educational (vocational) interest, personality, and attitudes toward children and learning (Meisgeir, 1965).

1) were well-adjusted, emotionally stable, and able to encounter difficult special class situations;
2) possessed physical energy, vitality, and enthusiasm;
3) scored high on measures of scholastic aptitude and ability.

Wolinsky (1959) indicated that three areas should be incorporated into any teacher education program for teachers of trainable children:

1) knowledge competence in the developmental psychology of children;
2) competence in curriculum planning;
3) competence in counseling, interviewing, and guidance techniques.

One of the series of reports on a nationwide study of the qualifications and preparation of teachers of exceptional children dealt with those unique skills and abilities needed by teachers of retarded children (Mackie, Williams and Dunn, 1957). Those competencies, which were intended to be distinctive from, or in addition to competencies needed by regular classroom teachers, fell into five categories:

1) understanding the mentally retarded child;
2) developing a functional curriculum;
3) applying teaching methods based on an understanding of learning characteristics of the retarded;
4) selecting, developing, and using appropriate instructional materials;
5) developing sound interpersonal relationships with the child, his family, and with allied professionals.

Of the 100 competencies included in the above categories, the teachers surveyed felt that the most important were:

1) recognizing the child as an individual;
2) helping develop acceptable patterns of behavior;
3) facilitating academic progress;
4) individualizing the curriculum;
5) developing self sufficiency in daily living;
6) providing experiences in health education;
7) understanding causes.

The Teacher of Brain-Injured Children (Cruickshank, 1966), a book which reports the efforts of eighteen professionals from various aspects of work with brain-injured children, identifies a wide array of teaching competencies. The competencies included, unfortunately, do not represent a consensus but only the opinions of individuals with varying biases (e.g. neurological, psychological, perceptual-motor, visual-perceptual, etc.). In addition, the competencies are so detailed that they are more like objectives outlining the content of a teacher preparation program than like competency statements. Nevertheless, Cruickshank did edit the competencies into general areas of competence which a majority of the participating experts thought should be included in teacher education programs:

1) understanding of terminology;
2) detailed knowledge of specific teaching techniques;
3) sound concepts of child development;
4) diagnostic skill;
5) teacher-child relationship;
6) relating to other disciplines;
7) understanding emotional problems;
8) capacity to work with parents.

Anttonen (1972) surveyed teacher trainers, building principals, and special class teachers and found the following competencies of teachers of the mentally impaired were rated high by all three respondent groups:

1) making program revisions which contribute to the functional development of retarded children;

2) planning individualized instructional programs;
3) developing, designing, and adapting instructional materials;
4) planning and conducting a comprehensive, individualized curriculum;
5) providing individualized basic skills instruction;
6) planning and providing for the social development of pupils;
7) providing prevocational information and skills;
8) developing work habits and attitudes.

In an article concerning the use of practicum experiences in preparing teachers of the mentally impaired, Lance (1966) stresses the importance of developing competence in clinical teaching techniques. Purportedly, the development of a clinical approach would result in greater proficiency in planning individualized instruction.

A doctoral dissertation entitled A Survey of Competencies of the Trainable Mentally Retarded (Foos 1972) identified three competencies in each of nine areas which were thought to be important by teachers of the trainable:

1) General (history, philosophy, and theory)
   a) ability to list skills needed for trainable children to function semi-independently
   b) ability to describe learning characteristics of the TMR
   c) ability to discuss the role of parents in the development of educational programs for TMRs

2) Learning, Growth and Maturation
   a) having early, direct experience with TMRs at all levels
   b) having adequate supervision during and after initial direct encounters with TMRs
   c) ability to pinpoint individual differences in levels of thinking, perceptual-motor functioning, and development of sensory skills
3) Measurement, Evaluation, and Research
   a) ability to assess physical and mental readiness for a task
   b) ability to outline remediation steps for individual learning problems
   c) ability to record systematically academic, social, and physical progress
4) Instruction: Curriculum and Methodology--Part I (skills related to planning and organizing materials and curriculum)
   a) ability to organize and modify teaching aids and materials
   b) ability to devise tasks at a level to insure success
   c) ability to break tasks down into small sequential steps from simple to complex
4) Instruction: Curriculum and Methodology--Part II (skills related to methodology)

a) ability to build learning on real-life experiences

b) ability to use concrete materials and concepts

c) ability to develop a variety of techniques to enliven repetitive drill

5) Self, Family and Society

a) ability to help TMR accept himself as a person of worth

b) ability to interact with parents on a professional level

c) ability to recognize problems of parents in reference to acceptance of their handicapped child

6) Community Resources and Relationships

a) ability to use allied services for supportive help in programming

b) ability to suggest avenues of recreation and leisure activities open to the TMR

c) ability to work with members of other disciplines in the assessment and follow-up of the TMR

7) Speech and Language Skills

a) ability to plan developmental lessons in areas of attention skills

b) ability to plan developmental speech and language lessons

c) ability to recognize specific speech patterns

8) Vocational Preparation

a) ability to structure experiences to develop desirable work habits

b) ability to list jobs that are feasible

c) ability to enlist support of the community for providing work experience

9) Behavior Management

a) ability to determine what is most rewarding for each child

b) ability to administer rewards and punishments to obtain changes in pupil behavior

c) ability to identify individual behaviors which interfere with learning

Bourne (1972) surveyed graduates of the University of Oregon in order to discern what persons prepared in the field of mental retardation perceived to be the most important performance skills for teachers of the educable mentally impaired. Behaviorally stated competencies were included in a questionnaire and grouped under several categories. Those categories are listed below according to their importance as ranked by the respondents in Bourne's study:

1) Skill in curriculum development and methodology for the retarded child;

2) Ability to be insightful and conversant regarding growth, maturation and learning as it pertains to the retarded child;

3) Functional understanding of measurement and evaluation techniques;

4) Understanding of the historical, philosophical, and sociocultural components of mental retardation.

In an effort to document an experimental program for preparing teachers of trainable mentally impaired children (San Jose State College, 1971), Department of Special Education faculty stated the teaching competencies, auxiliary competencies, and program experiences which comprised the REX program. Seven long-range goals of the teacher education program were identified and stated as competencies needed by teachers of TMR pupils.

1) The ability to recognize, describe, and interpret TMR children's behavior in specific learning environments.
2) The ability to assess and modify TMR children's behavior.
3) The ability to understand the learning principles and curriculum content for TMR children.
4) The ability to select and plan learning activities for TMR children.
5) The ability to conduct and evaluate learning activities for TMR children.
6) The ability to plan and communicate with the instructional aide, ancillary professional persons, and the family of the TMR child.
7) The ability to identify and use community and professional resources with respect to persons, organizations, and literature. (p. 10)

Studies of the Needs and Concerns of Inexperienced and Experienced Teachers

There have been many investigators who have been interested in the professional needs and concerns of teachers just entering the profession. Many of these studies of teacher concerns begin with a restricted perspective. For example, Lantz (1964) examined student teacher's self concepts; Sorenson and Halpert (1968) surveyed student teachers' anxiety and stress; and Alterman (1965) examined the problems

of student teachers as reported in their diaries. Fuller (1969) summarized the data from six studies which did not restrict the concerns to which student teachers could respond and concluded that . . .

> what we know is that beginning teachers are concerned about class control, about their own content adequacy, about the situations in which they teach and about evaluations by their supervisors, by their pupils and of their pupils by themselves (p. 210).

A number of studies have been directed toward identifying the needs and concerns of first year teachers. Briscoe (1972) examined many of these in his review of the literature related to beginning secondary teachers (see, for example, Moller, 1968; Miller, 1970; Clinton, 1970; Dropkin and Taylor, 1963).

A few studies from the field of special education also have focused on the needs of teachers, but have done so without discriminating between new teachers and teachers with several years of experience. Since these studies are more germane to the present research than are studies which identify teacher needs in general, more detail will be provided in reviewing this portion of the literature.

Connor and Goldberg (1960) surveyed 200 special educators to obtain information about their pupils, their programs, and their ideas concerning the needs of teacher education programs (and, by inference, their own present needs). Respondents were asked to indicate the areas in which they would take additional courses if they could supplement their training up to this point. Listed in order of importance as ranked by the respondents, those courses were

1) arts and crafts;

2) specialized teaching methods;

3) child growth and development;

4) parent counseling;

5) music;

6) vocational guidance.

As part of a study on the efficacy of special classes, Cain and Levine (1963) solicited evaluations of the university training received by twenty-eight teachers of the trainable mentally impaired. Again, their needs can be inferred from what they indicated teacher education programs should offer. The authors note two emphases in the responses to their questionnaire: 1) need for more work in the area of curriculum development, and 2) more training in parent counseling.

Part of a study by Lovelace (1971) also focused on the professional concerns of teachers of the mentally impaired. Five areas were identified:

1) knowledge of community resources;

2) competence in diagnosing student problems in reading and mathematics;

3) providing for the sequential and developmental presentation of materials;

4) teaching in functional and vocational areas;

5) parent counseling.

Faculty from the Department of Special Education at California State University identified the concerns of their former undergraduate students who were now receiving inservice training (San Jose State College, 1971). Many of these teachers expressed a need for developing

skill in the use of behavior modification, for improving their ability to individualize the teaching of social skills and language skills, for being able to functionally arrange classroom space, and for developing competence in task analysis and the specification of problems.

Schaftenaar (1972), summarizing the results of a survey of Michigan public school teachers of emotionally disturbed children, reports that a majority of these teachers felt "not sufficiently competent" in working with parents, choosing appropriate educational materials, and in assessment/diagnostic techniques.

Although the studies just cited do not attempt to uncover a relationship between the needs of teachers and the amount of experience they have had, there is some support in the literature for differentiating the needs of teachers at various points in their careers. Conant (1963), Yauch (1955), and Briscoe (1972) all argue that teacher education programs do not completely prepare teachers and should not be expected to do so. Mackie, Dunn, and Cain (1959), state:

> It is quite possible that the most extensive program of initial preparation for the teacher candidate could never be broad enough, or deep enough, or specific enough to prepare a teacher for more than a beginning--and that real competencies will develop only as the teacher works and matures . . . .(p. 53)

In order to recognize the continuing nature of the development of teaching competencies it is necessary to abandon the myth that teachers should be "finished products" at the end of their undergraduate programs.

An in-house study of the College of Education at Michigan State University attempted to describe the basic content of the undergraduate teacher education program through a consensus judgment of

faculty as to the importance of various teaching competencies (Educational Development Project, 1966). Included in the report of this project was essentially the same salient point made by Mackie, et al. (1959) seven years earlier:

> It seems unrealistic to attempt to develop in beginning teachers all the competencies expected of permanently certified professional educators. In the past the tendency in most teacher training programs has been to provide at least some instruction in all competencies perceived as necessary for the teacher. This approach has sacrificed depth for breadth . . . . (p. 19)

The report goes on to sugest that . . .

> competencies judged to be required of permanently certified teachers but not necessarily crucial for successful induction to the profession be deferred to the period after initial certification (p. 9).

The implication made by Mackie, et al. (1959) and by the Educational Developmental Project (1966) is that there are some things necessary to complete teacher preparation that cannot be accomplished during an undergraduate program. A logical extension of that point is that teachers in preparation, beginning or first-year teachers, and experienced teachers are at different stages in their professional development and therefore have different needs. But what are the concerns of teachers at different stages in their professional development? Are there regular concerns of future teachers prior to certification which might guide the development of curriculum in teacher education programs? What are the concerns of more experienced teachers?

Fuller (1969) investigated the concerns of teachers in several different ways and provided some answers to these questions. First, she studied the concerns of groups of student teachers as they arose during the course of the student teaching semester. After

analyzing the frequencies of topics discussed in seminar sessions, Fuller concluded that concerns could be divided into two groups: concern with self and concern with pupils. Concerns which arose early in the person's experience related mainly to "concern with self-protection and self-adequacy: with class control, subject matter adequacy, finding a place in the power structure of the school and understanding expectations of supervisors, principal and parents" (p. 211). Toward the end of student teaching, concerns shifted to the students--"with their learning, their progress and with ways in which the teacher could implement their progress" (p. 211).

Utilizing a different approach, Fuller (1969) asked other groups of student teachers to write down their concerns at two-week intervals. Throughout their student teaching experience the concerns of all twenty-nine subjects were related to self adequacy or to classroom control. Amazingly, none were concerned with pupil learning.

This same pattern persisted into the first year of teaching. Fuller (1969) reports data on beginning teachers who were asked to specify areas of greatest concern. Twenty-two percent were concerned with pupil learning while seventy-eight percent were concerned primarily with self adequacy.

Fuller (1969) then regrouped data in a study by Gabriel (1957) to try to determine if concerns with self adequacy preoccupied teachers even later in their teaching careers. Gabriel had surveyed experienced teachers in England; and, when Fuller dichotomized Gabriel's data, she found that experienced teachers were <u>less</u> concerned with discipline and criticism and were more often concerned with pupil progress.

The problems and tasks to which teachers address themselves, concludes Fuller (1969), occur in three phases. While pre-teaching concerns are rather amorphous, early teaching concerns focus primarily on self or on self-protection; and later concerns focus on pupils and the outcomes of teaching. Fuller suggests that teacher preparation experiences, both pre-service and in-service, should be designed after considering these concern phases and after systematically surveying the teacher concerns of the teacher population to be served.

Summary

The first section of this review of the literature provides an historical perspective on the identification of teacher competencies. Early statements of teacher competencies were often nebulous and non-specific. As time passed competency statements became increasingly performance oriented, and they began to reflect a broader base of opinion as well as the actual observation of teachers' classroom behavior. This first section of the review aided in the development of the survey instrument used in this study, and it provides a framework in which to compare the competencies identified in the present research. The last section of this chapter provides motivation for chronologically examining teacher needs as a means of obtaining feedback relevant to the design of pre-service and in-service programs.

This study differs from those reviewed in this chapter in two important ways. First, the competencies included in the survey instrument are an improvement over earlier statements in that they are specific, detailed statements of teacher behaviors. Second, many of

the earlier studies asked teachers to make judgments about their preparation programs which were in turn used to make curricular changes in teacher education programs. A significant difference in the present study was its assumption that competency in teaching develops over an extended period of time. This study attempts to broaden the examination of teacher competency by analyzing the professional development priorities of teachers at various points in their teaching careers. The data generated provide a means of determining proper emphases for undergraduate teacher education programs based on an examination of the range of differences in teachers' competency development priorities and on teachers' perceptions of where competency development can best occur.

CHAPTER III

METHODOLOGY

Introduction

The focus of this chapter is on the methodology and research design used in this study. Sections are included dealing with definition of terms, procedures in the development of the questionnaire, the questionnaire, the population sampled, collection of the data, specific research questions and data analysis procedures.

Definition of Terms

Clarification of the terminology used to refer to different portions of the questionnaire and of the methods of categorizing responses aids in understanding the research questions addressed in this study.

Teaching Competencies

Teaching competencies refer to sixty-three selected functions which may be performed by teachers of the mentally impaired. These competencies are listed in Part I of the Questionnaire presented in Appendix E; and they are subsumed under the seven major competency areas described below.

Major Competency Areas

Major competency areas refer to seven general functions which may be performed by teachers of the mentally impaired. Distinct groupings of the sixty-three teaching competencies define these major competency areas. They include the following:

1. Planning Instruction.--Teacher activities exemplified by the selection of curriculum and instructional strategies. It includes the formulation of goals as well as pre-class preparation for specific instructional activities. There are fourteen teaching competencies within this major competency area.

2. Assessing and Evaluating Behavior.--All efforts by the teacher to describe the status of a child at a given point in time in regard to cognitive, affective, or psychomotor behaviors. It includes assessment prior to instruction and evaluation following instruction; and it includes the use of both formal (standardized) and informal (teacher-made) instruments. There are six teaching competencies within this major competency.

3. Conducting Instruction.--Those teacher behaviors which guide pupil interaction with the prepared learning environment. There are nine teaching competencies within this major competency.

4. Classroom Management.--All teacher activities regarding the physical arrangement, the procedural routines, and the modification of pupil behavior which are intended to establish the desired learning environment. There are six teaching competencies within this major competency.

5. Facilitating Social-Emotional Maturity.--Teacher behaviors which promote mental health, effective interpersonal relationships, the understanding of feelings and emotions, and the clarification and development of attitudes and moral values. Nine teaching competencies comprise this major competency area.

6. Dealing and Relating With Other Professionals.--Activities of teachers which involve interactions with administrators, other teachers, and ancillary or supportive personnel. There are ten teaching competencies within this major competency area.

7. Working With Parents.--All teacher behaviors involving home-school relationships and direct or indirect contact with parents. There are nine teaching competencies within this major competency area.

Self Development Priorities

Self development priorities refer to the degree of preference respondents presently assign to continued development of skill in each of the sixty-three teaching competencies. The options for each teaching competency are:

1. No Need.--I presently do not need additional skill in this teaching competency.

2. Low Priority.--I would not go out of my way to develop additional skill in this teaching competency.

3. Moderate Priority.--I would find it helpful to improve my skill in this teaching competency.

4. High Priority.--I definitely would find it very helpful to improve my skill in this teaching competency.

Sources of the Development of Teaching Competence

Sources of the development of teaching competence (see Part II of the Questionnaire) refers to preparation settings where the development of skill in the seven major competency areas can occur. The definitions of each of those sources follows:

1. Undergraduate Program.--All coursework and experience prior to certification and approval.

2. Graduate Level Courses.--All coursework and experience for which university credit is received after completing a Bachelor's degree.

3. In-Service Training.--Workshops, conferences, consultant help, "hands-on" training experiences with children, etc. which do not result in university credit.

4. On-the-job Experience.--Actual employment experience as a teacher of mentally impaired children.

Population

The population from which data were obtained for this study included the total number of graduates of the teacher preparation program in mental retardation at Michigan State University who met the following criteria:

1. They must have completed their program requirements and earned approval to teach the mentally impaired as part of a regular, undergraduate degree program from Fall Term, 1971 through Spring Term, 1974.

2. They must have had actual teaching experience (minimum of one school year) in programs for the educable or trainable mentally impaired since the time of graduation.

A number of characteristics of graduates were considered as possible confounding variables. First, the elementary education program was examined in order to determine if any changes had taken place which would affect respondents in the present study. The only major change, the addition of the course Education 101A, Exploring Elementary Teaching, became a program requirement in the Fall of 1971; therefore, this factor did not affect the subjects in this research.

A second factor which was considered as a source of potential differences in the subjects of this study was the implementation of selective admissions procedures in screening applicants to the program in mental retardation. Theoretically, more comprehensive methods of screening students into the program would result in more highly qualified students and also graduates of higher calibre. Although these selective admissions procedures were in effect for two of the three graduating classes surveyed in this study, so few students were actually screened out of the program that this factor was judged to have little or no influence on the population of graduates who were the subjects of this study.

A third source of potential differences among graduates was a process-oriented change in the teaching of methods classes in mental retardation. Since that change focused more on the way material was presented in methods classes than on the actual course content, students who had gone through the program after the change was made were

not judged to be significantly different from earlier graduates; and the possible confounding effect of this variable was perceived to be minimal.

Two variables were judged to have a substantive impact on the survey population and were included as criterion variables in the selection of subjects for this study. The first (criterion one) was variation among former students in respect to their experience with children prior to enrolling in the undergraduate preparation program. There are basically two types of students who seek approval to teach the mentally impaired: 1) those students who complete their program requirements and earn approval as part of a regular, undergraduate degree program; and 2) those students who have had prior experience with children through employment as instructional aides or as certified teachers in regular classrooms. Members of this latter group possess regular elementary or secondary teaching certificates and generally enroll in the program during the Summer Term for the purpose of obtaining approval to teach the mentally impaired. It was apparent that prior experience as a paraprofessional or as a certified teacher would have a noticeable influence on perceptions of which teaching competencies are important and on personal priorities for the continued development of specific teaching competencies. Consequently, only those graduates who earned their undergraduate degree, certification and approval as part of a regular degree program were included in the sampling franes.

The second criterion for graduates who were to be included in this study was actual teaching experience in programs for the

educable or trainable mentally impaired since the time of graduation. Such experience was believed to be a prerequisite to meaningful response to the survey instrument. Since the research questions and hypotheses focused on potential differences between teachers of the educable and teachers of the trainable mentally impaired, only graduates who were employed in such positions were surveyed.

Approval records maintained by the Department of Elementary and Special Education indicated that a total of 198 graduates met the first criterion for inclusion in the study, namely that they had completed a regular, undergraduate degree program between Fall Term, 1971 and Spring Term, 1974. A pre-mailing (see Appendix A and B) was sent to this entire group in order to determine which of the 198 graduates who met the first criterion also met the second criterion of actual teaching experience with the mentally impaired since graduation. The pre-mailing, in addition, sought information concerning the type of program in which each graduate was teaching and the type of field experience completed during the undergraduate program (this variable was subsequently eliminated as a variable of interest). Each graduate's consent to participate in a more extensive survey was also requested in the pre-mailing.

Of the 198 graduates who were sent a pre-mailing, 45 could not be located because they had moved. Further attempts to find those individuals through parents, classmates, and faculty in the Department of Special Education at Michigan State University were unsuccessful. The remaining 153 graduates responded either to the pre-mailing directly or to a follow-up telephone call, resulting in a final response rate

of 77.27 percent. After eliminating the 34 graduates who failed to meet the criterion of actual teaching experience since graduation in programs for the educable or trainable mentally impaired, the remaining 119 individuals were mailed the survey questionnaire.

Procedure in the Development of the Questionnaire

The first major effort in the development of the survey instrument used in this study involved the compilation of a list of competencies judged to be important for teachers of the mentally impaired. The initial step in compiling this list was a careful examination and analysis of relevant literature which detailed the multifaceted activities of teachers of the mentally impaired. In addition, the efforts of the special education faculty at Michigan State University to develop a competency based preparation program were reviewed. Competencies suggested by the writer's own teaching experience and observations in classrooms for the mentally impaired were also included. The final list of competencies included sixty-three statements which were then organized into seven major categories.

The second step in developing and refining the questionnaire involved submitting an early form of the instrument to members of the researcher's guidance committee, professional colleagues at the university, and doctoral level students in special education. These persons were asked to indicate items or instructions which in their judgement were confusing, to delete items which they perceived to be irrelevant, to add items not included, and to identify redundancies.

Reviewers were also asked for their comments on the general structure of the questionnaire for the purpose of eliminating any elements which might interfere with accurate completion of the survey.

After revision of the instrument on the basis of the feedback received, the third step was a pilot study of the rewritten questionnaire. The purpose of this pilot study was to further refine the content of the instrument and to clear up any remaining structural errors.

The twelve pilot subjects included experienced teachers of the mentally impaired who were teaching in local school programs for the retarded as well as Master's level students at Michigan State University who had been employed previously as teachers of the mentally impaired. In order to avoid biasing the results of the actual survey, no individuals in the target population were utilized in the pilot study. The pilot respondents completed the survey as teachers in the actual study would receive it; an additional instruction was given to indicate any items or directions which were unclear. All responses on the pilot questionnaire were scrutinized in order to determine if the directions had been followed and the proper type of responses had been made. Pilot subjects were interviewed individually after they had completed the questionnaire to obtain their reactions and suggestions.

The final step in developing the questionnaire was to synthesize the results of the pilot study and to make some minor structural and semantic changes. The concern of this last step was to make sure that the material was presented in a manner which would allow efficient and correct completion of the survey.

The Questionnaire

The questionnaire (Appendix E) consisted of five major parts.

Part I. Selected Competencies for Teachers of the Mentally Impaired.--This portion of the survey contained the sixty-three teaching competencies which may be performed by teachers of the mentally impaired. These were organized into seven major competency areas. Respondents were asked to rate each of the sixty-three competency statements in two ways.

Step 1 placed respondents in a hypothetical situation in which they were to hire someone to take over their job. The task, then, was to indicate how important each teaching competency would be for the person they would hire. Each competency statement was rated on a scale from "1" to "5", from "least" important to "most" important. The purpose of this section was to determine the perceptions of the respondents concerning the importance or value of the sixty-three teaching competencies.

Step 2 required the respondents to indicate their personal priorities for the continued development of skill in each of the sixty-three teaching competencies. Each competency statement was rated according to the following scale:

No Need--I presently do not need additional skill in this teaching competency.

Low Priority--I would not go out of my way to develop additional skill in this teaching competency.

Moderate Priority--I would find it helpful to improve my skill in this teaching competency.

High Priority--I definitely would find it very helpful to improve my skill in this teaching competency.

The purpose of this section was to determine which teaching competencies the respondents wished to develop beyond their present level of skill. For data analysis, a score from one to four was assigned to each response with "No Need" receiving a one and "High Priority" receiving a four.

Part II. The Development of Teaching Competence.--The respondents were asked to rank four preparation settings (sources) according to the amount of competency development which realistically could occur in each. This ranking was to be accomplished by assigning a score of one to the setting where a major portion of the development of competence could occur, a two to the setting where the next largest portion of competency development could occur, etc. The preparation settings (sources of competency development) were ranked for each of the seven major competency areas.

The purpose of this section was to determine the respondents' perceptions regarding which competency areas can be developed primarily during an undergraduate program and which competency areas can be developed primarily after graduation through graduate level coursework, in-service training, or on-the-job experience.

Part III. Emphases of the Undergraduate Preparation Program.--The respondents were asked to rank the seven major competency areas according to the amount of emphasis each should receive during an undergraduate program.

Part IV. Open-Ended Questions.--This was the only section of the questionnaire in which the respondents were not restricted in their responses. Respondents were asked to indicate the professional areas in which they felt teachers of the mentally impaired needed to improve their skills and competencies and to indicate the changes they would make in undergraduate teacher education.

Part V. Personal and Vocational Data.--The purpose of this final section of the questionnaire was to obtain data regarding sex, age, amount of teaching experience, and the type of program for the mentally impaired in which the respondents were employed. The information obtained on sex and age served a descriptive purpose. The data related to teaching experience and type of program were used as independent variables in the statistical analysis of responses.

Collection of Data

On April 22, 1975 a mailing was sent to the 119 subjects who met the criteria for inclusion in this study. Enclosed was a letter of explanation (Appendix C), one questionnaire (Appendix E), and a stamped addressed envelope for the return of the questionnaire. Two weeks after the questionnaire was mailed, several non-respondents were contacted by telephone. Many of these subjects indicated that they had never received their questionnaires or had received them after the suggested return date. No reason for this unforeseen difficulty could be found. A second mailing (Appendix D) was sent to all non-respondents rather than complete the telephone follow-up as had been planned.

A total of 99 questionnaires (83.19 percent) were returned by the teachers of the mentally impaired who were surveyed in this study. One questionnaire was returned because of an incorrect address. Portions of a few questionnaires could not be used in the statistical analysis because of errors in completing the instrument. One questionnaire was completed but not included in the analysis of the data because it was received too late for consideration.

Research Questions and Data Analysis Procedures

The preceding descriptions of the questionnaire, associated terminology, and data collection procedures have provided a frame of reference for understanding the data analysis used to answer the research questions raised in this study.

I. What is the relative importance or value of the sixty-three specific teaching competencies as perceived by teachers of the mentally impaired?

To answer this question, the data from Part I, Step I of the questionnaire were presented in table form. Means for each of the sixty-three competency statements were reported, and the items were ranked in order of their average degree of importance. The percentage of competencies at each level of importance was reported for each of the seven major competency areas.

II. What is the extent of agreement between teachers of the mentally impaired, categorized according to the type of program in which they are teaching and according to

years of teaching experience, concerning the perceived relative importance of the sixty-three specific teaching competencies?

Since it seemed likely that teachers of the educable and teachers of the trainable as well as experienced teachers and inexperienced teachers would view competencies differently, the differences between teachers grouped according to both of these independent variables were tested using the chi-square test of homogeneity (Conover, 1971). Several of the sixty-three specific competency statements were not tested using the chi-square because of obvious agreement between groups on those particular items.

III. Which specific teaching competencies do teachers of the mentally impaired wish to develop beyond their present level of skill; that is, what are their self development priorities?

Data from Part I, Step 2 of the questionnaire were analyzed in order to answer this question. A score of one to four was assigned to each response, with "No Need" receiving a one and "High Priority" receiving a four. Means were reported for each of the sixty-three competency statements in Part I, and the items were ranked in order of their average degree of priority. The percentage of competencies of each level of priority was reported for each of the seven major competency areas.

IV. What is the extent of agreement between teachers of the mentally impaired, categorized according to the type of

program in which they are teaching and according to years of teaching experience, concerning their self development priorities?

Since it seemed likely that teachers grouped according to the independent variables Type of Program and Years of Experience would have differing self development priorities, chi-square was used to determine the significance of differences between respondents categorized according to those variables. Again, the chi-square test was not used for several of the sixty-three competency statements on which there was obvious agreement.

V. What are the perceptions of experienced teachers concerning the role of various preparation settings (undergraduate program, graduate level courses, inservice training, on-the-job experience) in the development of competence in each of the seven major competency areas?

To answer this research question, the data obtained from experienced teachers' responses to Part II of the questionnaire were analyzed using a Friedman Two-Way Analysis of Variance hypothesis test (Siegel, 1956). Post hoc procedures, setting up orthogonal contrasts, were used to determine where significant differences occurred.

VI. What degree of emphasis should each of the seven major competency areas receive during an undergraduate preparation program as perceived by teachers of the mentally impaired categorized according to Type of Program and Years of Experience?

Before measuring the degree of correlation between the rankings of teachers categorized according to the two independent variables, Kendall's Coefficient of Concordance (Conover, 1971; Siegel, 1956) was used first to test the "agreement in rankings" within the groups of inexperienced, experienced, educable, and trainable teachers. Then, Spearman's Rho (Conover, 1971) was used to measure the correlation of rankings between inexperienced and experienced teachers and between educable and trainable teachers.

VII. In what professional areas do teachers of the mentally impaired feel they need to improve their skills and competencies?

Content analysis procedures were used to organize the comments of the responding teachers concerning their professional needs into fifteen categories. Interrater reliability was determined using a sample (N = 30) of the questionnaires, and response frequencies for each category were reported.

VIII. What changes do teachers of the mentally impaired feel should be made in undergraduate teacher education programs?

Again, content analysis procedures were used to organize the suggestions of teachers concerning possible changes in undergraduate teacher education into categories. Interrater reliability was determined and response frequencies for eleven categories were reported.

CHAPTER IV

PRESENTATION OF THE FINDINGS

Introduction

The focus of this chapter is on the data obtained from the survey instrument and on the results of the statistical analyses which were used to study the data. The first section of the chapter contains personal and vocational data which describe the respondents according to the variables sex, age, type of school program, and years of teaching experience. The second section deals with the perceived importance of the sixty-three teaching competencies and with the differences in perceptions between groups of respondents, categorized on the basis of the variables, Type of Program and Years of Experience. The third section of the chapter is concerned with the self development priorities of the respondents for the sixty-three teaching competencies; and, again, the differences between respondent groups are detailed. The perceptions of experienced teachers concerning the amount of competency development which realistically can occur at various stages in a teacher's career are described in the fourth section of this chapter. The fifth section reports the respondent's rankings of the seven major competency areas according to the amount of emphasis each should receive during an undergraduate preparation program. The final section describes the responses to the only two open-ended questions on the survey instrument.

Personal and Vocational Information

A total of ninety-nine teachers of the mentally impaired responded to the personal and vocational items on Part V of the questionnaire.

Sex

As shown in Table 1 a large majority of the teachers of the mentally impaired were females (N = 91) whereas only a small number of these teachers were males (N = 8).

Table 1. Sex of respondents.

Group	N	Percent
Female	91	91.9
Male	8	8.1

Age

Teachers of the mentally impaired surveyed in this study were in general a very young group. A total of ninety-seven (97.98%) teachers were between the ages of twenty-one and twenty-eight, whereas only two teachers (2.02%) were above this age group (Table 2).

Years of Professional Teaching Experience

As can be seen in the column totals in Table 3, almost half of the respondents (47.5%) were second year teachers. Teachers of the educable mentally impaired, taken as a group, had slightly more

experience in their positions than did the teachers of the trainable. A total of 73.5 percent of the educable teachers had two to three years of experience while a total of 64 percent of the trainable teachers had two to three years of experience.

Table 2. Age of respondents

Age	N	Percent
21	1	1.0
22	10	10.1
23	25	25.3
24	41	41.4
25	12	12.1
26	4	4.1
27	3	3.0
28	1	1.0
37	1	1.0
42	1	1.0

Table 3. Years of professional teaching experience x Type of Program.

	1 Year		2 Years		3 Years		Total	
Group	N	%	N	%	N	%	N	%
Educable (EMI)	16	26.2	32	52.5	13	21.3	61	61.6
Trainable (TMI)	9	36.0	6	24.0	10	40.0	25	25.3
EMI & TMI Combined	1	10.0	8	80.0	1	10.0	10	10.1
Other*	2	66.7	1	33.3	0	0.0	3	3.0
Total	28	28.3	47	47.5	24	24.2	99	100.0

*Other--Two of these respondents worked in programs for the severely mentally impaired, and the other was employed in a sheltered workshop.

It should be noted that in computing the Chi-Square tests reported later in this chapter, first year teachers were considered to be the inexperienced group; and teachers with two or three years of experience were considered to be the experienced group.

Type of Program in Which the Respondents Were Employed

The row totals in Table 3 clearly indicate that a majority of respondents (61.6%) were employed as teachers of the educable mentally impaired. Twenty-five respondents (24.3%) were employed in programs for the trainable mentally impaired. The remaining 13.1 percent of the responding teachers were employed in combined educable and trainable programs, in programs for the severely mentally impaired, or in a sheltered workshop.

Perceived Relative Importance of the Sixty-Three Teaching Competencies With Significant Chi-Squares Identified

In order to describe the importance of the sixty-three teaching competencies as perceived by teachers of the mentally impaired, all of the competency statements included in the questionnaire were ranked according to their mean scores (Table 4). The observed frequency distributions for the sixty-three teaching competencies can be found in Appendix F. In addition to ranking the competencies in order of importance, they were also grouped into the following categories of scores:

4.99 to 4.50 - Most Importance

4.49 to 4.00 - High Importance

3.99 to 3.50 - Moderate Importance

3.49 to 3.00 - Low Importance

2.99 to 2.50 - Least Importance

A Chi-Square Test of Homogeneity was calculated twice for thirty-four of the competency statements in order to determine if there were significant differences in the distribution of responses between teachers of the educable mentally impaired and teachers of the trainable and between experienced and inexperienced teachers. The competency statements tested are preceded by an asterisk in Table 4. The chi-square procedure was not used to test the distribution of responses in twenty-nine of the competency statements.

The decision rule for eliminating chi-square tests consisted of the following two criteria:

1. If the expected frequency (Eij) was less than five in more than twenty percent of the cells in the contingency table, chi-square was not computed (Cochran, 1954);
2. If visual inspection of the data revealed that ninety percent or more of the respondents agreed in their ratings of a competency, chi-square was not used.

It should be noted that in several instances adjacent response categories were collapsed in order to meet Cochran's (1954) minimum requirements for expected frequencies (Conover, 1971; Siegel, 1956). Even after collapsing, the distribution of responses for several competency statements did not meet this criterion; and, consequently, they were not tested using chi-square.

Table 4. Perceived relative importance of the sixty-three teaching competencies with significant chi-squares identified.

	Most Importance (4.99-4.50)	Mean	Standard Deviation
44.	Promoting children's independence	4.88	.328
8.	Individualizing instruction	4.83	.469
43.	Helping children accept themselves	4.83	.453
32.	Handling unacceptable behavior	4.79	.501
21.	Making learning tasks clear to children	4.78	.526
29.	Using a variety of methods for motivating students	4.77	.470
30.	Making classroom rules and procedures clear to students	4.76	.497
39.	Encouraging cooperative interpersonal relationships	4.73	.448
42.	Communicating to children that their feelings are understood	4.68	.550
23.	Using a multi-sensory approach for children with sensory deficits	4.66	.574
9.	Breaking tasks into small steps from simple to complex	4.64	.677
38.	Helping students become aware of the values, attitudes and feelings of others	4.63	.632
33.	Determining what is rewarding for each child	4.61	.682
28.	Providing feedback to pupils during learning	4.53	.595
35.	Maintaining student respect	4.53	.800
41.	Acting as an affective model by expressing feelings honestly and gently	4.51	.676
	High Importance (4.49-4.00)		
12.	Finding materials appropriate to instructional goals	4.46	.661
58.	Listening to parents with the goal of seeing their point of view	4.43	.688
55.	Using a variety of methods to communicate with parents	4.43	.745

Table 4. (cont'd.)

	High Importance (4.49-4.00)	Mean	Standard Deviation
62.	Responding to parents in ways which lead to support of the school program	4.42	.799
5.	Selecting content appropriate to identified goals	4.41	.756
36.	Developing goals for pupils in the affective domain	4.41	.770
56.	Dealing with parent criticism	4.40	.755
37.	Implementing instructional activities which promote the awareness and expression of personal values, attitudes and feelings	4.38	.765
46.	Seeking help for students from agencies outside the school	4.37	.767
24.	Carrying out instruction that is consistent with identified goals	4.373	.737
*20.	Post-testing students to verify outcomes of instruction	4.373	.864
34.	Administering rewards or punishments to change pupil behavior	4.35	.825
*60.	Enlisting parent participation in the educational planning for their child	4.34	.859
*63.	Helping parents to deal with their children at home	4.33	.869
*51.	Working with teacher aides[1]	4.30	.966
*59.	Obtaining information about the child from parents	4.26	.954
*19.	Carrying out preassessment strategies to determine student readiness for specific learning activities	4.245	.874

* Tested using Chi-Square

__ Chi-Square value significant

1 Rated more important by trainable teachers than by educable teachers

Table 4. (cont'd.)

	High Importance (4.49-4.00)	Mean	Standard Deviation
*31.	Arranging the physical props in the classroom to facilitate learning	4.245	.973
*61.	Coordinating home and school approaches to children	4.242	.846
*53.	Tolerating different opinions without taking personal offense	4.242	.893
*13.	Modifying commercial teaching aids to meet specific needs of students	4.235	.894
*26.	Synchronizing different activities conducted simultaneously	4.235	.950
45.	Asking for help or ideas from staff	4.232	.740
10.	Choosing instructional methods for specific lessons	4.20	.812
*17.	Using the results of teacher-administered tests to develop educational plans for children	4.19	.904
* 2.	Formulating instructional goals for year	4.143	.850
* 4.	Selecting goals for specific units of instruction	4.141	.821
*14.	Originating new materials	4.13	.970
*57.	Using accepted principles of counseling, interviewing, and guidance in parent conferences	4.11	1.020
* 1.	Setting goals which take into account the expected adult status of students	4.103	.930
*40.	Adjusting behavior according to children's moods	4.101	.985

	Moderate Importance (3.99-3.50)	Mean	Standard Deviation
*54.	Consulting with regular classroom teachers [2,3]	3.98	1.116

* Tested using Chi-Square
__ Chi-Square value significant
2 Rated more important by educable teachers than by trainable
3 Rated more important by experienced teachers than by inexperienced

Table 4. (cont'd.)

	Moderate Importance (3.99-3.50)	Mean	Standard Deviation
*15.	Constructing informal tests for assessing a child's status	3.97	1.050
* 3.	Organizing the sequence of goals for the year	3.94	.902
*27.	Using behavior modification techniques	3.93	1.043
*47.	Getting to know other teachers	3.83	.980
*49.	Knowing the principal's expectations	3.76	.980
*52.	Following administrative directives	3.71	.961
*48.	Handling administrator's observations of your teaching	3.697	1.005
*11.	Organizing the sequence of daily lessons	3.694	1.107
*50.	Handling criticism from other teachers	3.62	.934
*18.	Interpreting data from formal tests administered by a diagnostician in developing educational plans for the children[2]	3.42	1.213
*25.	Conducting large group learning activities[1]	3.07	1.154
	Least Importance (2.99-2.50)	**Mean**	**Standard Deviation**
*22.	Operating audio-visual equipment	2.98	1.143
* 7.	Writing behaviorally stated objectives	2.95	1.270
* 6.	Preparing written lesson plans	2.80	1.212
*16.	Administering commercially prepared tests[2]	2.64	1.221

* Tested using Chi-Square
__ Chi-Square value significant
1 Rated more important by trainable teachers than by educable
2 Rated more important by educable teachers than by trainable

Six of the response distributions which were tested using chi-square were significantly different at or beyond the .05 level. They are underlined once in Table 4, and differences are identified using subscripts. Contingency tables for the chi-square tests which yielded significant values are presented in Appendix G.

The five competencies which were perceived as being most important for teachers of the mentally impaired were:

1. Promoting children's independence;
2. Individualizing instruction;
3. Helping children accept themselves;
4. Handling unacceptable behavior;
5. Making learning tasks clear to children.

Two of the five competencies felt to be important reflected the concern of teachers of the mentally impaired for facilitating the social-emotional maturity of their students. A third competency felt to be important was in the area of classroom management or discipline. The remaining two most important competencies were concerned with planning and conducting instruction.

In descending order, the five competencies perceived as least important for teachers of the mentally impaired were:

1. Conducting large group learning activities;
2. Operating audio-visual equipment;
3. Writing behaviorially stated objectives;
4. Preparing written lesson plans;
5. Administering commercially prepared tests.

Four of the five competencies perceived to be least important for teachers of the mentally impaired dealt with either planning or conducting instruction. The competency perceived to be least important of all related to assessing and evaluating behavior through the use of commercially made, teacher administered tests.

Four of the five competencies which were perceived as being most important also were rated as having moderate priority for self development by teachers of the mentally impaired. In other words, teachers felt it would be helpful to improve their skills in four of the five competencies they felt were most important for teachers of the mentally impaired.

Similarly, four of the five competencies which were rated as being least important also were rated low in priority for self development. Teachers felt they would not go out of their way to develop additional skill in the teaching competencies rated as having the least importance.

Two of the competency statements were rated significantly more important by teachers of the trainable mentally impaired than by teachers of the educable:

1. Working with teachers aides;
2. Conducting large group learning activities.

Three of the competency statements were rated significantly more important by educable teachers than by trainable teachers:

1. Consulting with regular classroom teachers;
2. Interpreting data from formal tests administered by a diagnostician in developing educational plans for children;

3. Administering commercially prepared tests.

One competency statement was perceived to be significantly more important by experienced teachers than by inexperienced teachers:

Consulting with regular classroom teachers.

A majority of the competencies within five of the major competency areas were rated as having "high" to "most" importance. Those areas, listed in descending order according to the percentage of competences rated "high" or "most" important, were:

Facilitating Social-Emotional Maturity

Working with Parents

Classroom Management

Conducting Instruction

Planning Instruction

As can be seen in Table 5, all of the competencies within the area "Dealing and Relating With Other Professionals" were rated as having from "moderate" to "high" importance. In the remaining area, "Assessing and Evaluating Behavior," fifty percent of the competencies were rated "high" in importance, and the other fifty percent were rated from "moderate" to "least" in importance.

Perceived Self Development Priorities for the Sixty-Three Teaching Competencies With Significant Chi-Squares Identified

The self development priorities of teachers of the mentally impaired for each of the sixty-three teaching competencies are described by first ranking all of the competency statements included in the survey instrument according to their total mean scores (Table 6). The ranked competency statements also were grouped into the following categories:

Table 5. Percentage of competencies at each level of importance for the seven major competency areas.

Competency Area		Importance Rating Most	High	Moderate	Low	Least
Planning Instruction (N = 14)	N	2	8	2	2	2
	%	14.3	57.1	14.3	0	14.3
Assessing and Evaluating Behavior (N = 6)	N	0	3	1	1	1
	%	0	50.0	16.7	16.7	16.7
Conducting Instruction (N = 9)	N	5	2	0	1	1
	%	55.6	22.2	0	11.1	11.1
Classroom Management (N = 6)	N	3	2	1	0	0
	%	50.0	33.4	16.7	0	0
Facilitating Social-Emotional Maturity (N = 9)	N	6	3	0	0	0
	%	66.7	33.3	0	0	0
Dealing and Relating with other Professionals (N = 10)	N	0	4	6	0	0
	%	0	40.0	60.0	0	0
Working with Parents (N = 9)	N	0	9	0	0	0
	%	0	100.0	0	0	0

3.50 to 3.01 High Priority

3.00 to 2.51 Moderate Priority

2.50 to 2.01 Low Priority--High

1.50 to 1.01 No Priority

The observed frequency distributions are reported in Appendix F.

The Chi-Square Test of Homogeneity was used to determine if there were significant differences in the sampling distributions between teachers of the educable and teachers of the trainable mentally impaired and between inexperienced teachers and experienced teachers for sixty-one of the competency statements. The competency statements tested are preceded by an asterisk in Table 6. Two of the competency statements were not tested using the chi-square procedure. One competency was not tested because more than twenty percent of the cells in the contingency table had an expected frequency of less than five (Cochran, 1954). The other competency was not tested because more than ninety percent of the respondents agreed in their rating of the competency. It should be noted again that in several cases adjacent response categories were collapsed in order to meet Cochran's (1954) rule of thumb for minimum expected frequencies (Conover, 1971; Siegel, 1956).

Eleven of the computed chi-squares yielded values significant at or beyond the .05 level. They are underlined once in Table 6, and differences are identified using subscripts. Contingency tables for the significant chi-squares are presented in Appendix H.

Table 6. Perceived self development priorities for the sixty-three teaching competencies with significant chi-square identified.

	High Priority (3.50-3.01)	Mean	Standard Deviation
*14.	Originating new materials	3.04	.874
*37.	Implementing instructional activities which promote the awareness and expression of personal values, attitudes and feelings	3.01	.900
*38.	Helping students become aware of the feelings, attitudes and values of others	3.01	.967

	Moderate Priority (3.00-2.51)	Mean	Standard Deviation
*63.	Helping parents to deal with their children at home	2.98	.989
*23.	Using a multi-sensory approach for children with sensory deficits	2.97	.945
*32.	Handling unacceptable behavior	2.927	1.029
*29.	Using a variety of methods for motivating students[2]	2.926	.992
*15.	Constructing informal tests for assessing a child's status	2.884	1.030
*18.	Interpreting data from formal tests administered by a diagnostician in developing educational plans for children	2.875	.849
*61.	Coordinating home and school approaches to children	2.86	1.048
*39.	Encouraging cooperative interpersonal relationships	2.84	1.029
*57.	Using accepted principles of counseling, interviewing, and guidance in parent conferences	2.83	.991

* Tested using Chi-Square
__ Chi-Square value significant

2 Rated higher in priority by inexperienced than experienced teachers

Table 6. (cont'd.)

	Moderate Priority (3.00-2.51)	Mean	Standard Deviation
*17.	Using the results of teacher administered tests to develop educational plans for children[2]	2.79	.955
*55.	Using a variety of methods to communicate with parents	2.781	1.007
*12.	Finding materials appropriate to instructional goals	2.778	.959
*43.	Helping children accept themselves	2.75	1.036
*60.	Enlisting parent participation in the educational planning for their child	2.74	1.103
*36.	Developing goals for pupils in the effective domain	2.708	.972
*44.	Promoting children's independence	2.708	1.104
*19.	Carrying out preassessment stratefies to determine student readiness for specific learning activities	2.695	.888
*26.	Synchronizing different activities conducted simultaneously	2.695	1.102
*27.	Using behavior modification techniques	2.687	.977
* 8.	Individualizing instruction	2.66	1.145
* 9.	Breaking tasks into small steps from simple to complex	2.63	1.092
* 3.	Organizing the sequence of goals for the year	2.60	.814
*10.	Choosing instructional methods for specific lessons[1]	2.57	.930
1.	Setting goals which take into account the expected adult status of students	2.56	.918
*13.	Modifying commercial teaching aids to meet specific needs of students	2.52	.921

* Tested using Chi-Square
__ Chi-Square value significant

1 Rated higher in priority by trainable teachers than by educable teachers
2 Rated higher in priority by inexperienced than experienced teachers

Table 6. (cont'd.)

	Low Priority--High (2.50-2.01)	Mean	Standard Deviation
*46.	Seeking help for students from agencies outside the school[1]	2.50	1.105
*56.	Dealing with parent criticism	2.49	1.076
* 2.	Formulating instructional goals for the year	2.4688	.882
*62.	Responding to parents in ways which lead to support of the school program	2.4681	1.034
* 4.	Selecting goals for specific units of instruction	2.42	.829
*24.	Carrying out instruction that is consistent with idendified objectives	2.40	.912
* 5.	Selecting content appropriate to identified goals	2.38	.837
*33.	Determining what is rewarding for each child	2.37	.985
*34.	Administering rewards or punishments to change pupil behavior	2.37	1.007
*59.	Obtaining information about the child from parents	2.33	1.046
*20.	Post-testing students to verify the outcomes of instruction	2.27	.946
*21.	Making learning tasks clear to children	2.27	1.021
*42.	Communicating to children that their feelings are understood	2.22	1.038
*16.	Administering commercially prepared tests[2]	2.19	.998
*58.	Listening to parents with the goal of seeing their point of view	2.15	1.041
*31.	Arranging the physical props in the classroom to facilitate learning[2]	2.14	1.017

* Tested using Chi-Square
__ Chi-Square value significant

1 Rated higher in priority by trainable teachers than by educable teachers

2 Rated higher in priority by inexperienced than experienced teachers

Table 6. (cont'd.)

	Low Priority--High (2.40-2.01)	Mean	Standard Deviation
*51.	Working with teacher aides	2.12	1.178
40.	Adjusting behavior according to children's moods	2.09	.919
28.	Providing feedback to pupils during learning	2.09	.996
	Low Priority--Low (2.00-1.51)	**Mean**	**Standard Deviation**
11.	Organizing the sequence of daily lessons	1.96	.874
41.	Acting as an affective model by expressing feelings openly and honestly	1.958	.983
25.	Conducting large group learning activities	1.947	.900
54.	Consulting with regular classroom teachers	1.936	.998
30.	Making classroom rules and procedures clear to students	1.900	.989
7.	Writing behaviorally stated objectives	1.863	.820
*49.	Knowing the principal's expectations[2]	1.862	.899
50.	Handling criticism from other teachers	1.84	.867
35.	Maintaining student respect	1.833	.948
53.	Tolerating different opinions without taking personal offense	1.831	.808
*48.	Handling administrators' observations of your teaching[2]	1.78	.882

* Tested using Chi-Square
__ Chi-Square value significant

2 Rated higher in priority by inexperienced than experienced teachers

Table 6. (cont'd.)

	Low Priority--Low (2.00-1.51)	Mean	Standard Deviation
*45.	Asking for help or ideas from other staff[2]	1.74	.864
*22.	Operating audio-visual equipment	1.73	.864
*52.	Following administrative directives[2]	1.67	.776
*47.	Getting to know other teachers[2]	1.60	.776

	No Priority (1.50-1.01)	Mean	Standard Deviation
6.	Preparing written lesson plans	1.45	.630

* Tested using Chi-Square
__ Chi-Square value significant

2 Rated higher in priority by inexperienced than experienced teachers

The following five competencies were rated highest in terms of self development priorities by teachers of the mentally impaired:

1. Originating new materials;
2. Implementing instructional activities which promote the awareness and expression of personal values, attitudes, and feelings;
3. Helping students become aware of the values, attitudes, and feelings of others;
4. Helping parents to deal with their children at home;
5. Using a multi-sensory approach for children with sensory deficits.

Two of the five competencies given the highest priority for self development related to facilitating the social-emotional maturity of pupils. One of the highest priorities of teachers concerned working with parents of their students. The remaining two competencies in which teachers wanted to improve their skill dealt with planning and conducting instruction.

The five competencies given the least priority for self development were:

1. Asking for help or ideas from other staff;
2. Operating audio-visual equipment;
3. Following administrative directives;
4. Getting to know other teachers;
5. Preparing written lesson plans.

Two of the five competencies rated lowest in priority were in the area of planning or conducting instruction. The other three low

priority items all dealt with competence in dealing and relating with other professionals. It should be noted that even though these last three competencies (numbers 45, 52, and 47) were given a low priority overall, they also yielded significant chi-square values, indicating differences in priority between inexperienced and experienced teachers.

Two of the five competencies given the least priority for self development also were rated as being the least important for teachers of the mentally impaired, viz., "operating audio-visual equipment" and "preparing written lesson plans." The competencies related to "following administrative directives" and "getting to know other teachers" rated low in priority for self development in spite of their moderate to high importance rating. The remaining low priority competency, "asking for help or ideas from other staff," was given a high importance rating.

Two of the competency statements were rated significantly higher in terms of self development priorities by teachers of the trainable mentally impaired than by teachers of the educable:

1. Choosing instructional methods for specific lessons;
2. Seeking help for students from agencies outside the school.

Nine response distributions with significant chi-square values indicated competencies which were rated higher in terms of self development priority by inexperienced teachers than by experienced teachers:

1. Using a variety of methods for motivating students;

2. Using the results of teacher-administered tests to develop educational plans for children;
3. Administering commercially prepared tests;
4. Arranging the physical props in the classroom to facilitate learning;
5. Knowing the principal's expectation;
6. Handling administrators' observations of your teaching;
7. Asking for help or ideas from other staff;
8. Following administrative directives;
9. Getting to know other teachers.

A majority of the competencies within four of the major competency areas were rated as having "moderate" to "high" priority for self development. Those areas, listed in descending order according to the percentage of competencies rated "moderate" or "high" in priority, were:

Facilitating Social-Emotional Maturity

Assessing and Evaluating Behavior

Working With Parents

Planning Instruction

As can be seen in Table 7, competencies within the remaining three areas--Conducting Instruction, Classroom Management, and Dealing and Relating With Other Professionals--were rated from "moderate" to "low" in priority.

Table 7. Percentage of competencies at each level of self development priority for the seven major competency areas.

Competency Area		Priority Rating: High	Moderate	Low(High)	Low(Low)	No
Planning Instruction (N = 14)	N	1	7	3	2	1
	%	7.1	50.0	21.4	14.3	7.1
Assessing and Evaluating Behavior (N = 6)	N	0	4	2	0	0
	%	0	66.7	33.3	0	0
Conducting Instruction (N = 9)	N	0	4	3	2	0
	%	0	44.4	33.3	22.2	0
Classroom Management (N = 6)	N	0	1	3	2	0
	%	0	16.7	50.0	33.4	0
Facilitating Social-Emotional Maturity (N = 9)	N	2	4	2	1	0
	%	22.2	44.4	22.2	11.1	0
Dealing and Relating with other Professionals (N = 10)	N	0	0	2	8	0
	%	0	0	20.0	80.0	0
Working with Parents (N = 9)	N	0	5	4	0	0
	%	0	55.5	44.4	0	0

Experienced Teachers' Rankings of the Role of Four Preparation Settings in the Development of Teaching Competencies

The Friedman Test, also called the two-way analysis of variance by ranks (Friedman, 1937), was used to test the hypothesis that each of the preparation settings plays an equal role in the development of competence for the seven major competency areas. The alternative hypothesis was that some of the preparation settings are perceived to be more important in the development of teaching competence than others. Stated in symbolic form:

$$H_0: \quad E(R_1) = E(R_2) = E(R_3) = E(R_4)$$

$$H_1: \quad H_0 \text{ is false}$$

The Friedman Test was computed using the response of experienced teachers only. Since inexperienced, first-year teachers have had little or no experience with preparation settings other than the undergraduate program, in all likelihood they would rank the undergraduate program as the most important setting for competency development. Years of teaching experience, therefore, would be a confounding variable.

With the data from experienced teachers reported in Table 8 a value of $Xr^2 = 17.808$ was obtained ($p. < .001$). The null hypothesis that the four preparation settings play an equal role in the development of teaching competence was rejected.

Further comparisons between preparation settings were made through the use of post hoc procedures, setting up orthogonal contrasts to determine where significant differences occurred. All three contrasts

Table 8. Friedman two-way analysis of variance by ranks.

Group	PREPARATION SETTINGS (SOURCES) Undergraduate Program Mean	Rank	Graduate Level Courses Mean	Rank	In-Service Training Mean	Rank	On-the-Job Experience Mean	Rank
Planning Instruction	1.741	2	3.414	4	3.155	3	1.690	1
Assessing and Evaluating Behavior	2.310	2	3.069	4	3.035	3	1.586	1
Conducting Instruction	2.211	2	3.456	4	3.105	3	1.276	1
Classroom Management	2.448	2	3.448	4	2.828	3	1.276	1
Facilitating Social-Emotional Maturity	2.386	2	3.123	4	2.895	3	1.638	1
Dealing and Relating with Other Professionals	3.143	4	3.071	3	2.597	2	1.175	1
Working with Parents	3.000	3	3.214	4	2.579	2	1.241	1
Total	R_1 =	17	R_2 =	27	R_3 =	19	R_4 =	7

Xr^2 = 17.808 (p = .001)

of interest yielded values which were statistically significant (alpha = .001). However, since there is a risk of a separate Type I error for each hypothesis tested, an overall alpha equal to .003 should be noted for the three contrasts of interest in this study.

Contrast 1

The first contrast compared the role of planned preparation experiences in the development of teaching competence with on-the-job experience:

$$\hat{\Psi}\ 1 = R_1 + R_2 + R_3 - 3(R_4) = 42 \pm 6.822$$

Significant at .001 level.

Experienced teachers indicated that the major portion of the development of competence could occur during actual employment experience as a teacher of mentally impaired children. In all of the seven major competency areas, on-the-job experience received a mean ranking of "1", indicating that teaching experience rather than more formal, planned preparation experiences was perceived to be the primary setting for the development of competency.

Contrast 2

The second contrast compared preparation prior to certification, i.e., during the undergraduate program, with preparation after certification:

$$\Psi\ 2 = 2(R_1) - R_2 = R_3 = -12 \pm 4.841$$

Significant at .001 level.

Experienced teachers indicated that on the whole a larger proportion of the development of competence could occur during the undergraduate preparation program than during later preparation experiences through graduate level courses or in-service training. Examination of the mean ranks in Table 8 indicated that the respondents felt that the undergraduate program probably could not play as big a role in the development of competency in the major areas "Dealing and Relating With Other Professionals" and "Working With Parents" as could in-service training experience.

Contrast 3

The role of graduate level courses was compared to the role of in-service training in the third and final contrast:

$\Psi 3 = R_2 - R_3 = 8 \pm 2.788$

Significant at .001 level.

Experienced teachers indicated that the least amount of competency development could occur through graduate level coursework and experience. Workshops, conferences, consultant help, "hands-on" training experiences with children, and other in-service training was perceived to be more important to the development of competence in the seven major competency areas than was more formal preparation for graduate credit.

Emphases of the Undergraduate Preparation Program

The perceptions of graduates who were teachers of the mentally impaired concerning the degree of emphasis each of the seven major competency areas should receive during an undergraduate program

were the focus of this portion of the study. Respondents were asked to assume that some competency development would occur in all of the seven major areas during undergraduate preparation and to rank the seven areas from "most" to "least" in respect to the amount of emphasis they should receive.

Kendall's Coefficient of Concordance (Conover, 1971; Siegel, 1956) was used to measure the extent of agreement within groups of teachers categorized according to "type of program" and "years of experience" on rankings of the seven competency areas. As shown in Table 9, there was very close within-group agreement for educable and inexperienced teachers, and acceptable levels of agreement for trainable teachers and experienced teachers.

Table 9. Extent of agreement within groups on rankings of the seven major competency areas: Kendall's Coefficient of Concordance (W).

Group	$W = \frac{r^2}{n(k-1)}$
Educable Teachers	.742
Trainable Teachers	.548
Inexperienced Teachers	.986
Experienced Teachers	.654

The degree of correlation between rankings of the seven major competency areas by educable and trainable teachers and between the rankings of experienced and inexperienced teachers then was measured using Spearman's Rank Correlation Coefficient, also known as

Spearman's Rho (Conover, 1971). High, positive correlations were obtained between the rankings of educable and trainable teachers (r_s = .982, significant at $p < .01$) and between experienced and inexperienced teachers (r_s = .964, significant at $p < .01$).

As indicated by the data presented above and by examination of the rank sums and new rankings presented in Table 10, teachers of the mentally impaired closely agreed as to the emphasis each of the seven major competency areas should receive during undergraduate teacher preparation. Planning Instruction was considered to be the competency which should receive the most emphasis. Classroom Management was ranked as the area which should receive the next largest amount of emphasis, although inexperienced teachers felt Assessing and Evaluating Behavior was slightly more important. The competency areas ranked third and fourth in the amount of emphasis they should receive were Assessing and Evaluating Behavior and Conducting Instruction. All of the first four competency areas are related to actual teaching competence which may indicate that teachers of the mentally impaired perceived the primary responsibility of undergraduate teacher education programs to be preparing teachers for instructional roles as opposed to preparing them to counsel students, work with others, or deal with parents.

Professional Areas in Which Teachers of the Mentally Impaired Need to Improve Their Skills and Competencies

The 99 subjects who completed the questionnaire made a total of 224 responses to the first open-ended question. Those comments were content analyzed, and 14 scoring categories were developed which

Table 10. Rankings of the seven major competency areas: Emphases of the Undergraduate preparation Program.[1]

Competency Area	Educable Teachers	Trainable Teachers	Inexperienced Teachers	Experienced Teachers
Planning Instruction	181(1)	54(1)	65(1)	207(1)
Assessing and Evaluating Behavior	192(3)	77(3)	81(2)	229(3)
Conducting Instruction	218(4)	84(4)	98(4)	250(4)
Classroom Management	181(2)	75(2)	89(3)	214(2)
Facilitating Social-Emotional Maturity	259(5)	109(5)	130(5)	309(5)
Dealing and Relating With Other Professionals	399(7)	168(7)	188(7)	463(7)
Working With Parents	346(6)	133(6)	168(6)	384(6)

[1]Numbers on the left are rank sums (ΣR_j's). Numbers in parentheses indicate new rankings derived from the various sums of ranks. A low number denotes a higher ranking.

represented the major emphases of the responses. Although some categories were actually sub-groups of other categories, the responses were organized in such a way as to preserve all of the essential ideas expressed (Table 11).

After the response categories had been defined and scoring procedures outlined, a second rater content analyzed a random sample (N = 30) of the questionnaires. Interrater reliability was determined by comparing the scores of both raters. Agreement on 89.8 percent of the responses was observed.

Visual inspection of the data revealed a high level of agreement in the comments made by educable and trainable teachers and by inexperienced and experienced teachers. Therefore, no statistical tests for significant differences between these groups were performed.

Teachers of the mentally impaired mentioned most frequently the need to become more competent in assessing and evaluating student behavior. A total of 28 out of 99 teachers made comments related to diagnostic skills, covering such topics as the interpretation of tests, the administration of both standardized and non-standardized tests, and pre- and post-assessment strategies. Sample remarks were:

> Become familiar with common informal and formal tests and how to use.
>
> I think . . . teachers need some help in understanding what the diagnostician's tests show.
>
> Knowing how to correctly assess (children's) specific needs.
>
> Evaluating behavior and instruction.
>
> I think that we should be concerned with assessing and evaluating behavior . . . so we can actually test, set up goals, and re-test ourselves.

Table 11. Professional areas in which teachers of the mentally impaired need to improve their skills and competencies (total responses: 224).

Professional Area	Number of Responses*
Assessing and evaluating behavior	28
Classroom management	22
Working with parents	20
Dealing and relating with other professionals	20
Defining goals and objectives; making curricular decisions	15
Recognizing and meeting individual differences	15
Locating, adapting, making instructional materials	14
Preparing students for adult roles and responsibilities	14
Training in methods of instruction in a variety of academic and non-academic areas	13
Facilitating social-emotional maturity	12
Working with children who have multiple or secondary handicaps	11
Dealing with children's feelings, values, and attitudes	10
Facilitating integration (mainstreaming)	10
Task analysis and development of skill hierarchies	6
Miscellaneous	14

* Number of Responses refers to the actual number of subjects who made comments in each category.

A number of the respondents (22%) felt that teachers of the mentally impaired needed to improve their skills in classroom management. Most of the responses in this area related to teacher control of unacceptable, "acting out" behaviors. Samples were:

> Maintaining control of the classroom without using authoritarian measures.
>
> How to deal with disruptive behavior . . . .
>
> How to deal with specific behavioral problems. You can't begin to teach until you have classroom control.
>
> While interviewing for jobs, I found that many people were not confident in an MI major's ability to deal with unacceptable behavior.
>
> More knowledge of behavior modification techniques, which, thank God, I am picking up in graduate school.

Twenty percent of the teachers also indicated that improvement was needed in the areas of working with parents and working with other professionals.

Suggested Changes in Undergraduate Teacher Education Programs

A total of 246 responses were made to the second open-ended question. Comments were again content analyzed and organized into 13 specific sub-categories under 4 major headings (Table 12). A second rater was provided with scoring rules and category definitions and asked to score a sample of the comments in order to determine interrater reliability. Ninety-two percent of the comments scored were in agreement.

Teachers of the mentally impaired made three types of suggestions regarding changes in undergraduate teacher education: 1)

Table 12. Suggested changes in undergraduate teacher education programs (total responses: 246).

Suggested Change	Number of Responses*
More Emphasis:	
Training in methods of instruction in a variety of subject areas	20
Dealing with the affective domain	17
Defining content and planning for individual differences	17
Assessing and evaluating behavior	16
Locating, adapted, making instructional materials	13
Dealing and relating with other professionals	12
Classroom management	12
Working with parents	11
Political/legal aspects of teaching	3
Less Emphasis:	
Theoretical coursework	10
Planning instruction and writing behavioral objectives	5
Process of Teacher Education:	
More field experience	64
Broader experience with different age groups, levels of retardation, and a variety of secondary handicaps	29
Other:	17

* Number of Responses refers to the actual number of teachers who made comments in each category.

topics to place more emphasis on, 2) topics to place less emphasis on, and 3) changes related to the process of teacher education.

A number of teachers (20%) suggested that more emphasis should be placed on training in methods of teaching the mentally impaired. Sample comments were:

> I would include methods classes for working with adults.
>
> Add physical education and more reading and math methods.
>
> Get into more practical techniques instead of terms that anyone can learn or look up in a book.
>
> There should be more teacher instruction in math . . . and many more classes suited to . . . teaching upper elementary and secondary classes.

A second area respondents felt needed more stress was preparation for dealing with the feelings, attitudes, values, self concepts, and interpersonal skills of mentally impaired students. Teachers also felt that more emphasis should be placed on determining curriculum and on planning to meet individual differences.

A relatively small number of teachers took an opposite point of view and suggested changes involving less rather than more emphasis. Fifteen respondents indicated that teacher education programs should be changed to include less theory and "bookwork," less time on how to plan for instruction, or less emphasis on behavioral or performance objectives.

Two sub-categories focused on process oriented change in teacher education. A large number of teachers, 64 out of 99, stated that more field experience should be built into programs and that the amount of campus-based instruction should be decreased. In addition,

29 respondents indicated that all teachers should be exposed to a wider variety of mentally impaired children--to the trainable and severely mentally impaired as well as the educable, to secondary as well as elementary, and to those with secondary or multiple handicaps in addition to their mental impairment.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

A major portion of this final chapter is devoted to an overview of the preceding chapters. A summary of the design and major findings of this study will be presented, and several limitations bearing on this study will be discussed. Conclusions based on the data will be drawn, and recommendations for additional research as well as for possible action will be made.

Overview of the Study

This research was a survey of teachers of the mentally impaired who were graduates of Michigan State University. The study sought to determine the specific teaching competencies perceived to be important for teachers of the mentally impaired and to identify the needs of teachers in respect to the continued development of skill in specific teaching competencies. Further, this study sought the perceptions of teachers concerning the role of various sources in the development of teaching competency, and solicited suggestions for the improvement of undergraduate teacher education.

The study had nine major objectives:

1. Identify the perceptions of teachers of the mentally impaired concerning the importance of selected teaching competencies;

2. Compare the perceptions of teachers of the mentally impaired, categorized by the type of program in which they were teaching, concerning the importance of selected teaching competencies;

3. Compare the perceptions of teachers of the mentally impaired, categorized by years of teaching experience, concerning the importance of selected teaching competencies;

4. Determine which competencies teachers of the mentally impaired wished to develop beyond their present level of skill (Self Development Priorities);

5. Compare the perceptions of teachers of the mentally impaired, categorized by the type of program in which they were teaching, concerning their self development priorities;

6. Compare the perceptions of teachers of the mentally impaired, categorized by years of teaching experience, concerning their self development priorities;

7. Determine graduates' perceptions concerning the role of various preparation settings (undergraduate program, graduate level courses, inservice training, on-the-job experience) in the development of competency in the seven major competency areas;

8. Determine the perceptions of graduates concerning the degree of emphasis each of the seven major competency areas should receive during an undergraduate program;

9. Obtain the suggestions of program graduates concerning possible changes in undergraduate teacher education.

The subjects for this study were drawn from the entire population of teachers who graduated from the teacher preparation program in mental retardation at Michigan State University from Fall Term, 1971 through Spring Term, 1974. All respondents were required to have earned approval as part of a regular, undergraduate degree program and to have had actual teaching experience with mentally impaired children since graduation. A total of 83.2 percent of the teachers who met the above criteria returned the mailed questionnaire.

The sixty-three competency statements included in the questionnaire were ranked according to their average degree of importance

using mean scores. The Chi-Square Test of Homogeneity was used to determine the significance of differences between educable and trainable teachers and between experienced and inexperienced teachers on their importance ratings of thirty-four of the competency statements. Similarly, mean scores were used to rank the sixty-three competency statements according to their degree of priority for self development. Again, Chi-Square was used to determine the significance of differences between teachers categorized according to type of program and years of experience on sixty-one of the competency statements. The Friedman Two-Way Analysis of Variance was used to determine if there were differences in the role of various preparation settings in the development of teaching competencies as perceived by experienced teachers. Post hoc procedures, setting up orthogonal contrasts, were used to determine where significant differences occurred. The perceptions of teachers concerning the amount of emphasis each of the seven major competency areas should receive during an undergraduate program were studied. The subjects also listed areas in which they felt teachers of the mentally impaired needed to improve; and they suggested changes in undergraduate teacher education. Those open-ended responses were described using content analysis procedures.

Major Findings

1. The five competencies perceived as being most important for teachers of the mentally impaired were:

   a) Promoting children's independence;
   b) Individualizing instruction;
   c) Helping children accept themselves;

d) Handling unacceptable behavior;
e) Making learning tasks clear to children.

2. The five competencies perceived to be least important for teachers of the mentally impaired were:

a) Conducting large group learning activities;
b) Operating audio-visual equipment;
c) Writing behaviorally stated objectives;
d) Preparing written lesson plans;
e) Administering commercially prepared tests.

3. Two competencies were rated as being more important by teachers of the trainable than by teachers of the educable:

a) Working with teacher aides;
b) Conducting large group learning activities.

4. Three competencies were rated as being more important by educable teachers than by trainable teachers:

a) Consulting with regular classroom teachers;
b) Interpreting data from formal tests administered by a diagnostician in developing educational plans for children;
c) Administering commercially prepared tests.

5. Only one competency was perceived to be more important by experienced than by inexperienced teachers:

Consulting with regular classroom teachers.

6. The five competencies rated highest in terms of self development priorities were:

a) Originating new materials;
b) Implementing instructional activities which promote the awareness and expression of personal values, attitudes, and feelings;
c) Helping students become aware of the values, attitudes, and feelings of others;
d) Helping parents to deal with their children at home;
e) Using a multi-sensory approach for children with sensory deficits.

7. The five competencies rate lowest in terms of self development priorities were:

   a) Asking for help or ideas from other staff;
   b) Operating audio-visual equipment;
   c) Following administrative directives;
   d) Getting to know other teachers;
   e) Preparing written lesson plans.

8. Teachers of trainable children had higher self development priorities than educable teachers on two of the teaching competencies:

   a) Choosing instructional methods for specific lessons;
   b) Seeking help for students from agencies outside the school.

9. Inexperienced teachers rated nine competencies higher in terms of self development priorities than did experienced teachers:

   a) Using a variety of methods for motivating students;
   b) Using the results of teacher-administered test to develop educational plans for children;
   c) Administering commercially prepared tests;
   d) Arranging the physical props in the classroom to facilitate learning;
   e) Knowing the principal's expectations;
   f) Handling administrators' observations of your teaching;
   g) Asking for help or ideas from other staff;
   h) Following administrative directives;
   i) Getting to know other teachers.

10. Experienced teachers indicated that a major portion of the development of competence in the seven competency areas could realistically occur through on-the-job experience. The undergraduate teacher education program was perceived to be the setting where the second largest amount of competency development could occur. Both inservice training and graduate level programs were perceived to be less important to the development of teaching competency.

11. There was a high correlation in rankings by educable, trainable, experienced, and inexperienced teachers of the seven major competency areas according to the degree of emphasis they should receive during undergraduate teacher education. The rankings below, based upon mean rankings of all the respondents, are listed in order from "most" to "least" emphasis:

    Planning Instruction
    Classroom Management
    Assessing and Evaluating Behavior
    Conducting Instruction
    Facilitating Social-Emotional Maturity
    Working With Parents
    Dealing and Relating With Other Professionals

12. Respondents indicated that the major emphasis of undergraduate teacher education should be on developing competence in instructional roles rather than in working well with parents or in working with other professionals.

13. The major competency area, Working With Parents, was rated "high" in importance and in priority by the respondents in this study. The respondents indicated, however, that this area should not be a major emphasis at the undergraduate level of preparation. In addition, they indicated that a major portion of the development of competence in this area could occur primarily through on-the-job experience and through in-service training.

14. The most frequent response to the first open-ended question was that teachers of the mentally impaired needed to become more competent in assessing and evaluating student behavior. Competence in classroom management was the second most frequently mentioned teacher need.

15. Teachers of the mentally impaired suggested several changes in undergraduate teacher education:

    a) More emphasis should be placed on methods of teaching the the mentally impaired;
    b) More emphasis should be directed to meeting the affective needs of children;
    c) Less emphasis should be placed on theory, lesson planning, and behavioral objectives;
    d) More field experience, exposing students to mentally impaired persons in different age and ability groups in diverse kinds of settings, should be built into teacher education programs.

Limitations of the Study

Several limitations of the major research findings need to be examined.

1. The subjects in this study were all teachers who had graduated from Michigan State University within the last three years and who had had actual teaching experience. It is not possible to generalize the findings in a statistical sense beyond that population. However, it is likely that the subjects of this study are similar to graduates of other institutions; and implications can be drawn to other teachers and programs in a theoretical sense.
2. Conclusions about the perceptions of experienced teachers may have been biased by the fact that no subjects with more than three years of experience were included in the study. It is possible that even more experienced teachers would have different perceptions concerning the importance of teaching competencies, priorities for self development, and the timing and process of competency development.

3. The subjects surveyed in this research did not include graduates who had never been employed as teachers of the mentally impaired. It may be that these graduates are the very ones who were least ready to enter the profession, and the absence of their perceptions may have biased the conclusions drawn from the data.
4. The format of the questionnaire itself may have biased the results of this study by creating a response set to the sixty-three teaching competencies. Grouping the competency statements into seven major areas may have caused the respondents to rate competencies within groups at the same level of "importance" or "priority," thereby inflating the mean values obtained for some of the competencies.
5. This study deals only with educable and trainable teachers and with teachers having no more than three years of experience. The findings may not be applicable to teachers of the severely mentally impaired or to teachers with more than three years of experience.
6. The "importance" ratings of the sixty-three teaching competencies represent the perceptions of teachers only and should not necessarily be taken at face value. Other findings in this study, too, represent the views of only one group of individuals. The opinions described, the differences cited, and the comparisons drawn do not prove that certain competencies need to be developed at one time or another or that suggested changes must be made in undergraduate preparation programs.

Teacher educators, parents, or administrators may have legitimate differences in their perceptions related to the development of teaching competencies.

7. It is possible that the perceptions of teachers reported in this study were biased by the fact that human beings tend to avoid getting into situations in which they are least competent. Teachers in this study may have concluded that some competencies were unimportant and may have given low priority to the further development of competency in some areas because they did not allow themselves to get into situations in which a lack of competence would have been obvious.

Discussion and Implications for Teacher Education

The teaching competencies rated high in this study in terms of importance and priority for self development are similar to the competencies and needs of teachers identified in other research (e.g., Mackie, et al., 1957; San Jose State College, 1971; Foos, 1972; Lovelace, 1971). Respondents in the present study, however, placed less emphasis on cognitive, theoretical competencies than did the subjects in earlier studies; and they emphasized applied teaching skills more heavily.

The major competency areas which were perceived to be most important for teachers of the mentally impaired were: facilitating social-emotional maturity, working with parents, classroom management, conducting instruction, and planning instruction (Table 5). Since

a majority of the competencies within those areas were rated "high" or "most" in importance by all teachers, the development of competence in those areas should be emphasized.

Teachers of the trainable mentally impaired rated "working with teacher aides" as being more important than did educable teachers; and both educable and experienced teachers rated "consulting with regular classroom teachers" as being more important than did trainable or inexperienced teachers. However, all groups of teachers indicated that these competencies were important; and it appears that attention to the major competency area, "dealing and relating with other professionals," should be a focus of teacher educators. The development of interpersonal skills would facilitate working both with aides and other teachers and would be germane to effective relationships with children, parents and administrators as well. Educable teachers placed more emphasis on the administration and interpretation of diagnostic tests than did trainable teachers, while there were no significant differences between teachers with varying amounts of experience. However, a large number of the responding teachers rated competence in "interpreting data from formal tests" and "administering commercially prepared tests low in importance. Apparently those competencies are not perceived to be very useful in making educational decisions about what to do with students.

The major competency areas rated highest by the respondents in terms of their self development priorities were: facilitating social-emotional maturity, assessing and evaluating behavior, planning instruction, and working with parents (Table 7). Since teachers

indicated a need for improving their skill in most of the competencies within those areas, and since a majority of the competencies within those major areas were also rated high in importance, the development of competence in those areas should be emphasized.

Teachers of trainable children indicated a higher priority for improving their skill in "choosing instructional methods for specific lessons" than did teachers of educable children. The greater confidence of educable teachers in their ability to select appropriate instructional methodologies suggests that teacher educators should place additional emphasis on teaching methods which are appropriate for use with trainable children. Teachers of the trainable also gave greater priority to "seeking help for students from agencies outside the school." Although both educable and trainable teachers perceived this to be a highly important competency, trainable teachers felt they had less skill in finding the necessary outside help for students as reflected in their higher degree of priority for improvement on this skill.

Nine competencies were rated higher in priority for self development by inexperienced than by experienced teachers. Five of those competencies were consistent with Fuller's (1969) research which suggests that inexperienced, beginning teachers are most concerned with "finding a place in the power structure of the school," self-adequacy and interpersonal relationships. However, the remaining four high priority competencies were consistent with Briscoe's (1972) findings which suggest that beginning teachers are also concerned with organizing instruction and determining student's needs. The above

needs of inexperienced teachers suggest areas which should receive increased attention during the early employment years and possibly prior to graduation.

Differences in the perceptions of teachers of the mentally impaired concerning which competencies were important and which competencies were high in priority for self development were relatively few. While some differences were found which were significant in a statistical sense, there was basically a great deal of agreement between teachers working in different types of programs and between teachers with different amounts of teaching experience.

Tracking in undergraduate teacher education in order to prepare teachers of either the educable or trainable is not warranted by the results of this study. Most of the teaching competencies studied were perceived to be relevant to teaching the mentally impaired generally and were not specific to teaching either the mildly or moderately mentally impaired.

Part of the rationale underlying this study related to recent discussion of a possible need to revise teacher approval practices to reflect preparation for employment with more narrowly defined age and ability levels of mentally impaired students. The differences described in this study do not seem to support differentiation in approval to teach either educable or trainable children. However, the small number of graduates employed in either secondary settings or in programs for the severely mentally impaired made it impossible to make comparisons between those groups and the groups included in this research. Therefore, conclusions about the value of differentiating

approval to teach elementary or secondary mentally impaired students or to teach the mildly and moderately impaired as opposed to the severely mentally impaired are not justifiable.

Conclusions can be drawn from the findings of this study regarding areas of emphasis for undergraduate programs and about the role of other preparation settings in the development of teaching competencies. Inferences about the content and process of undergraduate preparation programs in mental retardation can be made on the basis of data obtained in Part II, Part III, and the second open-ended question in Part IV of the questionnaire. The undergraduate preparation program was perceived to be the setting where a large amount of competence could be developed in planning instruction, assessing and evaluating behavior, conducting instruction, classroom management, and facilitating social-emotional maturity. These same five areas were ranked as being the most important to emphasize during undergraduate preparation. In addition, all of the same areas were mentioned frequently in response to the question asking for suggested changes in undergraduate programs as areas which should receive more emphasis. The most frequently mentioned response of all was that undergraduate programs should provide more field experience and expose students to a wide spectrum of mentally impaired children at varying age and ability levels.

A major assumption of the present research was that competence in many of the tasks of teaching develops over a long period of time as a result of both formal preparation and experience. An undergraduate teacher education program cannot be expected to develop total

competence in all areas by the time of graduation. Although the experienced teachers surveyed in this study felt that the undergraduate program could play a large role in the development of competence in five of the seven major areas, they felt a major portion of competency in all areas could be developed through on-the-job experience with mentally impaired children.

Teachers have long been encouraged to continue formal, planned preparation experiences during their teaching careers. A number of incentives have been provided to motivate the continued development of teachers' skills, including inservice days provided by school districts, reimbursements for taking graduate level courses, wage increments based on graduate credits accumulated, and state requirements for permanent or continuing certification. In spite of all this external encouragement for teachers to become involved in planned, post-certification experiences to further develop their teaching competencies, the teachers themselves believed that employment experience and undergraduate programs were the primary settings for the development of teaching competence.

While undergraduate programs were viewed as being highly important settings for the development of teaching competence, both graduate level courses and inservice training were perceived to play a much smaller role in the development of teaching competence. Only in the areas of working with other professionals and working with parents was inservice training perceived to play a bigger role than undergraduate programs in the development of competency. One implication of the above is that ways must be found to capitalize on the

learning value of actual employment experience. Teacher educators, perhaps, should bring graduate level programs into schools and classrooms rather than bring teachers back to the campus. A model of graduate level education which is removed from the real-world school milieu may not be any more efficacious than campus-based undergraduate preparation programs.

In conclusion, it should be reiterated that it is not the intent of this study to imply that all the self development priorities or needs of practicing teachers should be eliminated prior to employment or that undergraduate programs should bear the primary responsibility for preparing competent teachers. The recommendation is made that the self development priorities of teachers should be examined in light of the importance of the specific teaching competencies, taking into account all possible settings for the development of competency. While some of the needs of teachers could be met by making changes in undergraduate programs, others are more appropriately met after employment.

Recommendations for Future Research

The present research was limited by the fact that program evaluation is a complex and iterative process of which this study could only be a small part. Additional research is needed in the following areas:

1. Studies should be conducted to determine the perceptions of parents, administrators, and teacher educators concerning important teacher competencies.

2. Competencies which are perceived to be important for teachers of the mentally impaired should be validated through the observation of teachers in educational settings to determine which competencies are, in fact, used in teaching retarded persons.
3. Although teachers have indicated their personal priorities for self development, it cannot be stated that these are the only needs of teachers. Further research is recommended to identify teacher needs through direct observation of their behavior.
4. Longitudinal studies are needed in order to determine the professional needs of teachers at various points in their teaching careers, e.g., repeatedly measure teacher concerns before and after student teaching, and again at the end of each of the first several years of teaching.
5. A study should be conducted which obtains the perceptions of teachers sampled from a broader population, i.e., sample teachers graduated from several institutions who work with mentally impaired students at a wider variety of age and ability levels and who have more extensive teaching experience.
6. Further research should be conducted to determine whether pupil behavior is changed as a result of the application of specific teaching competencies. Perhaps most importantly, research which observes the interrelationships of teacher and child behavior is needed.

BIBLIOGRAPHY

BIBLIOGRAPHY

Alterman, R. D. Using student teachers' diaries to develop an evaluative instrument for teacher education programs. Journal of Educational Research, vol. 58, April, 1965, 369-372.

Altman, R., and Meyen, E. R. Some observations on competency based instruction. Exceptional Children, vol. 40, no. 4, January, 1974, 260-265.

Anttonen, J. E. Competencies requisite for teachers of educable mentally retarded as perceived by building principals, teacher trainers and special class teachers. Unpublished dissertation, University of Oregon, 1972.

Armore, S. J. Introduction to statistical analysis and inference. New York: John Wiley and Sons, Inc., 1967.

Babbie, E. R. Survey research methods. Belmont, California: Wadsworth Publishing Company, Inc., 1973.

Baumgartner, B. B. Helping the trainable mentally retarded child. New York: Teachers College Press, Columbia University, 1960.

Borg, W. R., and Gall, M. D. Educational research--an introduction. New York: David McKay Company, Inc., 1971.

Bourne, E. J. E. A survey of the preparation program for teachers of the mentally retarded, 1966 through 1969. Unpublished dissertation, Oregon College of Education, 1972.

Briscoe, F. G. The professional concerns of first-year secondary teachers in selected Michigan public schools: A pilot study. Unpublished dissertation, Michigan State University, 1972.

Bullock, L. M., and Whelan, R. J. Competencies needed by teachers of the emotionally disturbed and socially maladjusted: A comparison. Exceptional Children, vol. 37, 1971, 485-489.

Cain, L. F., and Levine, S. Effects of community and institutional school programs on trainable mentally retarded children. Washington, D.C.: The Council for Exceptional Children, NEA, 1963.

Clinton, T. A. Beginning teachers' problems: A study of problems encountered by one hundred graduates of East Texas State University and the functional relationship between these problems and the teacher education program. Unpublished dissertation, East Texas State University, 1965.

Cochran, W. G. Some methods for strengthening the common X^2 tests. Biometrics, vol. 10, 1954, 417-451.

Conant, J. B. The education of American teachers. New York: McGraw-Hill, 1963.

Connor, F. P., and Goldberg, I. I. Opinions of some teachers regarding their work with trainable children: Implications for teacher education. American Journal of Mental Deficiency, vol. 64, January, 1960, 658-670.

Conover, W. J. Practical non-parametric statistics. New York: John Wiley and Sons, Inc., 1971.

Cruickshank, W. M. (ed.). The teacher of brain-injured children. Syracuse, New York: Syracuse University Press, 1966.

Dropkin, S., and Taylor, M. Perceived problems of beginning teachers and related factors. Journal of Teacher Education, vol. 14, December, 1963, 384-390.

Educational Development Project. Curriculum review in the College of Education. East Lansing: Michigan State University, College of Education Publication, April, 1966.

Foos, R. B. A survey of competencies of teachers of the trainable mentally retarded. Unpublished dissertation, University of Northern Colorado, 1972.

Friedman, M. The use of ranks to avoid the assumption of normality implicit in the analysis of variance. Journal of the American Statistical Association, vol. 32, 1937, 675-701.

Fuller, F. F. Concerns of teachers: A developmental conceptualization. American Educational Research Journal, vol. 6, no. 2, March, 1969, 207-226.

Gabriel, J. An analysis of the emotional problems of the teacher in the classroom. London: Angus and Robertson, Ltd., 1957.

Glass, G. V., and Stanley, J. C. Statistical methods in education and psychology. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970.

Guidelines for personnel in the education of exceptional children. Reston, Virginia: The Council for Exceptional Children, Professional Standards and Guidelines Project, December, 1974.

Haring, N. G., and Fargo, G. A. Evaluating programs for preparing teachers of emotionally disturbed children. Exceptional Children, vol. 36, no. 3, November, 1969, 157-162.

Henry, N. B. The forty-ninth yearbook of the national society for the study of education, Part II, The education of exceptional children. Chicago: University of Chicago Press, 1950.

Lance, W. D. A clinical approach to the preparation of teachers of the mentally retarded. Mental Retardation, vol. 4, no. 2, April, 1966, 33-37.

Lantz, D. L. Changes in student teachers' concepts of self and others. Journal of Teacher Education, vol. 15, June, 1964, 200-203.

Lord, F. E. and Kirk, S. A. The education of teachers in special classes. In N. B. Henry (ed.), The forty-ninth yearbook of the national society for the study of education, Part II, The education of exceptional children. Chicago: University of Chicago Press, 1950, 103-116.

Lovelace, W. E. An evaluation of preparation programs for teachers of the mentally retarded in Minnesota. Unpublished dissertation, University of North Dakota, 1971.

Mackie, R. P., Kvaraceus, W., and Williams, H. Teachers of children who are socially and emotionally handicapped. Washington, D.C.: USGPO, 1957.

Mackie, R. P., Williams, H. M., and Dunn, L. M. Teachers of children who are mentally retarded. Washington, D.C.: USGPO, USOE Bulletin No. 3, 1957.

Mackie, R. P., Dunn, L. M., and Cain, L. F. Professional preparation for teachers of exceptional children: An overview. Washington, D.C.: USGPO, USOE Bulletin No. 6, 1959.

Meisgeir, C. The identification of successful teachers of mentally or physically handicapped children. Exceptional Children, vol. 32, no. 4, December, 1965, 229-235.

Miller, H. B. An analysis of empirically selected components of pressure, difficulty and satisfaction reported by beginning secondary school intern teachers. Unpublished dissertation, Temple University, 1970.

Moller, G. E. A comprehensive study of the problems of beginning teachers in selected large senior high schools. Unpublished dissertation, University of Nebraska, 1968.

Popham, W. J. Educational statistics--Use and interpretation. New York: Harper and Row, 1967.

Rosenshine, B., and Furst, N. Research on teacher performance criteria. In B. O. Smith (ed.), Research in teacher education--A symposium. Englewood Cliffs, New Jersey: Prentice-Hall, 1971.

Rotberg, J. M. Defining the tasks of teachers of the educable mentally retarded. Education and Training of the Mentally Retarded, vol. 3, no. 3, October, 1968, 146-149.

San Jose State College. An experimental teacher education program to prepare teachers for TMR classrooms (REX Program). San Jose, California, 1971.

Schaftenaar, L. Teachers' perceptions of their university training. Lansing, Michigan: Michigan Department of Education, Special Education Services Division Publication, 1972.

Siegel, S. Nonparametric statistics for the behavioral science. New York: McGraw-Hill Book Company, Inc., 1956.

Shores, R. E., Cegelka, P. T., and Nelson, C. M. Competency based special education teacher training. Exceptional Children, vol. 40, no. 3, November, 1973, 192-197.

Sorenson, B., and Halpert, R. Stress in student teaching. California Journal of Educational Research, vol. 19, January, 1968, 28-33.

Stake, R. E. The countenance of educational evaluation. Teachers College Record, vol. 68, 1967, 523-540.

Stufflebeam, D. E. Evaluation as enlightenment for decision making. Columbus, Ohio: College of Education, Evaluation Center, 1968.

Voelker, P. H. Administration and supervision of special education programs. In Cruickshank, W. M., and Johnson, G. O. (eds.), Education of exceptional children and youth. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967, 670-709.

Wolinsky, G. F. Theoretical and practical aspects of a teacher education program for teachers of the trainable child. American Journal of Mental Deficiency, vol. 63, May, 1959, 948-953.

Yauch, W. A. Helping the new teacher to succeed. Educational Forum, vol. 20, November, 1955, 37-38.

APPENDICES

APPENDIX A

PRE-MAILING LETTER

MICHIGAN STATE UNIVERSITY

College of Education East Lansing . Michigan . 48824

Department of Elementary and Special Education

February 19, 1975

Dear Graduate:

A persistent concern of faculty in mental retardation is the continual evaluation, modification and improvement of the training program. Aside from instructional evaluations for specific courses, students have not been systematically involved in program evaluation; and consequently, they have had only minimal impact on the total direction of the program. Recommendations of the National Council for the Accreditation of Teacher Education, the United States Office of Education, and the Council for Exceptional Children all suggest that in order to make informed decisions, all persons affected by a training program must be involved in the evaluation of that program. Simply stated, we need to know what your perceptions are in order to justify and validate what we are doing and to make decisions about what we should be doing.

The purpose of this letter is to ask for your involvement in a survey of selected graduates of the training program in mental retardation. The survey will seek your opinions concerning the value of various training goals, the adequacy of your training in respect to those goals, and the instructional methods used throughout the program.

Please indicate your willingness to respond to the survey by completing the enclosed postcard. We trust that our recognition of the importance of your involvement will be matched by your professional concern for improving training in mental retardation at Michigan State University.

Thank you very much for your help.

Sincerely,

Donald A. Burke
Professor

Thomas B. Hoeksema
Instructor

ek

APPENDIX B

POSTCARDS RETURNED BY RESPONDENTS

APPENDIX B

POSTCARDS RETURNED BY RESPONDENTS

Thomas B. Hoeksema, Instructor

Department of Special Education

115 Erickson Hall

Michigan State University

East Lansing, Michigan 48824

1. I am currently employed or have been employed previously as a teacher of the mentally impaired. YES____ NO____

   If YES, my most recent experience with the mentally impaired has been in the following type of program;
   educable____ trainable____ other (specify)___

2. I student taught with the mentally impaired in the following type of setting:
   educable____ trainable____ other (specify____

3. I would be willing to complete a further survey.
   YES____ NO____

4. Name and current address:

   _____
   _____
   _____

APPENDIX C

COVER LETTER EXPLAINING THE QUESTIONNAIRE

MICHIGAN STATE UNIVERSITY

College of Education East Lansing . Michigan . 48824

Department of Elementary and Special Education

April 22, 1975

Dear Teacher:

Thank you for your willingness to participate in this study. Enclosed is a questionnaire to be filled out by teachers of the mentally impaired who have graduated from Michigan State University during the last three years.

As you are probably aware, graduates have not been involved systematically in program evaluation in the past. We need to know how you feel about certain aspects of teaching and teacher preparation in order to validate what we are doing and in order to develop improved pre-service and in-service programs. Ultimately improved services to mentally impaired children also should result.

The questionnaire is self-explanatory and can be filled out in approximately twenty minutes. All responses are confidential so feel free to express your true feelings. In order for us to keep track of who has returned the questionnaire, we have asked for your name on the cover sheet. When we receive the completed questionnaire, your name will be removed so that your responses can no longer be identified.

Return of this questionnaire by May 6, 1975 would help us a great deal. A stamped, addressed envelope is enclosed for your convenience.

Your participation in this research contributes to our profession and to the children we all serve. Again, thank you very much for your cooperation.

Cordially,

Donald A. Burke
Professor

Thomas B. Hoeksema
Instructor

Enclosures

APPENDIX D

FOLLOW-UP LETTER TO NON-RESPONDENTS

MICHIGAN STATE UNIVERSITY

College of Education East Lansing . Michigan . 48824

Department of Elementary and Special Education

May 16, 1975

Dear Teacher:

Our records show that on May 16, 1975 we had not received your response to the Survey of Teachers of the Mentally Impaired. Through telephone contact, we have found that several people never received the survey. Since the information you can provide is crucial to the study, we have enclosed a copy of the survey with this letter.

If you have already mailed in your survey, please disregard this letter. If not, it is important that we receive your completed questionnaire as soon as possible. Your help will be greatly appreciated.

Sincerely,

Thomas B. Hoeksema
Instructor

TBH:ab

Enclosure

APPENDIX E

THE QUESTIONNAIRE USED IN THE STUDY

A SURVEY OF TEACHERS

OF THE MENTALLY IMPAIRED

INSTRUCTIONS

Please read all directions for each part of the survey carefully.

Please return in the enclosed postage-paid envelope by May 6, 1975.

TO

Thomas B. Hoeksema, Instructor
115 Erickson Hall
College of Education
Michigan State University
East Lansing, Michigan 48824

* *

Please fill in your name and address below. This information will enable us to keep track of who has returned the survey. It will be detached from the rest of the questionnaire as soon as we receive it to insure your anonymity. If you would like a copy of the results of the study, please check here. _____

NAME _____
Last First Maiden

ADDRESS _____
Street

_____
City State Zip code

PART I

SELECTED COMPETENCIES FOR TEACHERS OF THE MENTALLY IMPAIRED

Step 1

All of the competencies listed below are believed to be important for teachers of the mentally impaired. Some, however, are more crucial to successful teaching than others. Imagine that you are in the position of hiring someone to take over your job. Rate each statement below according to how important you think that competency is for the person you would hire. For those which are least important, circle the number "1"; for those which are most important, circle the number "5". You may circle a number somewhere between the two extremes.

NOTE: Please ignore the second response column. Respond to each of the statements using only the column marked Step 1.

COMPETENCY STATEMENTS	Step 1 IMPORTANCE OF THE COMPETENCY FOR THE PERSON YOU WOULD HIRE least most 1 2 3 4 5	Step 2 SELF DEVELOPMENT PRIORITIES No Low Moderate High No L M H
A. Planning Instruction		
1. Setting goals which take into account the expected adult status of students.	1 2 3 4 5	No L M H
2. Formulating instructional goals for the year.	1 2 3 4 5	No L M H
3. Organizing the sequence of goals for the year.	1 2 3 4 5	No L M H

COMPETENCY STATEMENTS	Step 1 IMPORTANCE OF THE COMPETENCY FOR THE PERSON YOU WOULD HIRE least most 1 2 3 4 5	Step 2 SELF DEVELOPMENT PRIORITIES No Low Moderate High No L M H
4. Selecting goals for specific units of instruction.	1 2 3 4 5	No L M H
5. Selecting content appropriate to identified goals.	1 2 3 4 5	No L M H
6. Preparing written lesson plans.	1 2 3 4 5	No L M H
7. Writing behaviorally stated objectives.	1 2 3 4 5	No L M H
8. Individualizing instruction.	1 2 3 4 5	No L M H
9. Breaking tasks into small steps from simple to complex.	1 2 3 4 5	No L M H
10. Choosing instructional methods for specific lessons.	1 2 3 4 5	No L M H

COMPETENCY STATEMENTS	Step 1 IMPORTANCE OF THE COMPETENCY FOR THE PERSON YOU WOULD HIRE least most 1 2 3 4 5	Step 2 SELF DEVELOPMENT PRIORITIES No Low Moderate High No L M H
11. Organizing the sequence of daily lessons.	1 2 3 4 5	No L M H
12. Finding materials appropriate to instructional goals.	1 2 3 4 5	No L M H
13. Modifying commercial teaching aids to meet specific needs of students.	1 2 3 4 5	No L M H
14. Originating new materials.	1 2 3 4 5	No L M H
B. Assessing and Evaluating Behavior		
15. Constructing informal tests for assessing a child's status.	1 2 3 4 5	No L M H
16. Administering commercially prepared tests.	1 2 3 4 5	No L M H

COMPETENCY STATEMENTS	Step 1 IMPORTANCE OF THE COMPETENCY FOR THE PERSON YOU WOULD HIRE least most 1 2 3 4 5	Step 2 SELF DEVELOPMENT PRIORITIES No Low Moderate High No L M H
17. Using the results of teacher-administered tests to develop educational plans for children.	1 2 3 4 5	No L M H
18. Interpreting data from formal tests administered by a diagnostician in developing educational plans for children.	1 2 3 4 5	No L M H
19. Carrying out preassessment strategies to determine student readiness for specific learning activities.	1 2 3 4 5	No L M H
20. Post-testing students to verify the outcomes of instruction.	1 2 3 4 5	No L M H
C. Conducting Instruction 21. Making learning tasks clear to children.	1 2 3 4 5	No L M H

COMPETENCY STATEMENTS	Step 1 IMPORTANCE OF THE COMPETENCY FOR THE PERSON YOU WOULD HIRE least most 1 2 3 4 5	Step 2 SELF DEVELOPMENT PRIORITIES No Low Moderate High No L M H
22. Operating audio-visual equipment	1 2 3 4 5	No L M H
23. Using a multi-sensory approach for children with sensory deficits.	1 2 3 4 5	No L M H
24. Carrying out instruction that is consistent with identified objectives.	1 2 3 4 5	No L M H
25. Conducting large group learning activities.	1 2 3 4 5	No L M H
26. Synchronizing different activities conducted simultaneously.	1 2 3 4 5	No L M H
27. Using behavior modification techniques.	1 2 3 4 5	No L M H
28. Providing feedback to pupils during learning.	1 2 3 4 5	No L M H

COMPETENCY STATEMENTS	Step 1 IMPORTANCE OF THE COMPETENCY FOR THE PERSON YOU WOULD HIRE least most 1 2 3 4 5	Step 2 SELF DEVELOPMENT PRIORITIES No Low Moderate High No L M H
29. Using a variety of methods for motivating students.	1 2 3 4 5	No L M H
D. Classroom Management		
30. Making classroom rules and procedures clear to students.	1 2 3 4 5	No L M H
31. Arranging the physical props in the classroom to facilitate learning.	1 2 3 4 5	No L M H
32. Handling unacceptable behavior	1 2 3 4 5	No L M H
33. Determining what is rewarding for each child.	1 2 3 4 5	No L M H
34. Administering rewards or punishments to change pupil behavior.	1 2 3 4 5	No L M H

COMPETENCY STATEMENTS	Step 1 IMPORTANCE OF THE COMPETENCY FOR THE PERSON YOU WOULD HIRE least most 1 2 3 4 5	Step 2 SELF DEVELOPMENT PRIORITIES No Low Moderate High No L M H
35. Maintaining student respect.	1 2 3 4 5	No L M H
E. Facilitating Social-Emotional Maturity		
36. Developing goals for pupils in the affective domain.	1 2 3 4 5	No L M H
37. Implementing instructional activities which promote the awareness and expression of personal values, attitudes and feelings.	1 2 3 4 5	No L M H
38. Helping students become aware of the values, attitudes, and feelings of others.	1 2 3 4 5	No L M H
39. Encouraging cooperative interpersonal relationships.	1 2 3 4 5	No L M H

COMPETENCY STATEMENTS	Step 1 IMPORTANCE OF THE COMPETENCY FOR THE PERSON YOU WOULD HIRE least most 1 2 3 4 5	Step 2 SELF DEVELOPMENT PRIORITIES No Low Moderate High No L M H
40. Adjusting your behavior according to children's moods.	1 2 3 4 5	No L M H
41. Acting as an affective model by expressing your feelings honestly and openly.	1 2 3 4 5	No L M H
42. Communicating to children that their feelings are understood.	1 2 3 4 5	No L M H
43. Helping children accept themselves.	1 2 3 4 5	No L M H
44. Promoting children's independence.	1 2 3 4 5	No L M H
F. Dealing and Relating with Other Professionals		
45. Asking for help or ideas from other staff.	1 2 3 4 5	No L M H

COMPETENCY STATEMENTS	Step 1 IMPORTANCE OF THE COMPETENCY FOR THE PERSON YOU WOULD HIRE least Most 1 2 3 4 5	Step 2 SELF DEVELOPMENT PRIORITIES No Low Moderate High No L M H
46. Seeking help for students from agencies outside the school.	1 2 3 4 5	No L M H
47. Getting to know other teachers.	1 2 3 4 5	No L M H
48. Handling administrators' observations of your teaching.	1 2 3 4 5	No L M H
49. Knowing the principal's expectations.	1 2 3 4 5	No L M H
50. Handling criticism from other teachers.	1 2 3 4 5	No L M H
51. Working with teacher aides.	1 2 3 4 5	No L M H
52. Following administrative directives.	1 2 3 4 5	No L M H
53. Tolerating different opinions without taking personal offense.	1 2 3 4 5	No L M H

COMPETENCY STATEMENTS	Step 1 IMPORTANCE OF THE COMPETENCY FOR THE PERSON YOU WOULD HIRE least most 1 2 3 4 5	Step 2 SELF DEVELOPMENT PRIORITIES No Low Moderate High No L M H
54. Consulting with regular classroom teachers.	1 2 3 4 5	No L M H
G. Working with Parents		
55. Using a variety of methods to communicate with parents.	1 2 3 4 5	No L M H
56. Dealing with parent criticisms.	1 2 3 4 5	No L M H
57. Using accepted principles of counseling, interviewing and guidance in parent conferences.	1 2 3 4 5	No L M H
58. Listening to parents with the goal of seeing their point of view.	1 2 3 4 5	No L M H
59. Obtaining information about the child from parents.	1 2 3 4 5	No L M H

COMPETENCY STATEMENTS	Step 1 IMPORTANCE OF THE COMPETENCY FOR THE PERSON YOU WOULD HIRE least most 1 2 3 4 5	Step 2 SELF DEVELOPMENT PRIORITIES No Low Moderate High No L M H
60. Enlisting parent participation in the educational planning for their child.	1 2 3 4 5	No L M H
61. Coordinating home and school approaches to children.	1 2 3 4 5	No L M H
62. Responding to parents in ways which lead to support of the school program.	1 2 3 4 5	No L M H
63. Helping parents to deal with their children at home.	1 2 3 4 5	No L M H

Step 2 (Do Not do this step until you have completed Step 1.)

Most teachers are aware that they can increase their teaching competence. However, in some areas you presently may need little or no improvement, while in others you may be very eager to improve your skill. Respond to each of the competency statements on the preceding pages according to the following scale:

No - No Need: I presently do not need additional skill in this teaching competency.

L - Low Priority: I would not go out of my way to develop additional skill in this teaching competency.

M - Moderate Priority: I would find it helpful to improve my skill in this teaching competency.

H - High Priority: I definitely would find it very helpful to improve my skill in this teaching competency.

Please return to Page 2 and complete Step 2 by circling the appropriate responses in the second column marked SELF DEVELOPMENT PRIORITIES.

PART II

THE DEVELOPMENT OF TEACHING COMPETENCE

Competence in many of the tasks of teaching develops over a long time period as a result of both formal preparation and experience. A teacher preparation program cannot be expected to develop total competence in all areas by the time of graduation. The development of competence in some areas may take place primarily after graduation through on-the-job experience, in-service training, conferences, workshops, graduate level coursework, etc. Please do the following:

> For each of the seven competency areas, rank the four possible sources of competency development by writing a "1" below the source where you think a major portion of the development of competence can occur, a "2" below the source where the next largest portion of competency development can occur, etc.

COMPETENCY AREA	SOURCES[1]: Undergraduate Program	Graduate Level Courses	In-Service Training	On-the job Experience
A. Planning Instruction				
B. Assessing and Evaluating Behavior				
C. Conducting Instruction				
D. Classroom Management				
E. Facilitating Social-Emotional Maturity				
F. Dealing and Relating with Other Professionals				
G. Working with Parents				

[1]Definitions: Undergraduate Program - all coursework and experience prior to certification.

Graduate Level Courses - all coursework and experience for which university credit is received after completing a Bachelor's degree.

In-service Training - workshops, conferences, consultant help, "hands-on" training experiences with children, etc., which do not result in university credit.

On-the-job Experience - actual employment experience as a teacher of mentally impaired children.

PART III

EMPHASES OF THE UNDERGRADUATE PREPARATION PROGRAM

Assume that some attention should be given to each of the seven major competency areas during an undergraduate preparation program. Please rank the major competencies from "1" to "7" according to the amount of emphasis you think they should receive. Place a "1" by the competency area which you think should receive the most emphasis, a "2" by the competency area which should receive the next most emphasis, etc., until finally giving a "7" to the competency area which you think should receive the least emphasis during an undergraduate program.

_____ Planning Instruction
_____ Assessing and Evaluating Behavior
_____ Conducting Instruction
_____ Classroom Management
_____ Facilitating Social-Emotional Maturity
_____ Dealing and Relating with Other Professionals
_____ Working with Parents

PART IV

OPEN-ENDED QUESTIONS

Up to this point you have been asked to respond to specific items. In this part of the questionnaire you are asked to respond to questions of a more general nature. You may raise issues that may not have been included in earlier sections or reinforce positions you have taken earlier. There are no correct answers. We seek your candid responses.

1. In what professional areas do you feel that teachers of the mentally impaired need to improve their skills and competencies?

_____

_____

_____

_____

2. If you were in the position of redesigning a teacher education program, what changes would you make?

_____

_____

_____

PART V

PERSONAL AND VOCATIONAL DATA

We would like to know a little about you so that we can see how different groups of people feel about the items in the rest of the survey.

1. Are you currently employed or have you been employed previously as a teacher of the mentally impaired?

YES____ NO____

2. If YES, in what type of program for the mentally impaired have you been employed most recently?

a. _____educable classroom
b. _____trainable classroom
c. _____educable and trainable classroom combined
d. _____other (specify) _____

3. How many years of teaching experience have you had? (Include both regular and special education experience; do not count student teaching; count the current year as one full year.)

0_____ 1_____ 2_____ 3_____

4. Your sex: Female_____ Male_____

5. Your age: _____

APPENDIX F

OBSERVED FREQUENCY DISTRIBUTIONS FOR THE SIXTY-THREE SPECIFIC TEACHING COMPETENCIES

APPENDIX F

OBSERVED FREQUENCY DISTRIBUTIONS FOR THE

SIXTY-THREE SPECIFIC TEACHING COMPETENCIES

	Importance					Self Development Priorities			
	Least				Most	NO	LOW	MOD	HIGH
	1	2	3	4	5	1	2	3	4
1. Setting goals which take into account the expected adult status of students									
N	0	6	19	31	41	7	12	20	6
%	0	6.19	19.59	31.96	42.27	15.56	26.67	44.44	13.33
2. Formulating instructional goals for the year									
N	0	3	20	35	40	16	28	43	9
%	0	3.06	20.41	35.71	40.82	16.67	29.17	44.79	9.38
3. Organizing the sequence of goals for the year									
N	0	5	28	34	32	7	37	39	13
%	0	5.05	28.28	34.34	32.32	7.29	38.54	40.63	13.54
4. Selecting goals for specific units of instruction									
N	0	3	18	40	38	15	32	43	6
%	0	3.03	18.18	40.40	38.38	15.63	33.33	44.79	6.25
5. Selecting content appropriate to identified goals									
N	1	1	7	37	53	17	31	43	5
%	1.01	1.01	7.07	37.37	53.54	17.71	32.29	44.79	5.21
6. Preparing written lesson plans									
N	18	20	35	16	10	60	29	7	0
%	18.18	20.20	35.35	16.16	10.10	62.50	30.21	7.29	0
7. Writing behaviorally stated objectives									
N	15	22	26	21	13	37	36	20	2
%	15.46	22.68	26.80	21.65	13.40	38.95	37.89	21.05	2.11
8. Individualizing instruction									
N	0	0	4	8	86	24	11	33	27
%	0	0	4.08	8.16	87.76	25.26	11.58	34.74	28.42
9. Breaking tasks into small steps from simple to complex									
N	1	1	2	24	70	23	11	39	22
%	1.02	1.02	2.04	24.49	71.43	24.21	11.58	41.05	23.16

	Importance					Self Development Priorities			
	Least				Most	NO	LOW	MOD	HIGH
	1	2	3	4	5	1	2	3	4
10. Choosing instructional methods for specific lessons									
N	1	2	12	44	39	18	16	50	11
%	1.02	2.04	12.24	44.90	39.80	18.95	16.84	52.63	11.58
11. Organizing the sequence of daily lessons									
N	5	9	22	37	25	35	32	25	3
%	5.10	9.18	22.45	37.76	25.51	36.84	33.68	26.32	3.16
12. Finding materials appropriate to instructional goals									
N	0	1	6	38	53	14	14	46	21
%	0	1.02	6.12	38.78	54.08	14.74	14.74	48.42	22.11
13. Modifying commercial teaching aids to meet specific needs of students									
N	0	6	12	33	47	16	26	41	12
%	0	6.12	12.24	33.67	47.96	16.84	27.37	43.16	12.63
14. Originating new materials									
N	1	4	22	25	46	7	13	44	31
%	1.02	4.08	22.45	25.51	46.94	7.37	13.68	46.32	32.63
15. Constructing informal tests for assessing a child's status									
N	4	6	13	41	34	14	14	36	31
%	4.08	6.12	13.27	41.84	34.69	14.74	14.74	37.89	32.63
16. Administering commercially prepared tests									
N	22	24	25	21	6	28	31	24	11
%	22.45	24.49	25.51	21.43	6.12	29.79	32.98	25.53	11.70
17. Using the results of teacher-administered tests to develop educational plans for children									
N	0	6	14	33	45	10	25	35	25
%	0	6.12	14.29	33.67	45.92	10.53	26.32	36.84	26.32
18. Interpreting data from formal tests administered by a diagnostician in developing educational plans for children									
N	7	16	27	26	23	7	20	47	22
%	7.07	16.16	27.27	26.26	23.23	7.29	20.83	48.96	22.92
19. Carrying out preassessment strategies to determine student readiness for specific learning activities									
N	0	5	13	33	47	12	20	48	15
%	0	5.10	13.27	33.67	47.96	12.63	21.05	50.53	15.79

	Importance					Self Development Priorities			
	Least				Most	NO	LOW	MOD	HIGH
	1	2	3	4	5	1	2	3	4
20. Post-testing students to verify the outcomes of instruction									
N	0	4	13	24	58	25	28	35	8
%	0	4.04	13.13	24.24	58.59	26.04	29.17	36.46	8.33
21. Making learning tasks clear to children									
N	0	1	2	15	81	30	20	36	10
%	0	1.01	2.02	15.15	81.82	31.25	20.83	37.50	10.42
22. Operating audio-visual equipment									
N	10	25	31	23	10	48	30	14	4
%	10.10	25.25	31.31	23.23	10.10	50.00	31.25	14.58	4.17
23. Using a multi-sensory approach for children with sensory deficits									
N	0	0	5	24	70	12	8	47	29
%	0	0	5.05	24.24	70.71	12.50	8.33	48.96	30.21
24. Carrying out instruction that is consistent with identified objectives									
N	0	2	9	38	50	21	23	45	7
%	0	2.02	9.09	38.38	50.51	21.88	23.96	46.88	7.29
25. Conducting large group learning activities									
N	12	14	40	21	12	37	31	24	4
%	12.12	14.14	40.40	21.21	12.12	38.54	32.29	25.00	4.17
26. Synchronizing different activities conducted simultaneously									
N	1	6	11	31	49	20	16	32	27
%	1.02	6.12	11.22	31.63	50.00	21.05	16.84	33.68	28.42
27. Using behavior modification techniques									
N	3	5	24	31	36	15	20	41	20
%	3.03	5.05	24.24	31.31	36.36	15.63	20.83	42.71	20.83
28. Providing feedback to pupils during learning									
N	0	0	5	37	57	35	25	28	8
%	0	0	5.05	37.37	57.58	36.46	26.04	29.17	8.33
29. Using a variety of methods for motivating students									
N	0	0	2	19	78	14	8	44	29
%	0	0	2.02	19.19	78.79	14.74	8.42	46.32	30.53
30. Making classroom rules and procedures clear to students									
N	0	0	1	21	77	45	23	21	7
%	0	0	1.01	21.21	77.78	46.88	23.96	21.88	7.29

		Importance					Self Development Priorities			
		Least				Most	NO	LOW	MOD	HIGH
		1	2	3	4	5	1	2	3	4
31.	Arranging the physical props in the classroom to facilitate learning									
	N	0	7	14	25	52	32	29	23	11
	%	0	7.14	14.29	25.51	53.06	33.68	30.53	24.21	11.58
32.	Handling unacceptable behavior									
	N	0	0	4	13	82	16	6	43	31
	%	0	0	4.04	13.13	82.83	16.67	6.25	44.79	32.29
33.	Determining what is rewarding for each child									
	N	0	2	5	23	69	25	21	40	10
	%	0	2.02	5.05	23.23	69.70	26.04	21.88	41.67	10.42
34.	Administering rewards or punishments to change pupil behavior									
	N	1	2	10	34	52	27	17	42	10
	%	1.01	2.02	10.10	34.34	52.53	28.13	17.71	43.75	10.42
35.	Maintaining student respect									
	N	0	2	13	15	69	46	26	18	6
	%	0	2.02	13.13	15.15	69.70	47.92	27.08	18.75	6.25
36.	Developing goals for pupils in the affective domain									
	N	1	0	11	32	55	14	21	40	21
	%	1.01	0	11.11	32.32	55.56	14.58	21.88	41.67	21.88
37.	Implementing instructional activities which promote the awareness and expression of personal values, attitudes, and feelings									
	N	0	2	11	33	53	9	11	46	30
	%	0	2.02	11.11	33.33	53.54	9.38	11.46	47.92	31.25
38.	Helping students become aware of the values, attitudes and feelings of others									
	N	0	1	5	24	69	12	8	43	33
	%	0	1.01	5.05	24.24	69.70	12.50	8.33	44.79	34.38
39.	Encouraging cooperative interpersonal relationships									
	N	0	0	0	27	72	15	14	38	29
	%	0	0	0	27.27	72.73	15.63	14.58	39.58	30.21
40.	Adjusting behavior according to children's moods									
	N	2	4	19	31	43	30	33	27	6
	%	2.02	4.04	19.19	31.31	43.43	31.25	34.38	28.13	6.25

	Importance					Self Development Priorities			
	Least				Most	NO	LOW	MOD	HIGH
	1	2	3	4	5	1	2	3	4
41. Acting as an affective model by expressing feelings honestly and openly									
N	0	0	10	29	60	40	28	20	8
%	0	0	10.10	29.29	60.61	41.67	29.17	20.83	8.33
42. Communicating to children that their feelings are understood									
N	0	0	4	24	71	33	19	34	10
%	0	0	4.04	24.24	71.72	34.38	19.79	35.42	10.42
43. Helping children accept themselves									
N	0	0	3	11	85	16	18	36	26
%	0	0	3.03	11.11	85.86	16.67	18.75	37.50	27.08
44. Promoting children's independence									
N	0	0	0	12	87	20	16	32	28
%	0	0	0	12.12	87.88	20.83	16.67	33.33	29.17
45. Asking for help or ideas from other staff									
N	0	1	15	43	40	51	23	18	4
%	0	1.01	15.15	43.43	40.40	53.13	23.96	18.75	4.17
46. Seeking help for students from agencies outside the school									
N	0	2	11	33	52	26	16	34	20
%	2.04	11.22	33.67	53.06	27.08	16.67	35.42	20.83	
47. Getting to know other teachers									
N	2	6	27	36	28	55	26	14	1
%	2.02	6.06	27.27	36.36	28.28	57.29	27.08	14.58	1.04
48. Handling administrators' observations of your teaching									
N	3	6	33	33	24	46	26	19	3
%	3.03	6.06	33.33	33.33	24.24	48.94	27.66	20.21	3.19
49. Knowing the principal's expectations									
N	2	7	29	36	25	41	29	20	4
%	2.02	7.07	29.29	36.36	25.25	43.62	30.85	21.28	4.26
50. Handling criticism from other teachers									
N	2	7	36	36	18	40	34	17	4
%	2.02	7.07	36.36	36.36	18.18	42.11	35.79	17.89	4.21
51. Working with teacher aides									
N	2	4	11	27	54	41	18	16	18
%	2.04	4.08	11.22	27.55	55.10	44.09	19.35	17.20	19.35
52. Following administrative directives									
N	3	5	31	39	21	47	35	10	3
%	3.03	5.05	31.31	39.39	21.21	49.47	36.84	10.53	3.16

		Importance					Self Development Priorities			
		Least				Most	NO	LOW	MOD	HIGH
		1	2	3	4	5	1	2	3	4
53.	Tolerating different opinions without taking personal offense									
	N	1	2	18	29	49	38	37	18	2
	%	1.01	2.02	18.18	29.29	49.49	40.00	38.95	18.95	2.11
54.	Consulting with regular classroom teachers									
	N	5	5	17	32	40	42	25	20	8
	%	5.05	5.05	17.17	32.32	40.40	44.21	26.32	21.05	8.42
55.	Using a variety of methods to communicate with parents									
	N	0	2	9	32	56	15	16	40	25
	%	0	2.02	9.09	32.32	56.57	15.63	16.67	41.67	26.04
56.	Dealing with parent criticism									
	N	0	3	7	36	53	23	23	30	20
	%	0	3.03	7.07	36.36	53.54	23.96	23.96	31.25	20.83
57.	Using accepted principles of counseling, interviewing, and guidance in parent conferences									
	N	2	6	16	30	45	12	20	36	28
	%	2.02	6.06	16.16	30.30	45.45	12.50	20.83	37.50	29.17
58.	Listening to parents with the goal of seeing their point of view									
	N	0	0	11	34	54	34	24	26	11
	%	0	0	11.11	34.34	54.55	35.79	25.26	27.37	11.58
59.	Obtaining information about the child from parents									
	N	1	6	11	29	52	28	21	33	13
	%	1.01	6.06	11.11	29.29	52.53	29.47	22.11	34.74	13.68
60.	Enlisting parent participation in the educational planning for their child									
	N	0	3	16	24	56	16	16	40	23
	%	0	3.03	16.16	24.24	56.57	16.84	16.84	42.11	24.21
61.	Coordinating home and school approaches to children									
	N	0	3	17	32	47	17	8	41	29
	%	0	3.03	17.17	32.32	47.47	17.89	8.42	43.16	30.53
62.	Responding to parents in ways which lead to support of the school program									
	N	1	1	10	30	56	22	22	34	16
	%	1.02	1.02	10.20	30.61	57.14	23.40	23.40	36.17	17.02
63.	Helping parents to deal with their children at home									
	N	1	2	14	28	54	14	5	45	31
	%	1.01	2.02	14.14	28.28	54.55	14.74	5.26	47.37	32.63

APPENDIX G

CHI-SQUARE TEST OF HOMOGENEITY SHOWING SIGNIFICANT DIFFERENCES IN RESPONDENTS' PERCEPTIONS OF THE IMPORTANCE OF SPECIFIC TEACHING COMPETENCIES

APPENDIX G

CHI-SQUARE TEST OF HOMOGENEITY SHOWING SIGNIFICANT DIFFERENCES IN RESPONDENTS' PERCEPTIONS OF THE IMPORTANCE OF SPECIFIC TEACHING COMPETENCIES

Numbers given are observed frequencies.

	Importance				
	Least				Most
	1	2	3	4	5
16. Administering commercially prepared tests					
Educable Teachers	11	18	11	20	0
Trainable Teachers	8	5	11	1	0

Educable Teachers: Mean = 2.67; Standard Deviation = 1.12
Trainable Teachers: Mean = 2.20; Standard Deviation = .94
Chi-Square = 12.766 d.f. = 3
Significant at .01

18. Interpreting data from formal tests administered by a diagnostician in developing educational plans for children					
Educable Teachers	4	11	12	18	16
Trainable Teachers	3	2	13	4	3

Educable Teachers: Mean = 3.51; Standard Deviation = 1.25
Trainable Teachers: Mean = 3.08; Standard Deviation = 1.12
Chi-Square = 11.091 d.f. = 4
Significant at .05

25. Conducting large group learning activities					
Educable Teachers	0	20	20	12	9
Trainable Teachers	0	1	13	8	3

Educable Teachers: Mean = 3.16; Standard Deviation = .94
Trainable Teachers: Mean = 3.52; Standard Deviation = .76
Chi-Square = 9.02 d.f. = 3
Significant at .05

	Importance				
	Least 1	2	3	4	Most 5
51. Working with teacher aides					
Educable Teachers	0	0	15	18	27
Trainable Teachers	0	0	1	5	19

Educable Teachers: Mean = 4.20; Standard Deviation = .82
Trainable Teachers: Mean = 4.72; Standard Deviation = .54
Chi-Square = 7.920 d.f. = 2
Significant at .025

54. Consulting with regular classroom teachers					
Educable Teachers	0	0	12	18	31
Trainable Teachers	0	0	12	8	5

Educable Teachers: Mean = 4.31; Standard Deviation = .79
Trainable Teachers: Mean = 3.72; Standard Deviation = .79
Chi-Square = 9.159 d.f. = 2
Significant at .01

54. Consulting with regular classroom teachers					
Inexperienced Teachers	0	0	12	11	5
Experienced Teachers	0	0	15	21	34

Inexperienced: Mean = 3.75; Standard Deviation = .75
Experienced: Mean = 4.27; Standard Deviation = .80
Chi-Square = 8.602 d.f. = 2
Significant at .025

APPENDIX H

CHI-SQUARE TEST OF HOMOGENEITY SHOWING SIGNIFICANT DIFFERENCES IN RESPONDENTS' SELF DEVELOPMENT PRIORITIES FOR SPECIFIC TEACHING COMPETENCIES

APPENDIX H

CHI-SQUARE TEST OF HOMOGENEITY SHOWING SIGNIFICANT DIFFERENCES IN RESPONDENTS' SELF DEVELOPMENT PRIORITIES FOR SPECIFIC TEACHING COMPETENCIES

Numbers given are observed frequencies.

	Self Development Priorities			
	NO 1	LOW 2	MOD 3	HIGH 4
10. Choosing instructional methods for specific lessons				
Educable Teachers	0	25	29	5
Trainable Teachers	0	3	19	2

Educable Teachers: Mean = 2.66; Standard Deviation = .70
Trainable Teachers: Mean = 2.96; Standard Deviation = .45
Chi-Square = 7.18 d.f. = 2
Significant at .05

16. Administering commercially prepared tests				
Inexperienced Teachers	3	13	8	2
Experienced Teachers	25	17	16	9

Inexperienced: Mean = 2.35; Standard Deviation = .80
Experienced: Mean = 2.13; Standard Deviation = 1.07
Chi-Square = 8.521 d.f. = 3
Significant at .05

17. Using the results of teacher-administered tests to develop educational plans for children				
Inexperienced Teachers	2	5	16	4
Experienced Teachers	8	20	18	21

Inexperienced: Mean = 2.81; Standard Deviation = .79
Experienced: Mean = 2.78; Standard Deviation = 1.03
Chi-Square = 8.851 d.f. = 3
Significant at .05

	Self Development Priorities			
	NO	LOW	MOD	HIGH
	1	2	3	4
29. Using a variety of methods for motivating students				
Inexperienced Teachers	0	3	18	5
Experienced Teachers	0	19	26	23
Inexperienced Mean = 3.08; Standard Deviation = .59				
Experienced: Mean = 3.06; Standard Deviation = .78				
Chi-Square = 7.37 d.f. = 2				
Significant at .025				
31. Arranging the physical props in the classroom to facilitate learning				
Inexperienced Teachers	5	10	10	1
Experienced Teachers	27	19	12	10
Inexperienced: Mean = 2.27; Standard Deviation = .83				
Experienced: Mean = 2.07; Standard Deviation = 1.08				
Chi-Square = 8.368 d.f. = 3				
Significant at .05				
45. Asking for help or ideas from other staff				
Inexperienced Teachers	9	10	8	0
Experienced Teachers	42	12	14	0
Inexperienced: Mean = 1.96; Standard Deviation = .81				
Experienced: Mean = 1.59; Standard Deviation = .81				
Chi-Square = 6.730 d.f. = 2				
Significant at .05				
46. Seeking help for students from agencies outside the school				
Educable Teachers	20	11	21	8
Trainable Teachers	1	4	8	11
Educable Teachers: Mean = 2.28; Standard Deviation = 1.08				
Trainable Teachers: Mean = 3.21; Standard Deviation = .88				
Chi-Square = 13.879 d.f. = 3				
Significant at .005				

	Self Development Priorities			
	NO	LOW	MOD	HIGH
	1	2	3	4

47. Getting to know other teachers

Inexperienced Teachers	10	12	5	0
Experienced Teachers	45	13	10	0

Inexperienced: Mean = 1.81; Standard Dhviation = .74
Experienced: Mean = 1.49; Standard Deviation = .74
Chi-Square = 7.723 d.f. = 2
Significant at .025

48. Handling administrators' observations of your teaching

Inexperienced Teachers	7	11	8	0
Experienced Teachers	38	15	14	0

Inexperienced: Mean = 2.04; Standard Deviation = .77
Experienced: Mean = 1.64; Standard Deviation = .81
Chi-Square = 6.867 d.f. = 2
Significant at .05

49. Knowing the principal's expectations

Inexperienced Teachers	6	11	9	0
Experienced Teachers	35	17	15	0

Inexperienced: Mean = 2.12; Standard Deviation = .77
Experienced: Mean = 1.70; Standard Deviation = .82
Chi-Square = 6.483 d.f. = 2
Significant at .05

52. Following administrative directives

Inexperienced Teachers	6	12	8	0
Experienced Teachers	40	23	5	0

Inexperienced: Mean = 2.08; Standard Deviation = .74
Experienced: Mean = 1.49; Standard Deviation = .63
Chi-Square = 13.136 d.f. = 2
Significant at .005

Typed and Printed in the U.S.A.
Professional Thesis Preparation
Cliff and Paula Haughey
144 Maplewood Drive
East Lansing, Michigan 48823
Telephone (517) 337-1527

MICHIGAN STATE UNIV. LIBRARIES
31293100201957