THE RELATION OF ELEMENTARY STUDENT TEACHER EMPATHY (AFFECTIVE SENSITIVITY) CHANGE TO SUPERVISING TEACHER EMPATHY AND STUDENT TEACHING SUCCESS

Thesis for the Degree of Ed. D.
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ABSTRACT

THE RELATION OF ELEMENTARY STUDENT TEACHER EMPATHY (AFFECTIVE SENSITIVITY) CHANGE TO SUPERVISING TEACHER EMPATHY AND STUDENT TEACHING SUCCESS

by Robert Glenn Underhill

Body of Abstract

The purpose of this investigation was to determine the relation of elementary student teacher empathy change to supervising teacher empathic ability and student teaching success. The two major hypotheses were:

I. A positive relation exists between supervising teacher empathic ability prior to student teaching and elementary education major empathic ability change during student teaching.

II. A positive relation exists between elementary education major empathic ability prior to student teaching and a rating of student teaching success by a university coordinator.

Subjects utilized to test the first hypothesis were forty-four student teacher-supervising teacher pairs. Fifty-seven student teachers were utilized in the examination of data relative to the second major hypothesis.

The population utilized was representative of the student teachers and supervising teachers in the

Michigan State University student teaching program. Assignment of student teachers with supervising teachers was random with respect to variables related to empathic ability.

Affective Sensitivity Scale scores constituted the criterion measure of empathic ability. The instrument consisted of videotaped excerpts of actual counseling sessions. Each of the forty-one scenes was from 20 to 150 seconds in duration. After viewing each excerpt, the respondant selected appropriate multiple-choice statements which he believed best described the counselee's feelings concerning the topic of discussion and his attitude toward the counselor.

Student teachers and supervising teachers were pretested and student teachers were posttested. A three-way analysis of variance statistic was selected to test the first hypothesis. Independent variables were Supervising Teacher Empathic Ability (E), Instructional Level (L) and Elementary Education Major Empathic Ability Prior to Student Teaching (P). The criterion measure for the dependent variable was student teacher posttest scale score.

Coordinator ratings of student teaching success were made on the Success Rating Scale, a seven-point composite-rank instrument. A Pearson product-moment correlation was made between ratings and student teacher pretest scale scores.

The null form of the first hypothesis was rejected at <.05 level. A positive relation existed between student teacher empathy change and supervising teacher empathy level. In general student teachers tended to gravitate toward the empathy level of the supervising teacher. A notable exception was that low empathy student teachers placed with high empathy supervisors tended to decrease in empathy. The null form of the second hypothesis was accepted. No significant correlation existed between pre-student teaching empathy levels of elementary student teachers and success ratings.

Problems examined yielded the following information:

The mean empathic scale score for supervising teachers was 44.00. This was significantly lower (<.01 level) than student teacher pretest empathy which was 49.23. The normative population mean for the scale was 50.65.

Student teacher pretest empathy was related at <.01 level to posttest empathy. Those who were high tended to remain high and those who were low tended to remain low.

No differences existed between student teacher or supervising teacher empathic ability on the basis of instructional level (K-2 versus 3-6).

THE RELATION OF ELEMENTARY STUDENT TEACHER EMPATHY (AFFECTIVE SENSITIVITY) CHANGE TO SUPERVISING TEACHER EMPATHY AND STUDENT TEACHING SUCCESS

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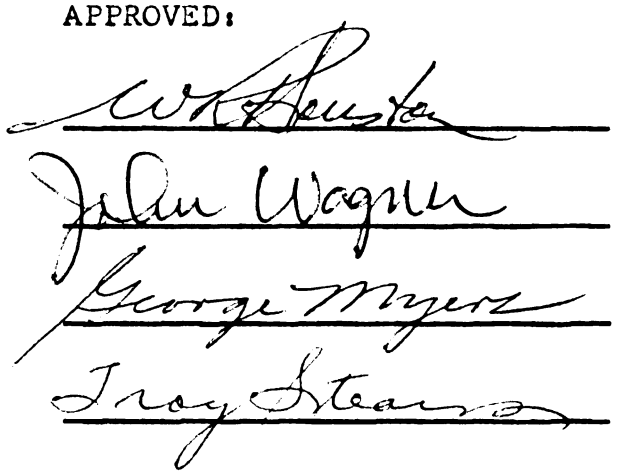

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By

Robert Glenn Underhill

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PREFACE

Educational research is frequently culminated only through the combined efforts of many individuals. The writer is deeply indebted and grateful to each individual whose counsel and service was so generously given towards the fruition of the present study.

Magnanimous thanks are most humbly extended to Dr. W. Robert Houston whose endless energies guided the research from inception to conclusion. As the study director, he critically appraised each facet of the research from design to final editing. His support of the ideas and his belief in the researcher were of inestimable value.

Special thanks are extended to Steven Danish whose first-hand experience with the Affective Sensitivity Scale was extremely helpful in the design and development of the study. Kent Gustafson of the Student Teaching Office and Fred Henderson and staff of the Closed Circuit Television station made special arrangements for equipment and made emergency repairs on short notice many times.

Appreciation is expressed to center coordinators Dr. Hugo David, Judd Field, Flora Fierstein, Dr. Roy Hanes, Lee Majoewsky, Arden Moon, John Phillips, Paul Slocum and their coworkers who were most facilitative. Dr. Andrew Porter and his staff of research consultants were most helpful.

The investigator also wishes to extend thanks to the many student teachers and supervising teachers who participated in the research. Their cooperation and personal contributions to educational research are appreciated.

The writer's committee members, Dr. George Myers, Dr. Troy Stearns and Dr. John Wagner raised important theoretical and procedural issues. Their critical appraisals of various aspects of the research were most welcomed.

To his wife, Ethel Marie, the writer is especially indebted. She was a constant source of support, understanding and love. Her talents for organization and manuscript typing were extensively utilized. She gave of her energies in a most dedicated and unselfish manner.

Each individual mentioned is deserving of great thanks. The indebtedness which one feels at a time such as this is nearly overwhelming. The writer expresses great joy and gratitude to each who made a contribution towards the successful conclusion of this research.

R. G. U.

Michigan State University
East Lansing, Michigan
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CHAPTER I

THE EVOLUTION OF THE RESEARCH STUDY

The demands of a dynamic, changing society place grave responsibilities on the nation's educational system. Schools are expected to produce capable individuals who are aggressive, confident, and well-trained. Educating people who meet such standards requires a continuous reappraisal of individuals who function within the society and of the professionals who train them.[1] Perceptual psychologists[2,3] appraised individual behavior by studying the unique nature of individual reality perceptions. They viewed individual perceptions as selective and purposive structures which were based upon the unique background experiences

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[1]Association for Supervision and Curriculum Development, Toward Better Teaching, a Report of Current Practices, 1949 Yearbook of the Association for Supervision and Curriculum Development (Washington, D.C.: National Education Association, 1949).

[2]Arthur W. Combs, The Professional Education of Teachers (Boston: Allyn and Bacon, Inc., 1965).

[3]Arthur W. Combs and Donald Snygg, Individual Behavior (New York: Harper and Row, Publishers, 1949).

of the individual.[4] Piaget[5] pioneered in the study of children's reality perceptions, and Jerome Bruner's extensive work with discovery learning in curricula[6,7] also explored these perceptions. From their research it became clear that the child's perceptions were expanded and modified through exploration as he assimilated and accommodated new information and expanded his problem solving abilities. Formal education structures must recognize and accommodate these uniquenesses.

Teachers must be trained who can help children improve their learning efficiency. A fundamental element in this process is the diagnostic ability of the teacher. Monroe,[8] Lee[9] and McDonald[10] stressed that

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[4]Earl C. Kelley, "The Full Functioning Self," Perceiving, Behaving, Becoming, 1962 Yearbook of the Association for Supervision and Curriculum Development (Washington, D.C.: National Education Association, 1962), pp. 9-20.

[5]John H. Flavell, The Developmental Psychology of Jean Piaget (Princeton: Van Nostrand, 1963).

[6]Jerome S. Bruner, The Process of Education (Cambridge: Harvard University Press, 1960).

[7]Jerome S. Bruner, Toward a Theory of Instruction (Cambridge: Harvard University Press, 1966).

[8]Walter S. Monroe, Encyclopedia of Educational Research (New York: The Macmillan Company, 1950), p. 315.

[9]Dorris May Lee, "Teaching and Evaluation," Evaluation as Feedback and Guide, 1967 Yearbook of the Association for Supervision and Curriculum Development (Washington, D.C.: National Education Association, 1967), p. 73.

[10]Frederick J. McDonald, Educational Psychology (2d ed.; Belmont, Calif.: Wadsworth Publishing Company, Inc., 1965), pp. 43-69.

a teacher must be able to make accurate diagnoses of learning difficulties and to make appropriate decisions to alleviate specific instructional problems. Empathic child-centered decision-making necessarily implies teacher knowledge of subject matter and child growth and development patterns. Additionally, knowledge of student emotive states and reactions are of critical importance in making decisions.[11] Only through the combined awarenesses of students' perceptions and feelings can teachers maintain full control of the instructional process. The Association for Supervision and Curriculum Development stated that two of the seven characteristics of good teaching are (1) to encourage discovery, creativity and help achieve new insights, and (2) to guide pupil learning and behavior to develop self-direction and reliance.[12] This stance is supported by Monroe[13] who reported that lack of sympathetic understanding of pupils is one of the major reasons teachers fail.

Research by Kagan et al demonstrated that the ability to make sound decisions in interpersonal relationships was greatly influenced by the empathic ability

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[11]Sidney Hook, Education for Modern Man (New York: Alfred A. Knoft, 1963), p. 225.

[12]Frederick Shaw, "The Changing Curriculum," Review of Educational Research, XXXI (June, 1966), pp. 343-350.

[13]Monroe, op. cit., p. 1448.

of the decision-maker.[14] Since empathic ability is an important component of teaching and decision-making, it is an important variable in teacher training. Professionals and laymen alike have long accepted student teaching as the most influential part of teacher-education.[15,16,17,18] The present study was designed to evaluate differences in empathic ability at the termination of student teaching between student teachers who were placed with supervising teachers of high and low empathic levels.

Formulation of the Hypotheses of the Study

Major Conceptualizations

Previous writers and researchers have not agreed on a theoretical definition of empathy.

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[14]Norman Kagan, David R. Krathwohl *et al.*, *Studies in Human Interaction* (East Lansing, Mich.: Educational Publication Services, College of Education, Michigan State University, 1967).

[15]James Bryant Conant, *The Education of American Teachers* (New York: McGraw-Hill Book Company, 1963), p. 142.

[16]Monroe, *op. cit.*, p. 1363.

[17]National Commission on Teacher Education and Professional Standards, *Who's in Charge Here?* (Washington, D.C.: National Education Association, 1966), p. 1.

[18]Joint Committee on State Responsibility for Student Teaching, *A New Order in Student Teaching* (Washington, D.C.: National Commission on Teacher Education and Professional Standards, National Education Association, 1967), p. 1.

Rogers[19] defined empathy as role-playing. Such a definition restricts the concept to uni-dimensionality. Allport[20] defined empathy as the ability of the individual to "put oneself in another's shoes." This definition was closely akin to Dymond's[21,22] definition of empathy as "the imaginitive transposing of oneself into the thinking, feeling and acting of another and so structuring the world as he does." The latter was used in the present research because it gives explicit recognition of the multi-dimensionality of empathy and lends itself more readily to operationalization.[23]

Affective sensitivity is one dimension or component of empathy. Kagan, Krathwohl and Farquhar defined affective sensitivity as "a person's ability to detect

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[19]Carl R. Rogers, "What Psychology Has to Offer to Teacher Education," Mental Health and Teacher Education, 46th Yearbook of the Association for Student Teaching (Dubuque: Wm. C. Brown Co., Inc., 1967).

[20]G. W. Allport, "The Historical Background of Modern Social Psychology," Handbook of Social Psychology, ed. G. A. Lindzey (Cambridge, Mass.: Addison-Wesley, 1954), pp. 3-57.

[21]Rosalind F. Dymond, "A Preliminary Investigation of the Relation of Insight and Empathy," Journal of Consulting Psychology, XII, No. 4 (July-August, 1948), pp. 228-233.

[22]Rosalind F. Dymond, "A Scale for the Measurement of Empathic Ability," Journal of Consulting Psychology, XIII, No. 2 (April, 1949), p. 127.

[23]Kagan et al., op. cit. For a comprehensive discussion of definitions and theoretical constructs of empathy, the reader is referred to pages 459-472.

and describe the immediate affective state of another."[24] The present research was a study of changes in affective sensitivity during student teaching.

Empathy as an Important Component of the Teaching-Learning Process

Perceptual psychology has been very influential in educational theory since Combs and Snygg published Individual Behavior.[25] In the late 'forties they utilized the framework of perceptual psychology to develop a theory of individual behavior.

Perceptualists emphasized that learning is a very individualized process; it is a change in the learner's perception of reality. Learning is the discovery of personal meaning in newly acquired information and skills.[26] As Weir stated, "Meaning is the order imposed upon experience by the individual as he becomes aware of the interrelationships between the self and the phenomena encountered in his experience."[27] Within this framework, the teacher is one who stimulates individual discoveries in the pursuit of personal

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[24] Ibid., p. 131.

[25] Combs and Snygg, loc. cit.

[26] Arthur W. Combs, The Professional Education of Teachers (Boston: Allyn and Bacon, Inc., 1965), p. 27.

[27] Edward C. Weir, "The Meaning of Learning and the Learning of Meaning," Phi Delta Kappan, XLVI, No. 6 (February, 1965), p. 281.

meaning. According to Combs,[28] teachers must be "growth" rather than "manipulation" oriented.

Perceptualists emphasize that facts are the tools through which people achieve new meanings: thinking and learning are recognized as very subjective processes. They point out, for example, that principles of logic exist only in the minds of those who believe them. The teacher who uses logic must have facts, but also he must have the ability to create new meanings in the minds of students.[29] The teacher must be able to view the facts as his students perceive them. This is closely related to the concept of empathy as "putting oneself in the shoes of another."

Clark and Beatty[30] stated that the problem faced by the teacher is primarily one of communicating with students and pointed to empathic ability as one important factor which facilitates communication. Teachers can direct and manipulate learner perceptualizations with more confidence and expertise when they have a thorough knowledge of learners' present perceptions.

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[28]Arthur W. Combs, "New Goals in Teacher Education," Speech delivered to the Student Teaching Section of the Utah State Teachers Convention, Provo, Utah, March 24, 1967.

[29]Weir, loc. cit., p. 280.

[30]Rodney A. Clark and Walcott H. Beatty, "Learning and Evaluation," Evaluation as Feedback and Guide, 1967 Yearbook of the Association for Supervision and Curriculum Development (Washington, D.C.: National Education Association, 1967), p. 68.

Perceptual psychologists established a theoretical framework of learning which led quite naturally to the discovery mode of teaching and learning. Bruner[31] and Thelan[32] viewed the teacher as one who facilitates a natural process. Bruner suggested that through perceptive instruction the teacher aids pupil learning by channeling potential and by helping learners achieve new insights. The teacher facilitates pupil learning discoveries through empathic understanding of pupil learning difficulties.

The success of discovery teaching is highly contingent upon the teacher's ability to diagnose learning difficulties and to make remedial decisions. Teachers must advantageously utilize every source of information. Cues may be obvious as in an apparent knowledge gap. Cues may be less obvious as when a child is frightened by the content which is being presented or is bored with the instruction. The teacher who is best qualified to teach is the one who is most receptive to cues. Many cues are of an affective nature and may be either verbal or nonverbal in nature.[33]

In studies of teaching-learning, Kagan et al found that teachers frequently misinterpret student

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[31]Bruner, loc. cit.

[32]Herbert A. Thelen, Education and The Human Quest (New York: Harper & Row, Publishers, 1960), p. 136.

[33]Kagan et al., loc. cit.

nonverbal behavior. For example, teachers interpreted as indicative of understanding and interest silences and pleasant facial expressions which in reality represented students who were lost or bored.[34] Both Maccoby[35] and Kagan et al concluded from their research findings that empathic understanding of an individual was not increased by lengthened exposure to him. The results of their research implied that nonverbal behavior patterns were idiosyncratic culturally rather than individually. These findings were supported by Hall's[36] anthropological studies.

Empathy in Teacher Education

Monroe[37] reported in 1950 that expert judgment was the best available criterion of teaching success. To date, this research report has not been refuted. When Sandiford and Others[38] at the University of Toronto rated teaching success by using expert judges (professional teacher educators) and other raters

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[34]Kagan et al., op. cit., p. 345.

[35]N. Maccoby, J. Jecker, H. Breitrose and E. Rose, Sound Film Recording in Improving Classroom Communication: Experimental Studies in Nonverbal Communication (Stanford: Stanford University, 1965).

[36]Edward T. Hall, The Silent Language (New York: Doubleday & Co., 1959).

[37]Monroe, loc. cit., p. 1391.

[38]Peter Sandiford and Others, Forecasting Teaching Ability, Department of Educational Research Bulletin No. 8 (Toronto: University of Toronto, 1937), 93 pp.

(teachers and administrators), they found, using the Spearman-Brown reliability formula, that such judgments had reliability coefficients of .888 and .929, respectively. The correlations of these judges were .748 and .707, respectively.

Knowledge of empathic processes offers exciting possibilities for selecting and training teacher-candidates. The research of Buchheimer,[39] Kagan et al[40] and others[41,42] offers new challenges to teacher-educators. The measurement of empathy and the means by which one's empathic ability can be increased are now within the realm of the possible. Considerable research has been done; much more is needed.

Dixon and Morse[43] attempted to ascertain the relation between empathic ability and teaching success. The research was limited in two ways. First, they

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[39]Arnold Buchheimer, Videotapes and Kinescopic Recordings as Situational Test and Laboratory Exercises in Empathy for the Training of Counselors (New York: Hunter College of the City University of New York, 1965).

[40]Kagan et al., loc. cit.

[41]N. L. Gage, "Explorations in the Understanding of Others," Educational and Psychological Measurement, XIII, No. 1 (1953), pp. 14-26.

[42]Rosalind F. Dymond, "A Scale for the Measurement of Empathic Ability," Journal of Consulting Psychology, XIII, No. 2 (April, 1949), pp. 127-133.

[43]W. Robert Dixon and William C. Morse, "The Prediction of Teaching Performance: Empathic Potential," The Journal of Teacher Education, XII, No. 3 (September, 1961), pp. 322-329.

assumed that attitudinal patterns and empathic ability were synonyms although no previous research had established such a relationship, and they failed to develop a justification for such a position. The second weakness in the study was in its instrumentation; a paper-and-pencil instrument was employed to elicit teacher attitudes. Conclusions of the study were indecisive; predictions of teaching performance could not be made from the evidence they had garnered.

In another study of teacher empathy, Gage[44] identified teacher-empathy with social perceptiveness. He administered a 60-item questionnaire to an entire high school faculty of twenty teachers and their 200 students. Each item was a curriculum question to which students replied either "yes" or "no". A mean for each of the 60 items was calculated for each teacher's students, and each teacher was then asked to indicate the proportion of his students who would answer "yes" or "no" for each of the 60 items. Measures of social perceptiveness were derived from these data.

Social perceptiveness in this instance was closely related to Allport's definition of empathy as "putting oneself into the shoes of another." The criterion variable for teacher effectiveness in interpersonal relations was a rating scale on which each

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[44]Gage, loc. cit.

student rated the teachers with whom he was currently enrolled. For each teacher, a mean rating was obtained which indicated how much he was liked by his students.

Gage found that the accuracy of social perception was positively and significantly related (at the .05 level) to teacher effectiveness in interpersonal relations. This study was not a rigorous one, and no information on reliability and validity is available. Such a broad interpretation of empathic ability is of little value in examining its importance in instruction.

Dymond's conception of empathy as ". . .the imaginitive transposing of oneself into the thinking, feeling and acting of another and so structuring the world as he does" has particular meaning to the teacher in diagnosing learning difficulties and directing learning. Based on this conception, Dymond[45] did a preliminary study on empathic ability and its relationship to insight. She administered twenty pictures of the Murray and Morgan Thematic Apperception Test, Third Revision, to twenty university student volunteers.

The population of the study included three males and seventeen females aged seventeen years eleven months to twenty-seven years, with a mean age of nineteen years five months. The intelligence quotients ranged from

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[45]Dymond, "A Preliminary Investigation of the Relation of Insight and Empathy," op. cit.

118 to 145 with a mean I.Q. of 131.5.

Each subject had a one-hour individual appointment each week for four weeks. At the first meeting, he was administered an I.Q. test. At the second meeting he discussed the results of the I.Q. test with the test administrator and responded to the first ten pictures of the T.A.T. The subject responded to the remaining ten pictures during the third meeting, and in the fourth meeting he was given an expert evaluation or summary of his T.A.T. responses and asked to react.

On the T.A.T. the respondant reacted to pictures by creating stories; he projected relationships, identified with one of the characters and projected the attitudes of this figure towards the other figures in the picture. The responses were tape recorded and evaluated by experts on the basis of interpersonal relationships. The judges evaluated the projections as "good," "fair," or "poor." These were converted to a three-point scale which represented the extent of empathy projected by the respondant (role-playing). Respondants then were confronted with these evaluations and asked if they were correct. Only sixteen of the 400 evaluations were denied. Six of the sixteen were confirmed as correct evaluations through subsequent personal interviews with the respondants; the other ten were unaccounted for.

The criterion for empathy was role-playing as suggested by Rogers. If forty percent of the projections were "good," the individual was defined as empathic. Twelve subjects were ranked low while eight others scored high. Of the six confirmed through personal interview, five had low empathy. Thirteen of the sixteen denials had low empathy. The mean validity was .83 with a range of .66 to 1.00 This research by Dymond supported the hypothesis that people with low empathy have less insight into interpersonal processes than those with high empathy.

In a subsequent replication, Lindgren and Robinson[46] concluded that the procedure could be adapted to large scale administration but the reliability of the instrument was too low to be considered useful as a predictive device. They also noted that the concept of empathy as "the tendency to see oneself as seen by others" was too restrictive.

Encouraged by the results of the preliminary research, Dymond[47] conducted a more rigorous investigation of empathic ability. She employed a more precise instrument consisting of six characteristics on

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[46]Henry Clay Lindgren and Jacqueline Robinson, "An Evaluation of Dymond's Test of Insight and Empathy," Journal of Consulting Psychology, XVII, No. 3 (1953), pp. 172-176.

[47]Dymond, "A Scale for the Measurement of Empathic Ability," op. cit.

five-point scales. They were:

Self-confidence, lack of self-confidence
Superiority, inferiority
Selfishness, unselfishness
Friendliness, unfriendliness
Leader, follower
Sense of humor

Fifty-three members including twenty-nine females and twenty-four males in her university social psychology class worked in groups of six or seven members. They were randomly assigned, but no friends were allowed to be members of the same group. Each group had a leader and met once each week to plan a class project. Each member in a seven member group made nineteen evaluations.

1) he evaluated himself
2) he evaluated each of the other six members
3) he evaluated himself as he felt each of the other six members would evaluate him
4) he evaluated each of the other six members as he felt they would evaluate themselves

Deviation scores were calculated by determining the difference between "self" scores and "other-of-self" scores. Evaluations were made at three weeks and at six weeks. Interestingly, no significant changes occurred in the three week interval. However, females improved in accuracy whereas males did not.

To examine validity, she compared the new instrument with the T.A.T. empathy instrument previously developed. When the five students with highest scores and the five with lowest scores were administered the T.A.T., only one evaluation was in disagreement.

These ten individuals who responded to the T.A.T. were not aware of their high or low status, and the T.A.T. expert judgments were made without knowledge of individuals who reacted. A correlation of +.60 was found between the tests administered at three weeks and those administered at six weeks. Dymond argued this was because students became better acquainted.

Dymond's explanation was contradicted by other research findings. The research of Maccoby[48] and Kagan et al[49] concluded that extended exposure to individuals does not increase the empathizers ability to empathize. They found, for example, that a teacher cannot empathize any better with students after extended exposure than after short exposure.

Chambers[50] used student grade point averages and Dymond's T.A.T. instrument in a study of empathy. He administered Dymond's instrument to 200 college freshmen who were roommates. They had lived together for six months and had finished the first semester of their freshman year. Fifty-five of the 200 who had taken three common courses were selected for additional study. Chambers used the American Council on Education

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[48]Maccoby, loc. cit.

[49]Kagan et al., loc. cit.

[50]Frank M. Chambers, "Empathy and Scholastic Success," The Personnel and Guidance Journal, XXXVI, No. 4 (December, 1957), pp. 282-284.

Psychological Exam (L) or verbal scores as the criterion of scholastic aptitude. He found empathy significantly related to academic success.

Previous researchers operationalized empathy with paper-and-pencil tests. Buchheimer[51] reported that such tests were characteristically weak in reliability and were of questionable validity. More recently, researchers[52,53] viewed empathic processes as multi-dimensional and sought to operationalize definitions in such a way that certain dimensions of the process were studied. To counteract the typical paper-and-pencil single-sensory approach which used tape recordings or questionnaires, recent investigators took advantage of new technological developments. They studied empathic processes and developed instruments with the aid of videotape recordings and kinescopic reproductions.

In 1965 Buchheimer[54] sought to attain a more valid measure of empathy through a multi-sensory approach. Through videotapes and kinescopes, he evaluated reactions to scenes from counseling interviews. Through this technique, he found significant differences

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[51]Buchheimer, loc. cit.

[52]Ibid.

[53]Kagan et al., loc. cit.

[54]Buchheimer, loc. cit.

in empathic ability among groups with different amounts of training and experience, among groups of trainees who were subjected to different amounts of training and experience, and among groups of trainees who were subjected to different experiences in training.[55]

In a similar research study, Kagan, Krathwohl and Farquhar explored a dimension of empathy which they defined as "a person's ability to detect and describe the immediate affective state of another."[56] They called this ability affective sensitivity. Their instrument, like Buchheimer's, was based on interview excerpts. They found significant changes in counselor affective sensitivity as a result of full academic year training programs. A high scale score was found to be a necessary, but not sufficient, condition for being judged an effective counselor by peers; i.e., people who were effective scored high but people who were ineffective scored high or low. The instrumentation and methodology of this study are discussed in Chapter II.

The research of Dymond and others indicated that positive relationships exist between empathic ability and teaching variables. Further, the research

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[55] Ibid. The reader is referred to Chapter 2, pages 16-56, for a comprehensive description of the instrument and reliability and validity information.

[56] Kagan et al., loc. cit., p. 31.

of Buchheimer and Kagan et al revealed that empathic ability can be enhanced through certain experiences. Previous research suffered from agreement in defining, both theoretically and operationally, the concept of empathy with resulting instrumentation of low reliability and questionable validity. The Affective Sensitivity Scale is an instrument with sufficient reliability and validity[57] to study empathic processes. It is a multi-sensory instrument which utilizes a carefully restricted operational definition of empathy.

Previously cited professionals and laymen have attested to the importance of student teaching in the teacher-training process. Empathy-related variables have been studied by many people but research findings are highly contradictory. The Affective Sensitivity Scale affords an opportunity to study a specifically defined aspect of empathy in student teaching with an instrument of verified reliability and carefully researched validity.

Problems of the Study

Broadly stated, the problems of this research were (1) to study the relation between supervising teacher empathic ability and change in student teacher empathic ability during the student teaching experience,

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[57]See Chapter II.

and (2) to study the relationship between student teacher empathic ability prior to student teaching and student teaching success.

Based on the findings of the research reviewed in this chapter, the following hypotheses were formulated and tested in the present study.

I. A positive relation exists between supervising teacher empathic ability prior to student teaching and elementary education major empathic ability change during student teaching.

II. A positive relation exists between elementary education major empathic ability prior to student teaching and a rating of student teaching success by a university coordinator.

In addition to the major hypotheses, the following related problems were investigated.

A. What differences, if any, exist between empathy levels of supervising teachers in grades K-2 and in grades 3-6?

B. What differences, if any, exist prior to student teaching between empathy levels of teacher education majors who choose to student teach in grades K-2 and those who choose to student teach in grades 3-6?

C. What differences, if any, exist at the termination of student teaching between empathy levels of teacher education majors who choose to student teach in grades K-2 and those who choose to student teach in grades 3-6?

D. What differences, if any, exist between the empathy levels of supervising teachers and student teachers prior to the student teaching experience?

E. What relation, if any, exists between student teacher empathic ability at the

beginning of student teaching and at the termination of student teaching?

F. What is the combined relation between student teacher and supervising teacher empathy levels prior to student teaching and student teacher empathic ability change during student teaching?

Assumptions

Basic to this study were three assumptions. First, the ability to empathize was assumed to be an important component of successful teaching. This assumption was based on the opinions of experts from many fields whose support and testimony were set forth in this chapter. If this assumption holds, an increase in empathic ability is a desirable goal of teacher education programs. If other variables were held constant, the relative effects of placing student teachers with supervising teachers of high and low empathic ability should be reflected in the relative differences in student teacher empathic ability change.

The second assumption of the study was that the Affective Sensitivity Scale was valid, reliable and sensitive enough to measure those changes which resulted from the experimental treatment. Affective sensitivity was demonstrated to be a component of empathy and as such the second assumption rests upon the first.

The third assumption was that the placement of student teachers with supervising teachers was random with respect to variables which are directly related to empathic ability. Chapter II contains an elaboration of support for this assumption.

Summary of Procedures

The student teacher population of this study was selected from those elementary education majors enrolled in student teaching Spring Term, 1968, at Michigan State University. Each student teacher and his supervising teacher was tested prior to the student teaching experience. In addition, each student teacher was posttested at the termination of that experience, and his performance in student teaching was rated by a university coordinator.

To test the major hypotheses and to evaluate the data with respect to the eight related problems of this study, two basic experimental research designs were utilized. For the first hypothesis, a three-way analysis of variance was employed, utilizing the following independent variables:

A. Instructional Level -- grades K-2 versus grades 3-6.

B. Supervising Teacher Empathic Ability -- high versus low.

C. Student Teacher Empathic Ability Prior to Student Teaching -- high versus low.

The dependent or criterion variable included in the design was Student Teacher Empathic Ability at the Termination of Student Teaching as measured by the Affective Sensitivity Scale. The assumption of no mean difference between student teachers placed with high and low supervising teachers within instructional level followed from the previous assumption of student teacher random assignment to experimental groups. Under these assumptions, differences were analyzed by comparing terminal differences. Hence, the criterion variable posttest score was appropriate.

For the second major hypothesis, the statistic utilized was the Pearson product-moment correlation. The independent variable was Student Teacher Empathic Ability Prior to Student Teaching as measured by the Affective Sensitivity Scale. The dependent variable was Success in Student Teaching as determined by the university student teacher coordinator on a seven-point rating scale.

Organization of the Remainder of the Research Report

Following the report of the evolution and recognition of the problem and a description of the research design in Chapter I, the procedures of the study are presented in Chapter II. Chapter III contains the statistical analyses utilized in testing

the two hypotheses of the study and in evaluating related problems. A summary of findings, conclusions of the study, and implications for teacher-education and further research are found in Chapter IV.

CHAPTER II

PROCEDURES OF THE STUDY

To test the first major hypothesis and related problems, a research design was employed utilizing student teacher-supervising teacher pairs. The second major hypothesis utilized only student teachers. Supervisors and student teachers were selected from the student teaching assignments for the Spring Term, 1968, at Michigan State University. The College of Education at Michigan State University prepares 2,500 certified personnel annually. The mission and program are briefly but succinctly described in a College of Education publication.[58]

The Population of the Study

Selection of the Population

The study population was selected after consideration of several factors. Factors which influenced the decision were (1) student teaching center assignment process, (2) student teacher-supervising

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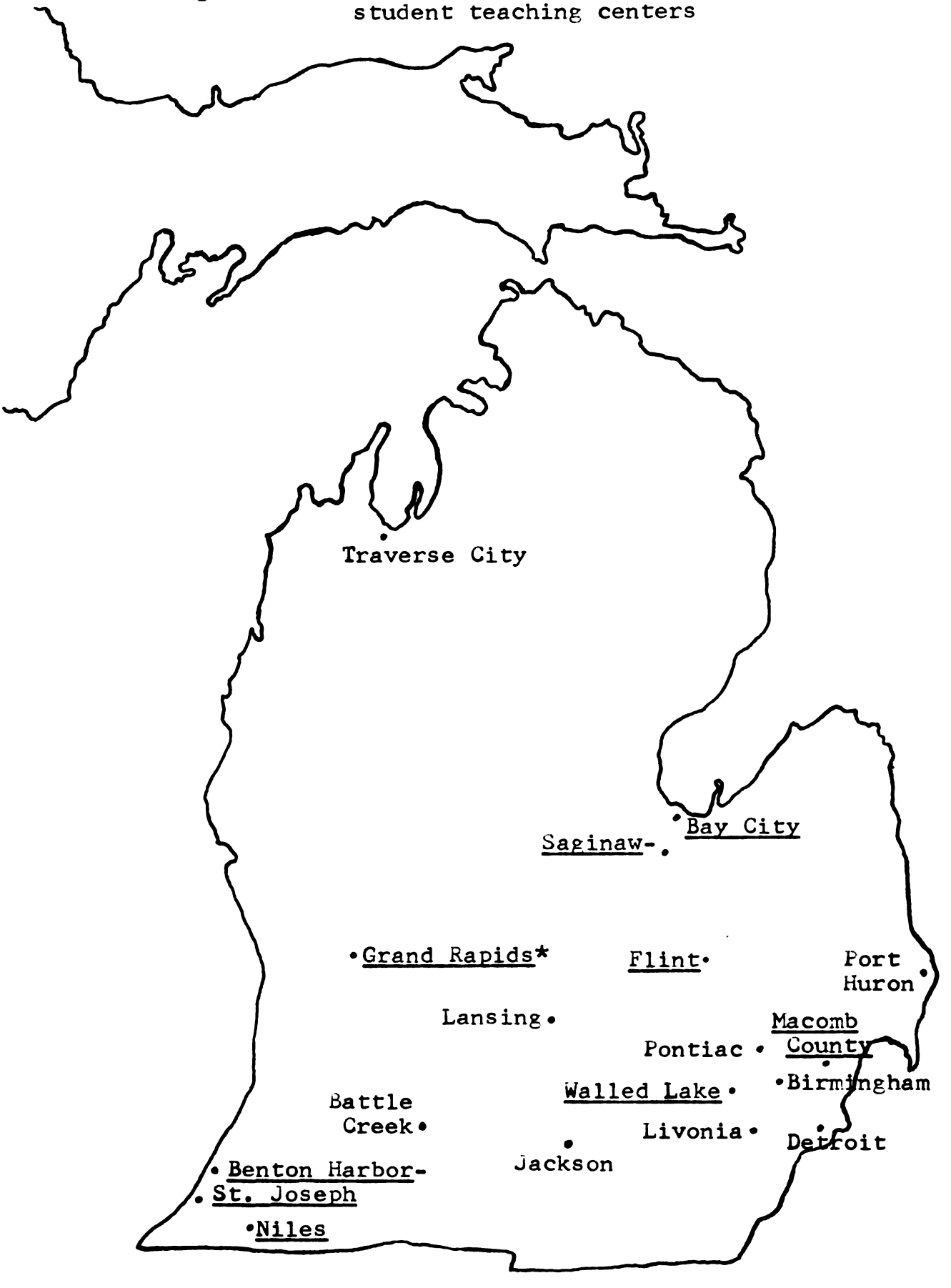
[58]College of Education, Michigan State University, Professional Education: A Mission of Michigan State University (East Lansing, Mich.: College of Education, Michigan State University, 1968), pp. 2-3.

teacher pairing process within centers, (3) sample size, (4) utilization of supervising teachers, (5) nature of the instruments, and (6) research design.

Center Assignment Process. Off-campus student teaching centers exist to provide teacher-education majors a variety of location choices and community environments for their student teaching experiences. Student teaching centers are located in Battle Creek, Birmingham, Benton Harbor-St. Joseph, Detroit, Flint, Grand Rapids, Jackson, Lansing, Livonia, Macomb County, Niles, Pontiac, Port Huron, Saginaw-Bay City, Traverse City, and Walled Lake.

Figure 1 illustrates the geographical location of these centers and Table 2.1 indicates the population of the cities in which the centers are located. The mean city population was approximately 160,000 and the median was approximately 50,000. Three centers utilized had city populations greater than 160,000; three had populations less than 50,000, and one had a population between 50,000 and 160,000. The distribution of student teachers in elementary education initially assigned to each of the respective centers for Spring Quarter, 1968, is presented in Table 2.2. The mean number of student teachers initially assigned to sixteen student teaching centers was approximately thirteen, and the median was approximately 10.5. Three centers utilized had more than thirteen teachers initially

Figure 1 Geographic distribution of student teaching centers



*Underlining designates centers utilized in the study.

Table 2.1 Population of cities in which student teaching centers were located

Student Teaching Center	Major Cities in Center	Population of Major Cities**
Battle Creek	Battle Creek	42,500
*Benton Harbor-St. Joseph	Benton Harbor St. Joseph	19,136 11,755
Birmingham	Birmingham	25,525
Detroit	Detroit	1,600,000
*Flint	Flint	202,000
*Grand Rapids	Grand Rapids	203,000
Jackson	Jackson	50,500
Lansing	Lansing	120,500
*Niles	Niles	13,842
Pontiac	Pontiac	84,000
Port Huron	Port Huron	36,000
*Saginaw-Bay City	Saginaw Bay City	99,000 52,500
*Macomb County	Warren	149,000
Traverse City	Traverse City	18,432
*Walled Lake	Walled Lake	3,550

*Centers utilized in the study.

**Populations from 1960 Census and latest available estimates.

Table 2.2 Distribution of elementary student teachers initially assigned to sixteen student teaching centers, Spring Term, 1968

Student Teaching Center	Grade Level		Total
	K-2	3-6	
Battle Creek	4	7	11
*Benton Harbor-St. Joseph	3	6	9
Birmingham	5	3	8
Detroit	13	22	35
*Flint	9	13	22
*Grand Rapids	9	9	18
Jackson	4	6	10
Lansing	17	24	41
*Niles	4	4	8
Pontiac	4	2	6
Port Huron	0	0	0
*Saginaw-Bay City	5	5	10
*Macomb County	4	9	13
Traverse City	3	4	7
*Walled Lake	6	9	15
Total	90	123	213

*Centers utilized in the study.

assigned; three had less than 10.5, and one had between 10.5 and thirteen initial placements.

Approximately six months before an elementary education major began student teaching, he filed an Application for Student Teaching form with the Student Teaching Office on campus. He indicated a student teaching instructional level preference, K-2, 3-4 or 5-6. He also requested a first, second and third choice of student teaching locations from among the sixteen centers.

Student teaching assignments were made by the Student Teaching Office on the basis of three criteria:

1) priority of the applicant
2) center openings
3) availability of openings in the student's instructional level preference

On the application, the student indicated whether he was divorced or widowed with children, married with children, married with no children, to be married, or single. Applicants who satisfied criteria 2) and 3) above were assigned to the centers of their first choice using these five classifications to establish priorities.

Criterion two refers to availability of qualified supervising teachers in the centers. Suppose, for example, that Benton Harbor-St. Joseph had five K-2 places for student teachers. If six students

requested Benton Harbor-St. Joseph as their first choice, at least one was unable to be placed in that center.

Criterion three refers to the total number of openings in a center. This criterion was determined by the number of staff members in the university center. For example, Niles had one full-time coordinator who worked with about twenty-five student teachers each academic quarter while Macomb County had two full-time coordinators and one half-time coordinator who worked with approximately sixty-three student teachers each quarter.

On the basis of these three criteria, approximately seventy percent of the applicants received placements in their first choice centers. Nearly all the remaining thirty percent received center placements in their second or third choices.

Student Teacher-Supervising Teacher Pairing Process. Just prior to center placement, the student completed a personal information form[59] and returned it to the Student Teaching Office. The form was subsequently given to the coordinator in whose center the student was placed. The student was then interviewed briefly (usually three to ten minutes) on campus by his coordinator. Interviews typically centered

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[59]See Appendix B.

around discussion of student housing and transportation needs.

On the basis of the researcher's personal interviews with coordinators, it was determined that the following criteria were utilized by coordinators in making individual placements: (1) transportation problems, (2) housing considerations, and (3) availability of qualified supervising teachers at the instructional level requested. In large metropolitan centers, i.e., Detroit or Flint, the placements were made by central office administrators with little information concerning individual student teachers. In two centers utilized in the study, coordinators were new and unacquainted with teachers in the center schools. Placement decisions in these centers were made on the recommendations of local school administrators.

Sample Size. The determination of optimum sample size for studying changes in empathic ability in elementary student teachers was made through a careful analysis of previous research conducted with the instrument selected. Measurable differences were detected when employing the Affective Sensitivity Scale with guidance and counseling groups with N's of twenty-four or more.[60]

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[60]Norman Kagan, David R. Krathwohl et al., Studies in Human Interaction (East Lansing, Mich.: Educational Publication Services, College of Education, Michigan State University, 1967), p. 488.

A particularly relevant study was one which utilized individuals not in guidance and counseling programs.[61] This study investigated the hypothesis that music majors had greater affective sensitivity than engineering majors. Nine advanced engineering majors and ten advanced music majors were utilized. The hypothesis was supported by statistically significant differences on the basis of Affective Sensitivity Scale scores.

Supervising Teachers. The Affective Sensitivity Scale was administered to the supervising teachers in the study. Since they had many professional and familial obligations, the researcher planned more than one test administration when large groups were involved.

Instrument. The Affective Sensitivity Scale was administered in approximately one hour and fifteen minutes. Eighty-nine multiple choice items were answered in connection with counseling interview excerpts viewed on a portable television monitor-videorecorder hook-up.

Design. Student teachers were pre- and post-tested. Supervising teachers were tested once.

In view of these considerations, certain important facts and/or assumptions influenced selection of the study population.

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[61] Ibid., p. 198.

A. More than one student teaching center was included since the study was to be representative of the entire student teaching program.

B. Biases due to placement did not affect the study because placements were independent of the study.

C. A sample size of sixty or more was sufficiently conservative to measure changes in a dichotomization of groups with N's of thirty or more. This allowed for drop-outs while maintaining adequate group sizes.

D. Testing of supervising teachers occurred within a two-week time interval because final center commitments were not made until that time.

E. All posttesting was done at the center locations since past experience indicated that many student teachers did not return to campus.

F. No more than two centers were tested in one day.

Six of the sixteen centers representing a good cross-section of Michigan State University student teaching centers on the basis of geographical location and urban-rural composition were selected: Benton

Harbor-St. Joseph, Flint, Grand Rapids, Macomb County, Niles, and Saginaw-Bay City. An examination of the center student teaching assignments indicated a heavy weighting of the K-2 instructional level placements so the student teachers and supervising teachers in grades 3-6 in the Walled Lake Center were utilized in the study. The distribution of ninety-five student teacher-supervising teacher pairs initially assigned to the seven centers is included in Table 2.2.

Three additional criteria for student teacher inclusion were employed:

1. No student teacher with previous full-time public school teaching experience was included in the study.
2. No student teacher with special classroom experiences of ten weeks or more duration in connection with the teacher education program was included in the study.
3. No student teacher who was assigned to a center after the initial assignment process was included in the study.

Only those individuals for whom this student teaching experience was their first extended full-time relationship with elementary school pupils in a normal school setting were included in the study population. The present research was designed to examine the impact of student teaching in general and the

supervising teacher specifically on student teacher empathic ability. The first criterion eliminated those individuals who had taught full-time but who were presently becoming certified; supervising teachers did not represent a model for these individuals to the same extent as for neophytes. The second criterion eliminated those individuals who had completed a term of student teacher (elementary special education student teachers) and those who had participated in the Mott Institute for Community Improvement Program in which students observed and micro-taught elementary pupils for an entire term prior to student teaching. The third criterion was necessary because of pretesting.

The resulting population consisted of sixty-six student teacher-supervising teacher pairs. The distribution of pairs is found in Table 2.3. The mean number of student teachers in each of the centers utilized was 9.4; the median was nine. Grand Rapids and Flint were the largest centers utilized. They had study participants numbering fifteen and thirteen, respectively. Niles and Benton Harbor-St. Joseph were the smallest centers utilized. They had study participants numbering four and six, respectively. Of sixty-six student teachers initially assigned, twenty-five were assigned to student teach in grades K-2 and forty-one in grades 3-6.

Population Parameters

Parameters are discussed under three subheadings: (1) minimum academic prerequisites for student teaching, (2) core of similar experiences which are representative of the student teaching program, and (3) selected descriptive variables for research study participants.

Academic Prerequisites. Prerequisite to the elementary student teaching program was the successful completion of a minimum of one hundred five quarter hours of course work including five hours of educational psychology, fifteen hours of elementary methods of instruction, and a speech course or its equivalent. In addition, a minimum C average in all-university course work, university basic courses, and education courses was required.

Student Teaching Program. Student teachers were engaged full-time in the school sphere of instructional and social interactions for one academic quarter of approximately ten weeks. Roles, expectations and goals of full-time student teaching are outlined and discussed in booklets prepared by the Student Teaching Office for student teachers[62] and supervising teachers.[63]

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[62]Ted Ward, You're in for a Surprise! (East Lansing, Mich.: College of Education, Michigan State University, 1967).

[63]Ted Ward, What Makes the Difference? (East Lansing, Mich.: College of Education, Michigan State University, 1967).

Table 2.3 Distribution of sixty-six student teacher-supervising teacher pairs assigned to the study

Student Teaching Center	Grade Level		Total
	K-2	3-6	
Benton Harbor-St. Joseph	2	4	6
Flint	6	7	13
Grand Rapids	8	7	15
Macomb County	3	7	10
Niles	1	3	4
Saginaw-Bay City	5	4	9
Walled Lake	0	9	9
Total	25	41	66

During the first few days of full-time classroom encounter, the student teachers became acquainted with classroom routines. They learned children's names, helped with classroom tasks, and observed instruction given by the supervising teacher and other teachers in the building.

Near the end of the first week or early in the second week, the student teachers began to plan and execute class instruction. Gradually, over the ten weeks of the quarter, the typical student teacher assumed all or nearly all classroom instructional responsibilities. During the quarter the supervising teacher demonstrated techniques and served as a teaching model, consultant, and friend of the student teacher. The extent of help and cooperation was dependent upon the personal relationship established between the student teacher and supervising teacher.

To facilitate the success of the student teaching program, seminars were held by the university coordinators with both the student teachers and the supervising teachers. These were held separately and in differing frequency. The student teaching coordinators met with the student teachers weekly or bi-weekly. The time averaged half a school day each week. These seminars, whether planned by the coordinators or the student teachers, were concerned with problems of instruction, school-community relationships, and other

professional problems as indicated by the objectives of the Michigan State University School for Teacher Education student teaching program.[64]

Supervising teacher seminars were held three or four times during the quarter. Administrative details of the student teaching program were handled at the seminars. Informal seminar sessions dealt with problems of student teachers and general problems of classroom instruction. These meetings were usually two or two-and-one-half hours in length.

In addition to these group contacts, the university coordinators had informal contacts with student teachers and supervising teachers during public school visits. Coordinators observed student teachers' classroom instruction and held informal conferences with student teachers and/or supervising teachers. Three or four such coordinator visits to each room were made during the term.

Descriptive Variables. Tables 2.4 and 2.5 contain summaries of certain descriptive information on the populations utilized in examining major hypotheses. While Allport[65] and Gates[66] reported no sex

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[64]See Appendix C.

[65]R. H. Allport, Social Psychology (Cambridge: Riverside Press, 1924).

[66]G. S. Gates, "An Experimental Study of the Growth of Social Perception," Journal of Educational Psychology, XIV (1923), pp. 449-462.

differences in empathic ability in adults, sex was a control variable in the present study in the student teacher population because of the small number of males in the elementary student teaching program.

Table 2.4 Age and grade means by instructional level and supervising teacher empathic ability of forty-four student teachers included in the analysis of variance

Descriptive Variable	Grade Level				Total
	K-2		3-6		
	Empathy		Empathy		
	High	Low	High	Low	
Age	21.3	21.4	20.8	22.3	21.5
Grade Point*	2.6	2.6	2.8	2.9	2.7

*A=4, B=3, C=2.

The mean age of student teachers utilized in the analysis of variance was 21.5. The greatest mean difference between the four experimental groups was 1.5 years. The mean grade point average of forty-four student teachers was 2.7, a high C average. Group grade point means differed by a maximum 0.3.

Student teacher-supervising teacher age and/or experience differences could have been a factor in student teacher's change in empathy since student

Table 2.5 Mean descriptive information by instructional level and empathic ability of forty-four supervising teachers included in the analysis of variance

Descriptive Variable	Grade Level				Total
	K-2		3-6		
	Empathy		Empathy		
	High	Low	High	Low	
Age	33.0	42.6	36.5	38.6	36.3
Sex Female	9	10	12	12	43
Sex Male	0	0	1	0	1
Years of Teaching Experience	8.6	14.5	12.1	11.0	11.3
Current Class Enrollment	28.3	26.7	32.3	28.7	27.9
Current School Enrollment	474.3	471.1	508.1	501.9	483.6

teachers may have accepted or rejected teaching models on this basis. While Gates[67] and Taft[68] reported no differences in empathic ability using age as the criterion, the interaction of age and student teacher

[67] Ibid.

[68] Robert Taft, "Some Correlates of the Ability to Make Accurate Social Judgments," (unpublished Ph.D. dissertation, University of California, 1950).

perception may have been a factor, and was thus included as a descriptive variable.

Class and school size information was included to describe the typical student teaching situation. Class sizes and school enrollments were fairly consistent. All mean differences between experimental group class sizes were less than 5.6 pupils. The high supervising teacher class-size mean was distorted somewhat by one class of sixty-four. Supervising teacher age and experience were less consistent. Age means of K-2 teachers in high and low empathic ability groups were 33.0 and 42.6, respectively, a mean difference of 9.6 years. A smaller difference, 4.1 years, existed between teachers of high and low empathic ability in grades 3-6.

Detailed Procedures for Hypothesis One

Instrumentation

Selection. As reported in Chapter I, previous empathy research in the field of teacher education was inconclusive. The evolution of the present study was greatly influenced by the research of Norman Kagan, David Krathwohl and William Farquhar. During the course of their research on human interaction in the field of guidance and counseling, they developed the Affective Sensitivity Scale to measure a component of empathic ability.

Description. The Affective Sensitivity Scale was a situational test of empathic ability. The instrument consisted of forty-one videotaped scenes using eleven different counselees. The excerpts varied in length from approximately twenty seconds to two-and-one-half minutes. After viewing each scene, the respondant reacted to two or three multiple-choice items concerning the feeling and attitudes of the counselee. During administration, the respondant was allowed thirty seconds to answer each of the first twelve items (five scenes) and twenty seconds for each item thereafter. The instrument consisted of forty-one scenes and eighty-nine items similar to the following sample.[69]

CLIENT I
Scene 1

A married woman talked to a counselor about her marital problems. She was having difficulty expressing emotions, particularly anger, toward her husband. The counselor tried to help her understand her feelings and the reasons why she was unable to express herself. At the end of the scene, the counselor asked her a question which required self-analysis and interpretation of highly personal and sensitive feelings; she groped for an answer.

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[69]Kagan et al., op. cit., p. 34.

Item 1
1. I'm just a little confused, I always have trouble expressing myself.
2. I'm feeling glum at this point, kind of a sad feeling.
3. I'm groping and confused; I can't bring it all together.

Item 2
1. You're (counselor) trying to understand what I'm feeling, but I'm not sure you're completely with me.
2. You really understand me. I like that.
3. You're just not with me today. Please try.

A major strength of using the situational approach was that the semantic trap of defining empathy was avoided. Affective sensitivity was defined as a component of empathy and was a more restricted and easily operationalized concept.[70] Affective sensitivity was defined to be "a person's ability to detect and describe the immediate affective state of another."[71]

Development. Videotapes of counseling interviews were made by installing cameras in two corners of a studio in such a way that they were hidden and would tape front views of the counselor and the counselee simultaneously. Although the recorders were hidden from view, the counselees were told that they were being videotaped and the recording process was explained.[72] A special effects amplifier was then used

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[70] Ibid., p. 215.

[71] Ibid., p. 31.

[72] Ibid., p. 9.

to place both images on a television monitor using a split screen technique.

A team of six researchers reviewed the tapes and selected scenes which contained some describable client emotion. In most of these scenes there was a change in the client's mood from one state to another. Two criteria were employed in selection: (1) some emotion had to be displayed, and (2) the emotion had to be revealed in a client interrogation which followed the taping session. Forty-one scenes with eleven clients and counselors were selected. The problems were normal problems of interpersonal relations, social maturity and educational planning. Two women clients were married; all others were high school age students. There were five males and six females.[73]

Two groups of high and low empathizers were selected by peer and faculty ratings from guidance and counseling courses at Michigan State University. After viewing each of the selected scenes, the individuals responded to a list of 57 adjectives, checking all those which seemed to apply to the client's feelings at the end of the episode. They then circled the one they felt was the best descriptive adjective for each episode.[74] Means were used to dichotomize the responses and chi square tests were made. When cross-validated, only

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[73] Ibid., p. 137.

[74] Ibid., p. 138.

nine of the 280 items were significant at the 20% level of significance. Hence, this scale was not a successful discriminator of empathy.[75]

These results were judged inconclusive because of two major factors: (1) lack of personal familiarity to make faculty and peer ratings, and (2) lack of qualifying phrases to narrow the possible meanings of isolated adjectives. Also failure of respondants to concentrate on the emotive state of the client at the end of the episode could have contributed to the inconclusive nature of the results.[76]

A new approach was devised. Multiple-choice items replaced lists of adjectives, and phrases replaced words as descriptions of the emotive states. Correct answers were developed by utilizing three sources: (1) expert judges, (2) judges with a large amount of clinical information concerning the clients, and (3) client interrogation recall statements. Client's statements could generally be classified into those which indicated how he felt about himself or his problem and those concerning his feelings toward or about the counselor.[77] Three Scale Forms were developed and administered. Three item analysis procedures were

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[75] Ibid., p. 140.

[76] Ibid., pp. 141-142.

[77] Ibid., p. 33.

used on the data from the three forms on (1) total scale scores, (2) peer ratings of counselor effectiveness, and (3) staff ratings of counselor effectiveness. An item analysis indicated that no significant differences were found on the ability of high and low empathizers to differentiate between the two types of client statements. Of the 224 items in the three scales, 109 were found to be significant at the .04 level against one of more of the three criterion variables. From these items a new scale was constructed.

The new scale was called Revised Form A. Subsequent testing revealed that the mean item difficulty was 36. The Kuder-Richardson reliability formula 20 was .57, and 39 of the 86 items had Student's *t*'s significant above the .20 level. On the basis of these 39 items and 17 others with *t*'s significant beyond the .35 level, the $K\text{-}R_{20}$ was .81.[78]

Form B.[79] From the previous research and examination of the various forms, certain patterns appeared which seemed to differentiate between high and low empathizers. Form B was constructed primarily from items which worked well on Form A. Other items which had worked well on Forms I, II, and III but which because of subsequent changes, did not work well on

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[78] *Ibid.* p. 171.

[79] A copy of Form B in its entirety may be found in Appendix D.

Form A were returned to their original form and included. The mean item difficulty of Form B was 42 with a mean point biserial correlation of .20. The mean score of 232 individuals was 51.8 of 89 items. The standard deviation was 8.26 and the scores ranged from a low of 25 to a high of 74.[80]

Form B Psychometric Data. Kagan et al[81] explored the reliability and validity of Form B by administering it to nine sample groups. Five groups were members of NDEA Master's Degree academic year institutes in guidance and counseling; one was a group of high school counselors; one was a group of undergraduate students in education; one was a group of doctoral students who had just finished one quarter of counseling practicum, and one was a group of master's degree candidates in guidance and counseling who had just finished a group counseling experience.[82,83]

On the basis of data derived from 232 individuals, an item analysis indicated that of the total of 89 items, 73 had point biserial correlations significant at or above the .05 level using Student's t value.

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[80]Kagan et al., op. cit., pp. 187-188.

[81]Ibid.

[82]Ibid., p. 173.

[83]A data summary of the nine groups may be found in Appendix E.

Fifty-one were significant at the .01 level. On this same sample of 232 individuals, the calculated K-R_{20} was .74.[84,85]

The stability of the scale scores over an extended period of time was calculated for two of the academic year institutes. The r's for these two groups between pretest and posttest were .58 and .67.[86] The influence of retaking the test, or practice effect, was studied on one of the nine sample groups. Significantly, the group consisted of fifty volunteers from two undergraduate education courses in the College of Education at Michigan State University.[87] This group was administered the pretest and posttest separated by a one-week time interval. The pretest mean was 52.00 and the posttest mean was 51.88. The mean change was slightly negative, 0.12, and was not statistically significant.[88] The value of r was .75 when calculated on the test-retest scores.[89] Form B seemed to be unaffected by the practice effect involved in pretesting and posttesting.

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[84]Kagan et al., loc. cit., p. 175.

[85]Ibid., pp. 182-185.

[86]Ibid., p. 175.

[87]Ibid., p. 201.

[88]Ibid., p. 39.

[89]Ibid., p. 35.

Three different types of validity studies were made: concurrent, predictive and construct.

Concurrent Validity. A group of master's degree students in guidance and counseling were administered Form B after three months of group counseling experience. The group was divided into three subgroups for the experience and at the termination the therapist for the groups was asked to rank the members of the subgroup on the basis of their affective sensitivity. When the rho coefficients for the three subgroups were averaged, the average was found to be significant at the .01 level. The rho values were converted to z scores and these also were significant at the .01 level.[90]

Predictive Validity. One of the nine sample groups was administered Form A and seven months later was administered Form B. Peer ratings of counselor effectiveness were gathered both times. A correlation coefficient was calculated based on the Form A pretest and the peer rating at the end of the seven month period. Rho was .49; .45 was significant at the .01 level.[91]

Construct Validity. Form B was administered to two of the sample groups at the beginning of the

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[90] Ibid., p. 176.

[91] Ibid., p. 179.

NDEA institutes and again six months later. When t tests were calculated for the correlated means, one was significant at the .025 level and one at the .05 level using one-tailed tests. This study indicated that these two groups did reveal significant increases in affective sensitivity during the NDEA experience.[92] These and other studies indicate that a positive relationship exists between Form B scores and other, usually more subjective, measures.[93]

> The average correlation obtained across all studies which dealt with the relationship between scale scores and counselor effectiveness was +.26, with a high correlation of +.42 and a low of +.16. The average correlation across all the studies that dealt with the relationship between scale scores and subjective measures of affective sensitivity was +.38, with a high correlation of +.64 and a low of -.10.[94]

The previous validating studies were from three to seven months in duration. Still another study was done which supports the premise of the present research that significant changes can occur in shorter periods of time. Fifty-one subjects who attended a ten-day sensitivity training experience were administered Form B as pretest and posttest. The computed t ratio between pretest and posttest was significant at the

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[92] Ibid., p. 180.

[93] Ibid., p. 185.

[94] Ibid., p. 186.

.05 level. Hence, the Affective Sensitivity Scale is sensitive to changes associated with intensive short experiences.[95]

Summary of Form B Psychometric Data. The reliability of the Affective Sensitivity Scale was above .70 for most somewhat heterogeneous groups. The scale accounted for more than fifty percent of group variability.

The concurrent, predictive and construct validity studies provided evidence of the scale's content validity. Validity support was also given by developmental procedures which were used in creating the instrument.

A moderately substantial relationship existed between scores on the scale and subjective measures of affective sensitivity. The average correlation between these two variables across all studies was +.38, with a high of +.64 and a low of -.10.

Procedures for Test Administration, Scoring and Recording

Administration of Instrument. The Affective Sensitivity Scale was administered to student teachers between February 27 and March 14, 1968, which was prior to the first day of student teaching. During the ninth week of student teaching, May 27-May 31, 1968,

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[95] Ibid., p. 41.

Saginaw-Bay City and Flint student teachers were post-tested. Student teachers in the remaining five centers were posttested during the tenth or final week of student teaching, June 3-June 7, 1968. The instrument was administered to supervising teachers the week prior to student teaching and the first four days of the quarter, March 15-March 28, 1968, before student teachers assumed teaching responsibilities.

The Affective Sensitivity Scale was administered during a 90-minute testing session. The pretest was administered on nine occasions and the posttest on ten occasions to student groups ranging in size from N = 2 to N = 13; the instrument was administered to supervising teachers on thirteen occasions to groups ranging in size from N = 2 to N = 10. Respondants read the page of directions and the researcher reviewed the testing procedures with them. Scenes were viewed on the portable television monitor-videorecorder hook-up and responses were indicated on data processing answer sheets. Upon completion of the eighty-nine multiple-choice items, respondants supplied certain descriptive information. All tests were administered by the researcher to insure uniformity in timing and test administration.

Scoring Tests and Recording Results. All tests were machine scored and the results for each student teacher and supervising teacher coded and recorded on

punched cards for data processing. Each card was verified by comparing coded information with raw data.

Procedures for Analysis of the Data

Preparation of Data for Analysis.

Sixty-two student teachers and fifty-four supervising teachers participated in one or more phases of the testing program for this investigation. Some of the sixty-six student teachers initially assigned to the study did not complete both phases of the testing because of illness or other mitigating circumstances. Similarly, some of the sixty-six initially assigned supervising teachers were not tested. Since the first hypothesis involved the study of change in affective sensitivity as it related to supervising teacher affective sensitivity, only those student teacher-supervising teacher pairs which had participated in all three phases of the testing were included in the analysis.

The statistical analysis was based on data from these pairs. Dichotomizations were made on median scores of each group. These data were punched on data processing cards and used in the analysis.

Selection of Statistical Procedures.

The three-way analysis of variance was the statistical procedure selected for treatment of the data for the first hypothesis and its related problems. It allowed the researcher to test the null hypothesis that no

statistically significant differences existed in the post-student teaching empathy levels of student teachers who taught with supervising teachers of high or low empathic ability. The analysis of variance tested the significance of variation which could be traced to main effects and interactions of the independent variables.

A student teacher was assigned to a cell of the eight cell 2 x 2 x 2 matrix on the basis of three independent variables: (1) the instructional level at which he chose to do his student teaching, (2) the affective sensitivity of his supervising teacher, and (3) his pre-student teaching affective sensitivity.

1. Instructional Level. Each student taught in grades K-2, grades 3-4 or grades 5-6 on the basis of his personal preference. On the student teaching application form, each student teacher indicated his grade level preference. Nineteen elementary education majors elected to student teach in grades K-2, sixteen in grades 3-4, and nine in grades 5-6. In the analysis of variance, instructional levels 3-4 and 5-6 were combined. Hence, the two instructional levels utilized as independent variables in the study were grades K-2 and grades 3-6.

2. Supervising Teacher Empathic Ability. The second independent variable was supervising teacher

empathic ability. Studies by Price,[96] Horowitz[97] and Elliott[98] indicated that supervising teacher attitudes and openness appeared to be associated with change in student teacher attitudes and openness during the period of student teaching. Supervising teacher empathic ability was the main effect under study in the first hypothesis.

3. Elementary Education Major Pre-student Teaching Empathic Ability. On the basis of pretest scores, student teachers were dichotomized into a high group and a low group to determine if there was a significant interaction between student teacher and supervising teacher empathic abilities.

Detailed Procedures for Hypothesis Two

Instrumentation

Selection and Description. Attempts to operationalize success prove very elusive. Professional educators claim to have a notion or intuition for evaluating

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[96]Robert D. Price, "Relations Between Cooperating Teachers' and Student Teachers' Attitudes and Performances," (unpublished Ph.D. dissertation, University of Texas, 1960).

[97]Myer Horowitz, "Role Relationships in Student Teaching Settings," (unpublished Ph.D. dissertation, Stanford University, 1965).

[98]Richard J. Elliott, "Changes in Openness of Student Teachers as a Function of Openness of Supervising and Cooperating Teachers," (unpublished Ph.D. dissertation, University of Alabama, 1964).

success, and certainly the study by Sandiford[99] and the report by Monroe[100] gave strong support to this claim.

The Success Rating Scale[101] for student teachers was an instrument which purported to measure the success variable. B. Bradley West, Assistant Director of Student Teaching at Michigan State University, developed the scale for a research study in student teaching. University coordinators judged student teaching success by considering the overall impact of the following variables:

A. Working with people
B. Establishing classroom climate
C. Planning instruction
D. Managing instruction
E. Command of subject and teaching materials
F. Personal qualities
G. Professional qualities
H. General effectiveness as a teacher

Hicks and Blackington[102] discussed the parameters and implications of each category. Subcategories further delineated each and suggested ramifications for success in teaching. They emphasized that a student teacher who works well with people is one who establishes adequate relationships with pupils,

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[99]Sandiford and Others, loc. cit.

[100]Monroe, loc. cit.

[101]See Appendix F.

[102]William Vernon Hicks and Frank H. Blackington III, Introduction to Education (Columbus, Ohio: Charles E. Merrill Books, Inc., 1965), pp. 38-56.

staff members and parents. The student teacher's ability to work well with people is closely related to his ability to establish classroom climate and to manage instruction. These components are influenced by the empathic ability of the teacher since, according to Hicks and Blackington, success in these areas is determined by the student teacher's understanding of children, his cooperative participation in planning and directing classroom activities, and his flexibility in meeting the special needs of individuals.

Le Pere and Cox[103] utilized these eight categories in an investigation of pre-service training of elementary teachers. They developed the Confidence Level Inventory for Teachers and administered it as pretest and posttest in connection with student teaching to ascertain changes in the categories relative to certain variations in undergraduate methods coursework. Each category consisted of from six to nineteen statements on which students ranked themselves on a ten-point scale. When student teachers rated themselves on questions related to each of these categories, correlations between pre- and post-student teaching evaluations of control and experimental groups ranged

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[103]Jean M. Le Pere and Richard C. Cox, Training Elementary Teachers: Comparison of Separate and Block Methods Courses (East Lansing, Mich.: Bureau of Educational Research Services, College of Education, Michigan State University, 1964).

from +.23 for "working with people" to +.78 for "planning for instruction."

A student teaching rating scale using these variables had been employed by Michigan State University coordinators for seven years. Their familiarity with the instrument and the implications of each category in rating student teaching success insured greater reliability. Face validity in this study, and in the one conducted by West, was assumed.

Procedures for Data Collection and Recording

During the last week of the student teaching quarter, June 3-June 7, each coordinator completed a Success Rating Scale for each student teacher in his center who participated in the research study. The ratings were punched on data processing cards, and the accuracy of each card was verified by comparing the data card with raw data.

Procedures for Analysis of the Data

Fifty-seven students initially assigned were pretested; seven student teachers were not pretested. Since the second hypothesis predicted the relation between pre-student teaching empathy levels and student teaching success, only those student teachers who had been pretested were included in the statistical analysis for the second hypothesis.

The Pearson product-moment correlation was selected for statistical analysis of the data in testing the second hypothesis. It allowed the researcher to test the null hypothesis that no statistically significant relation existed between student teacher pretest empathic ability and student teaching success.

CHAPTER III

DATA ANALYSIS

Data are presented in this chapter in sections determined by instruments utilized. Major sections include:

A. Affective Sensitivity Scale

B. Success Rating Scale

In each section results of statistical tests on data gathered with these instruments are presented. Significance levels revealed through statistical analysis of data are reported on main effects and interactions of independent variables. Support or lack of support for major hypotheses and evidence related to problems of the study are evaluated.

Affective Sensitivity Scale

The first major hypothesis and three related problems of the study were tested with the analysis of variance statistic. Following a presentation of the analysis of variance results, findings are reported in four parts. In the first part, data relative to the first major hypothesis are considered. The second section treats the related problems to the first hypothesis. After completing these original analyses,

modifications of the three-way analysis of variance were made to garner new evidence related to the major hypothesis. These findings are reported in part three. Other problems of the study are considered in part four.

Analysis of Variance

The Affective Sensitivity Scale was utilized to measure student teacher and supervising teacher empathic ability. Individual supervising teacher scores and pre- and posttest student teacher scores are given in Appendix A. The scores of forty-four student teacher-supervising teacher pairs are included in this appendix.

A three-way analysis of variance statistic was utilized to examine the first major hypothesis and three related problems. The independent variables were Instructional Level (L), Supervising Teacher Empathic Ability (E) and Elementary Education Major Pre-student Teaching Empathic Ability (P). Table 3.1 indicates the eight cell N's of the 2 x 2 x 2 analysis of variance matrix.

When the forty-four pairs were dichotomized by the independent variable Instructional Level (L), nineteen student teacher-supervising teacher pairs were in grades K-2 and twenty-five in grades 3-6. The second dichotomization was made separately within

Table 3.1 Number of student teacher-supervising teacher pairs in each cell of the analysis of variance matrix

Grade Level (L)	Supervising Teacher Empathy (E)	Student Teacher Pretest Empathy (P)		Total
		High	Low	
K-2	High	5	4	9
	Low	5	5	10
	Total	10	9	19
3-6	High	7	6	13
	Low	6	6	12
	Total	13	12	25
Total		23	21	44

each instructional level by Supervising Teacher Empathic Ability (E) median scores in grades K-2 and in 3-6.

As a result of the second dichotomization, nine student teacher-supervising teacher pairs were assigned to the high supervising teacher empathy group in grades K-2 and ten were assigned to the low group. In grades 3-6 twelve pairs were assigned to the high supervising teacher empathy group and thirteen to the low supervising teacher empathy group.

Finally, each of these four cells (high K-2, low K-2, high 3-6, low 3-6) was dichotomized using

the independent variable Elementary Education Major Pre-student Teaching Empathic Ability (P).

The dependent variable, change in empathy during student teaching by elementary education majors, was determined by post-student teaching score on the Affective Sensitivity Scale. This procedure assumed a normal distribution and no significant differences in pretest scores. Use of posttest scores produced a considerably stronger test of significance than change scores in that raw data rather than derived data were employed in the computation. Since pretest scores were available on the study population, a *t* test was made to determine whether or not the assumption of no difference prior to student teaching could be verified. The results of this analysis are found in Tables 3.2 and 3.3. These results confirmed the basic assumption and permitted use of terminal student teaching scores on the Affective Sensitivity Scale as the criterion measure.

The first hypothesis examined in the study was:

> A positive relation exists between supervising teacher empathic ability prior to student teaching and elementary education major empathic ability change during student teaching.

In the analysis of variance, this hypothesis was tested through the main effect Supervising Teacher Empathic Ability (E).

Table 3.2 Student teacher Affective Sensitivity Scale pretest means by Instructional Level (L) and Supervising Teacher Empathic Ability (E)

Grade Level (L)	N	Supervising Teacher Empathy (E)		Total
		High	Low	
K-2	19	49.67	49.00	49.32
3-6	25	49.46	49.75	49.60
Total		49.55	49.41	49.48

Table 3.3 t test of greatest student teacher Affective Sensitivity Scale pretest mean difference by Instructional Level (L) and Supervising Teacher Empathic Ability (E)

Grade Level (L)	Supervising Teacher Empathy (E)	Mean	Standard Deviation	df	t	P
K-2	Low	49.00	4.16	42	.10	>.45
3-6	Low	49.75	8.11			

Each of three related problems was examined through evaluation of a main effect or an interaction in the analysis of variance. The three problems and

main effects or interactions utilized in answering them follow.

Problem One.

> What differences, if any, exist at the termination of student teaching between empathy levels of teacher education majors who choose to student teach in grades K-2 and those who choose to student teach in grades 3-6?

The main effect Instructional Level (L) was used to evaluate this problem.

Problem Two.

> What relation, if any, exists between student teacher empathic ability at the beginning of student teaching and at the termination of student teaching?

The main effect Elementary Education Major Pre-student Teaching Empathic Ability (P) was used to evaluate this problem.

Problem Three.

> What is the combined relation between student teacher and supervising teacher empathy levels prior to student teaching and student teacher empathic ability change during student teaching?

The interaction of Supervising Teacher Empathic Ability and Elementary Education Major Pre-student Teaching Empathic Ability (EP) was used for this analysis.

The analysis of variance for the Affective Sensitivity Scale scores is presented in Table 3.4. One of the seven main effects and interactions was significant at $<.01$ level, and one was significant at $<.05$ level. Elementary Education Major Pre-student

Table 3.4 Analysis of variance of Affective Sensitivity Scale posttest scores of forty-four student teachers dichotomized on median scores

Source of Variation	df	Sum of Squares	Mean Square	F	P
Instructional Level (L)	1	0.66	0.66	0.02	.90
Supervising Teacher Empathic Ability (E)	1	92.29	92.29	2.34	.14
Elementary Education Major Pre-student Teaching Empathic Ability (P)	1	947.26	947.26	24.02	<.01
EL	1	3.43	3.43	0.09	.77
EP	1	95.47	95.47	2.42	.13
LP	1	198.28	198.28	5.03	.03
ELP	1	13.34	13.34	0.34	.57
Error Between	36	1495.06	41.53		

Teaching Empathic Ability (P) was significant at <.01 level; and the interaction of Elementary Education Major Pre-student Teaching Empathic Ability and Instructional Level (PL) was significant at the .03 level using the F test.

The significance level of Supervising Teacher Empathic Ability (E) was .14 calculated with a two-tailed F test. Since the major hypothesis predicted a positive relationship, a one-tailed test was computed utilizing a t test. The t value was 1.74 with thirty-six degrees of freedom. This value was significant at $<.07$ level.

Hypothesis One

The first hypothesis was formulated to examine the relation between supervising teacher empathic ability and change in student teacher empathic ability. To test the null form, that there was no relation, the main effect Supervising Teacher Empathic Ability (E) was evaluated through the variance statistic. Even though the analysis of variance did not utilize change scores, pre- and posttest student teacher means were computed and are included in Table 3.5. They were dichotomized on the independent variable Supervising Teacher Empathic Ability (E).

Student teachers who taught with supervising teachers in the high group increased in empathy while those who student taught with supervising teachers in the low group decreased in empathy. This was as hypothesized. As indicated in Table 3.6, the difference in post-student teaching scores of those students placed with the high empathy supervising teachers

Table 3.5 Student teacher Affective Sensitivity Scale pre- and posttest mean scores by Supervising Teacher Empathic Ability (E)

Supervising Teacher Empathy (E)	N	Student Teacher Empathy	
		Pretest	Posttest
High	22	49.55	49.68
Low	22	49.41	45.36

Table 3.6 t test of mean differences between Affective Sensitivity Scale posttest scores of student teachers by Supervising Teacher Empathic Ability (E)

Supervising Teacher Empathy (E)	Mean	Standard Deviation	df	t	P
High	49.68	8.13	42	1.81	<.05
Low	45.36	8.27			

and those assigned to the low empathy supervising teachers was statistically significant at <.05. The Supervising Teacher Empathic Ability indicator variable (E) had a regression coefficient of 1.47 and a standard error of .96. While this .07 confidence level did not

reach the desired .05 level, with a small N it was considered important and suggested that other analyses of the data were warranted.

Related Problems

The problem relative to instructional level read, "What differences, if any, exist at the termination of student teaching between empathy levels of teacher education majors who choose to student teach in grades K-2 and those who choose to student teach in grades 3-6?" Mean pre- and posttest scores relative to Instructional Level (L) were calculated from individual scores and are presented in Table 3.7.

Table 3.7 Student teacher pre- and posttest mean Affective Sensitivity Scale scores by Instructional Level (L)

Grade Level (L)	N	Student Teacher Empathy	
		Pretest	Posttest
K-2	19	49.32	48.00
3-6	25	49.16	47.96

The regression coefficient of the Instructional Level indicator variable (L) in the analysis of variance was -.12 with a standard error of .96. The .90

significance level indicated that no relation between instructional level and posttest scores was evident in the data.

The second problem answered through use of the analysis of variance was, "What relation, if any, exists between student teacher empathic ability at the beginning of student teaching and at the termination of student teaching?" The Student Teacher Pretest Score indicator variable (P), used to answer this question, had a regression coefficient of 4.70 with a standard error of .96, indicating significance at <.01 level.

Table 3.8 Student teacher Affective Sensitivity Scale pre- and posttest mean scores by Elementary Education Major Pre-student Teaching Empathic Ability (P)

Student Teacher Pretest Empathy (P)	N	Student Teacher Empathy	
		Pretest	Posttest
High	22	54.45	53.14
Low	22	44.00	42.09

The means, pre- and post-, are found in Table 3.8. Students who scored high on the pretest tended also to remain high on the posttest, and students who scored low on the pretest tended to remain low on the

posttest. However, both groups tended to decrease in empathy during student teaching.

The third problem related to the analysis was, "What is the combined relation between student teacher and supervising teacher empathy levels prior to student teaching and student teacher empathic ability change during student teaching?" An examination of the Supervising Teacher Empathic Ability-Student Teacher Pretest Empathy Level interaction (EP) in Table 3.4 revealed significance at the .13 level. The regression coefficient was 2.15 and the standard error was .96. Means are contained in Table 3.9.

Table 3.9 Student teacher Affective Sensitivity Scale pre- and posttest mean scores and mean changes by Supervising Teacher Empathic Ability (E) and Elementary Education Major Pre-student Teaching Empathic Ability (P)

Supervising Teacher Empathy (E)	Student Teacher Pretest Empathy (P)	N	Student Teacher Empathy		Change
			Pretest	Posttest	
High	High	11	54.09	55.56	+1.47
	Low	11	45.82	44.56	-1.26
Low	High	11	54.64	50.27	-4.37
	Low	11	42.00	40.64	-1.36
Total		44	49.23	47.98	-1.38

All mean changes were in the predicted directions except one. High student teachers placed with high supervising teachers tended to increase in empathic ability; low student teachers placed with low supervising teachers tended to decrease in empathic ability; and high student teachers placed with low supervising teachers tended to decrease in empathic ability. High student teachers placed with low supervising teachers made the greatest negative change of any group, -4.37. Low student teachers placed with high supervisors tended to decrease in empathic ability, contrary to the hypothesized directional change.

Additional Evidence Related to the First Major Hypothesis

The significance of the one-tailed *t* test was .07 when the dependent variable, Student Teacher Empathic Ability change was examined relative to using Supervising Teacher Empathic Ability (E) as the independent variable. New questions were raised relative to the first major hypothesis:

A. Was this a chance occurrance or could additional evidence be garnered from further analyses of the data?

B. Since supervising teacher empathic ability was below the mean of the student teacher population (44.00 versus 49.23), might not influences be more precisely studied

with a dichotomization more nearly at the student teacher mean?

C. Since supervising teacher empathic ability was below the mean of the normative population (44.00 versus 50.65) might this not also be a contributing factor to lower levels of significance?

D. Do Affective Sensitivity Scale discriminations between low and very low empathizers lend themselves to the same interpretations and generalizations as those which are based on populations whose scale scores are higher?

Discriminations made by the sensitivity scale were supported by validity studies. Those studies defined empathic and non-empathic individuals by the populations utilized. Such dichotomies were based on a mean in excess of fifty. The present study raised two pertinent questions relevant to levels of empathic ability: first, do scale scores of thirty and forty communicate or indicate categories of high and low empathy as would scores of forty-five and fifty-five? Second, if a supervising teacher had an empathic ability of forty-five on the scale, he was assigned to the high empathy group because he was above the supervising teacher median. Could it be said that a student teacher with scale score forty-eight, but who was low in comparison to other student teachers, would increase his empathic

ability as a result of intensive short-term interaction with such a supervising teacher?

These questions challenged the procedure of dividing the sample at the median. The mean for student teachers was 49.23 and for the normative population 50.65. A second analysis of variance was computed, using 50 as a point of dichotomization. Instructional Level (L) was omitted as an independent variable since the previous analysis indicated that no relation existed between instructional level and student teacher empathy change. Independent variables in the two-way analysis of variance were Supervising Teacher Empathic Ability (E) and Elementary Education Major Pre-student Teaching Empathic Ability (P). The same dependent variable, student teacher posttest score, was utilized. To reduce distortions caused by unequal cell frequencies of considerable magnitude, ten members of the low student teacher-low supervising teacher cell were randomly selected and removed. The results of the two-way analysis of variance and adjusted cell means are indicated in Tables 3.10 and 3.11.

Student teacher empathic ability was significant at $<.01$ level. Supervising teacher empathic ability was significant at the .09 level using a two-tailed F test. Utilizing the t test as formerly, this statistic yielded a significance level $<.05$. The major hypothesis was supported by this analysis of data.

Table 3.10 Analysis of variance of posttest Affective Sensitivity Scale scores of thirty-four student teachers dichotomized on a score of 50

Source of Variation	df	Sum of Squares	Mean Square	F	P
Supervising Teacher Empathic Ability (E)	1	107.25	107.25	3.1353	.09
Elementary Education Major Pre-student Teaching Empathic Ability (P)	1	860.25	860.25	25.1479	<.01
EP	1	.05	.05	.0015	.97
Error Between	30	1026.23	34.21		

Table 3.11 Cell means of the two-way analysis of variance reported in Table 3.10 utilizing Affective Sensitivity Scale posttest scores

Supervising Teacher Empathy (E)	N	Student Teacher Pretest Empathy (P)	
		High	Low
High	22	56.40	45.40
Low	22	52.57	41.40

An additional two-way analysis of variance was made to garner further evidence for the acceptance or rejection of the first hypothesis that a relation exists between supervising teacher empathic ability and student teacher change in empathy. Change between pre- and posttest by student teachers was used as the dependent variable in a 2 x 2 analysis of variance. Supervising Teacher Empathic Ability (E) and Elementary Education Major Pre-student Teaching Empathic Ability (P) were again the independent variables. A mean of 50 was utilized and ten members of the low student teacher-low supervisor cell were randomly removed as in the previous analysis. The analysis of variance of data and adjusted cell means are presented in Tables 3.12 and 3.13.

Student teachers with high empathic ability gained when placed with supervising teachers of high empathic ability and student teachers of both high and low empathic ability tended to decrease when placed with supervising teachers of low empathic ability. One group, low student teacher empathy, failed to change in the predicted direction when placed with high supervising teachers. The 3.51 F value was significant at the .07 level. When the F statistic was converted to a t test to examine the results on the basis of a one-tailed test, the t value of 1.89 was significant at $<.05$.

Table 3.12 Analysis of variance of Affective Sensitivity Scale change scores of thirty-four student teachers dichotomized on a score of 50

Source of Variation	df	Sum of Squares	Mean Square	F	P
Supervising Teacher Empathic Ability (E)	1	118.90	118.90	3.51	.07
Elementary Education Major Pre-student Teaching Empathic Ability (P)	1	84.70	84.70	2.50	.12
EP	1	96.94	96.94	2.86	.10
Error Between	30	1016.41			

Table 3.13 Cell means of two-way analysis of variance utilizing change scores

Supervising Teacher Empathy (E)	N	Student Teacher Pretest Empathy (P)	
		High	Low
High	22	+4.20	-3.00
Low	22	-3.64	-3.40

On the basis of four different data analyses, the first major hypothesis was demonstrated to be consistently upheld by the data.

Other Problems Related to Affective Sensitivity Scale Data

Other pertinent problems relative to the research groups utilized in the study were formulated. Each one is briefly discussed statistically and ramifications are elaborated upon in the subsequent chapter. The forty-four student teacher-supervising teacher pairs were utilized in evaluating the problems.

A. What differences, if any, exist between empathy levels of supervising teachers in grades K-2 and in grades 3-6?

To examine the differences in empathic ability of teachers in grades K-2 and 3-6, means were calculated and *t* tests made. The results are presented in Table 3.14. The results of the *t* test indicated no

Table 3.14 *t* test of supervising teacher mean Affective Sensitivity Scale score differences by Instructional Level (L)

Grade Level (L)	Mean	Standard Deviation	df	t	P
K-2	43.79	10.67	42	.13	>.40
3-6	44.16	8.43			

difference in empathy between elementary supervising teachers in grades K-2 and those in grades 3-6.

B. What differences, if any, exist prior to student teaching between empathy levels of teacher education majors who choose to student teach in grades K-2 and those who choose to student teach in grades 3-6?

As in the preceding problem, a *t* test was made. Results are presented in Table 3.15. Results of the

Table 3.15 *t* test of student teacher Affective Sensitivity Scale pretest mean difference by Instructional Level (L)

Grade Level (L)	Mean	Standard Deviation	df	t	P
K-2	49.32	5.79	42	.07	>.45
3-6	49.16	7.60			

t test on these data suggest that no relationship existed between instructional level preference and pre-student teaching empathic ability of student teachers.

D. What differences, if any, exist between the empathy levels of supervising teachers and student teachers prior to the student teaching experience?

A summary of the *t* test follows:

Table 3.16 t test of mean differences between supervising teacher and student teacher Affective Sensitivity Scale pretest scores

Teacher Group	Mean	Standard Deviation	df	t	P
Supervising teacher	44.00	9.35	86	9.49	<.01
Student teachers	49.23	6.80			

The difference in empathy between student teachers and supervising teachers was significant at <.01. The means for elementary majors prior to student teaching was 49.23 and for supervising teachers 44.00. This analysis is even more important when coupled with the previously presented findings which indicated that student teachers generally made negative changes during student teaching.

Success Rating Scale

Student teaching effectiveness was judged by university coordinators who rated each student using the Success Rating Scale. On the seven point scale, 1 was the highest rating and 7 the lowest. Individual Success Rating Scale evaluations of fifty-seven student teachers are found in Appendix A. The number of student

Table 3.17 Success Rating Scale score N's and overall means for student teaching centers

Student Teaching Center	Student Teacher Success Rating							Total	Mean
	1	2	3	4	5	6	7		
Benton Harbor-St. Joseph	0	4	2	0	0	0	0	6	2.3
Flint	1	5	5	1	0	0	0	12	2.5
Grand Rapids	1	6	4	1	0	0	0	12	2.4
Macomb County	0	4	4	0	0	0	0	8	2.5
Niles	0	1	1	0	0	0	0	2	2.5
Saginaw-Bay City	2	3	3	0	0	0	0	8	2.1
Walled Lake	0	2	6	1	0	0	0	9	3.3
Total	4	25	25	3	0	0	0	57	2.5

teachers rated in each category by the center coordinators and the mean student teacher rating for each center are included in Table 3.17.

Fifty of the 57 students were rated 2 or 3 on the scale, while four student teachers received the highest possible rating, 1, and three others were judged as a 4 by their coordinators. Although the rating scale included a seven-point range, no student was rated either 5, 6, or 7. Thus the effective range was four.

The number of students in each center ranged from two to twelve with eight as the mean. Ratings by centers ranged from 2.1 to 3.3, with 2.5 as the mean rating for all subjects. In only two centers were the mean ratings more than .2 different from the population mean. Saginaw-Bay City mean was 2.1, .4 less than the population mean, and Walled Lake was 3.3, .8 greater than the population mean.

Table 3.18 indicates the number of student teachers who received each rating and the Affective Sensitivity Scale pretest mean of those individuals.

The mean pretest Affective Sensitivity Scale score was 49.98. When student teachers' pretest scores were analyzed by coordinator ratings, that group receiving the highest success rating had the lowest mean Affective Sensitivity Scale score. No pattern of relationship was evident. When ranked from highest

to lowest on Affective Sensitivity Scale, Success Rating Scale groups were ordered: 3, 2, 4, 1.

Table 3.18 Mean pretest Affective Sensitivity Scale scores by Success Rating Scale scores for 57 student teachers

Success Rating Scale Score	N	Affective Sensitivity Scale Pretest Mean
1	4	46.75
2	25	50.08
3	25	50.40
4	3	48.67
5	0	---
6	0	---
7	0	---
Total	57	49.98

The statistic utilized to examine the second hypothesis was the Pearson product-moment correlation. The second hypothesis examined in the study was:

> A positive relation exists between an elementary education major's empathy level prior to student teaching and a rating of his student teaching performance by his university coordinator.

The Pearson product-moment correlation summary is presented in Table 3.19.

Table 3.19 Pearson product-moment correlation between student teaching success and pre-student teaching empathic ability

Variable	Mean	Standard Deviation	Correlation	F	P
Success rating	2.47	.71	-.05	.12	.73
Pretest	49.98	6.68			

Success rating correlated with pretest scores at -.05 which was contrary to the hypothesized direction and not statistically significant. Based on the results of this analysis, the second hypothesis was rejected.

Student teaching success was not related to pre-student teaching empathic ability as measured by the Affective Sensitivity Scale and the Success Rating Scale.

CHAPTER IV

DISCUSSION

Summary of the Research Study

Summary of Procedures

During the Winter Quarter, 1968, sixty-six elementary education majors who planned to student teach during the Spring Quarter were selected from the Michigan State University Student Teaching Office records to participate in empathy research. The student teachers selected had been assigned to student teach in seven of the sixteen off-campus student teaching centers.

Prior to the commencement of Spring Quarter, 1968, fifty-seven student teachers were pretested and fifty-four supervising teachers were tested. Fifty-six student teachers were posttested during the final phase of their student teaching experience. The instrument utilized to measure empathic ability was the Affective Sensitivity Scale. The purpose of this research study was to evaluate the relation between supervising teacher empathy and student teacher empathy change during student teaching.

University student teaching coordinators in the off-campus centers rated the success of each student teacher at the termination of the Spring Quarter. The instrument utilized to evaluate success in student teaching was the Success Rating Scale. The coordinator ratings were correlated with student teacher pretest Affective Sensitivity Scale scores to determine the relation between pre-student teaching empathic ability and success in student teaching.

Data from forty-four student teacher-supervising teacher pairs who completed all three phases of the sensitivity testing were utilized in the statistical analyses relative to differences in elementary education major pre- and post-student teaching empathic ability. Fifty-seven elementary education majors who completed the pretest were utilized in the empathy-success correlation.

Student teacher center assignments and supervising teacher pairings were random with respect to variables related to empathic ability. The nature of the assignment processes established student teacher groups of comparable pre-student teaching empathic ability. Procedures made possible the analysis and evaluation of student teacher empathy change through the utilization of posttest scores. A three-way analysis of variance was the statistic selected. Indicator variables were created for independent

variables Instructional Level, Supervising Teacher Empathic Ability and Elementary Education Major Pre-student Teaching Empathic Ability. Student teacher posttest Affective Sensitivity Scale scores constituted the dependent variable of the variance statistic.

Elementary Education Major Pre-student Teaching Empathic Ability as determined by pretest Affective Sensitivity Scale scores constituted the independent variable of the second major hypothesis. Success ratings constituted the criterion variable. The Pearson product-moment correlation statistic was utilized to evaluate the extent of relation between these variables.

Summary of Results

Hypothesis One and Related Problems. The relation between Supervising Teacher Empathic Ability and elementary student teacher empathic ability change during student teaching was investigated by testing the first hypothesis of the study. The hypothesis was:

> Hypothesis One.
>
> A positive relation exists between supervising teacher empathic ability prior to student teaching and elementary education major empathic ability change during student teaching.

A significant relation ($<.05$) between the two variables of the first hypothesis was indicated by the data analysis. The hypothesis of positive relation between supervising teacher empathic ability and

elementary education major pre-student teaching empathic ability was accepted.

When change scores were utilized in a two-way analysis of variance, change of three student teacher groups supported this hypothesis. However, low student teachers who student taught with high empathy supervising teachers diminished in empathic ability.

In addition to this hypothesis, data relevant to six problems were evaluated. These problems were:

A. What differences, if any, exist between empathy levels of supervising teachers in grades K-2 and in grades 3-6?

B. What differences, if any, exist prior to student teaching between empathy levels of teacher education majors who choose to student teach in grades K-2 and those who choose to student teach in grades 3-6?

C. What differences, if any, exist at the termination of student teaching between empathy levels of teacher education majors who choose to student teach in grades K-2 and those who choose to student teach in grades 3-6?

No significant differences ($>.40$) were found on the basis of these data in relation to Problems A, B and C. Supervising teachers in grades K-2 do not differ significantly in empathic ability from supervising teachers in grades 3-6. No differences in empathic ability, either pre- or post-, were found between student teachers who chose to student teach in grades K-2 and those who chose to student teach in grades 3-6.

D. What differences, if any, exist between the empathy levels of supervising teachers and student teachers prior to the student teaching experience?

Student teachers had significantly higher ($<.01$) empathy levels than supervising teachers. The student teacher pretest empathy mean score was 49.23 and the supervising teacher mean was 44.00. The net effect of this difference together with the support for the first hypothesis was that in general student teachers tended to <u>decrease</u> in empathy during student teaching.

E. What relation, if any, exists between student teacher empathic ability at the beginning of student teaching and at the termination of student teaching?

Data relevant to Problem E yielded a statistically significant relation ($<.01$) between student teacher pre-student teaching empathy and post-student teaching empathy. Student teachers whose pretest was high tended to remain high on the posttest while those whose pretest was low tended to remain low.

F. What is the combined relation between student teacher and supervising teacher empathy levels prior to student teaching and student teacher empathic ability change during student teaching?

No relation exists between an interaction of Supervising Teacher Empathic Ability and Elementary Education Major Pre-student Teaching Empathic Ability and student teacher empathy change during student teaching on the basis of these data.

Hypothesis Two. The relation between elementary education major pre-student teaching empathic ability and student teaching success was investigated by testing the second hypothesis. The hypothesis was:

Hypothesis Two.

A positive relation exists between an elementary education major's empathy level prior to student teaching and a rating of his student teaching performance by his university coordinator.

No relation exists (>.70) between pre-student teaching empathic ability and success ratings. The hypothesis of positive relation between elementary education major pre-student teaching empathic ability and student teaching success was rejected.

Conclusions

The conclusions of the study are presented below as they relate to the hypotheses and problems of the research.

Hypotheses:	Conclusions
I. A positive relation exists between supervising teacher empathic ability prior to student teaching and elementary education major empathic ability change during student teaching.	Accepted
II. A positive relation exists between an elementary education major's empathy level prior to student teaching and a rating of his student teaching performance by his university coordinator.	Rejected

Problems:	Conclusions
A. What differences, if any, exist between empathy levels of supervising teachers in grades K-2 and in grades 3-6?	No difference
B. What differences, if any, exist prior to student teaching between empathy levels of teacher education majors who choose to student teach in grades K-2 and those who choose to student teach in grades 3-6?	No difference
C. What differences, if any, exist at the termination of student teaching between empathy levels of teacher education majors who choose to student teach in grades K-2 and those who choose to student teach in grades 3-6?	No difference
D. What differences, if any, exist between the empathy levels of supervising teachers and student teachers prior to the student teaching experience?	Student teacher empathy higher
E. What relation, if any, exists between student teacher empathic ability at the beginning of student teaching and at the termination of student teaching?	Very strong positive relation
F. What is the combined relation between student teacher and supervising teacher empathy levels prior to student teaching and student teacher empathic ability change during student teaching?	No relation

Implications for Teacher Education and Further Research

Limitations of the Present Research

Research reflects strength in implications only to the extent that the research is relevant when placed

in a given context. Limitations must be evaluated to determine the generalizability of findings to other population groups. Limitations of the present research are discussed relative to the population of the study and research procedures.

Limitations Related to the Population. The research was conducted in the student teaching program of one university and utilized seven of sixteen off-campus student teaching centers. Michigan State University has the largest teacher-training program in the United States and is probably as representative of student teaching programs in general as any single university in the nation. The student teaching centers utilized were selected in such a way that areas of varying population density and geographical location were represented from the state of Michigan. Approximately one-quarter of the elementary student teachers participated in this research study during Spring Term, 1968. Assignments were not randomly made in the strictest theoretical sense, but the present study argued that assignments were random with respect to those variables related to empathic ability. From time to time a coordinator had a "feeling" for a placement and made his decision on the basis of a brief personal contact with the student on campus. However, mitigating circumstances determined nearly all placements. To the extent that assignments were not random,

the centers selected were not typical, and the Michigan State University was not representative of all student teacher education institutions, generalizations derived from this study are limited.

Limitations Related to Procedures. Although the Affective Sensitivity Scale was probably the best instrument of its kind at the time this study was conducted, its strengths may also have been its weaknesses. Testing sessions were about ninety minutes in length. This increased discrimination but tended also to fatigue respondants. The scale's multi-sensory approach to sensitivity measurement gave a more realistic approach to evaluation but equipment failures related to sound and picture loss interruptions could have influenced some scores. The quality of the video and audio reproduction could also have influenced test scores. All supervising teachers initially assigned to the study were not utilized because some were not tested. To the extent to which these factors influenced scores, generalizations from the study are limited.

Implications for Teacher Education

From the results of this research in empathy are derived implications for program change and research in the field of teacher education. These are discussed under three headings: (1) entrance into the profession, (2) pre-service education of teachers, and (3) in-service

education of teachers.

Implications for Entrance into the Teaching Profession. Teaching, as a behavioral science, focuses primarily on interpersonal relations. Interpreting verbal and non-verbal messages, being sensitive to personal needs cues, and being able to understand the viewpoint of pupils are relevant aspects of teaching. Open channels of communication are probably necessary prerequisites to effective teaching. A teacher's subject-matter competence and expertise is of little value if he is unable to "read" the feedback cues from learners. Assuming the importance of empathic ability, a prerequisite for entrance into the teaching profession might be a sufficient empathic ability. The extent of this level would need to be examined through further research.

The child is much more than an information receptacle. When he learns, he is extracting something from the external world and making it a part of a very personal internal reality. A new fact is not simply added to the bank of knowledge resources when it is acquired; instead, it is weighed, evaluated and checked against other components of the child's belief structure. Then if it passes all tests of personal meaning and conflicts are resolved which resulted from new inconsistencies--only then has the child learned: he believes.

A person who cannot communicate with the child and who does not seek to comprehend the child's reality is in a poor position to attempt modifications. The perception of teaching-learning which fails to consider this factor is inadequate, and those who cannot meet the challenges inherent in such an interpretation of learning are inadequate to be intimately involved in so crucial a process.

Implications for Pre-service Education of Teachers. A desirable addition to pre-service education of teachers would be a set of experiences especially developed and designed to make teachers more empathic. These experiences would be particularly valuable for individuals desiring to enter the teaching profession but who have marginal empathic ability. Sensitivity training is one such experience. With planned research other experiences could undoubtedly be created. All prospective teachers could benefit from participation in such experiences.

In addition to participating in a planned set of experiences, extensive study of interpersonal relations and empathic processes as part of undergraduate training would facilitate deeper understanding and appreciation of interpersonal elements of teaching. Study of individual behavior with particular emphasis on understanding how individuals acquire and utilize knowledge could be a part of pre-service education.

Prospective teachers could be taught to translate this knowledge into appropriate teaching strategies. The perceptions of prospective teachers must be altered and that alteration process studied and understood before they can be truly capable of directing learning which functions within such a framework.

A decided advantage and goal of such experiences would be the development of empathic pre-professionals prior to student teaching. Under such circumstances, selection of supervising teachers of high empathic ability would be most advantageous. The present research indicated that placement of student teachers with supervising teachers of low empathy was detrimental to the maintainance or further development of student teacher empathy.

The goal of such experiences prior to student teaching is clearly supported by the present research since student teachers of low empathic ability tended to decrease in empathy <u>even</u> when placed with supervisors of high empathy.

<u>Implications for In-service Teacher Training</u>. If the sample of this study was representative of the supervising teacher population, then supervising teachers have lower empathy than student teachers. In-service education experiences could be designed to enhance teacher empathy. New insights into teaching roles could be achieved through study of interpersonal processes in the teaching-learning milieu.

In-service education could help the teacher view herself as a creative person who expands individual uniquenesses and interests through student self-expression. Teachers would begin to understand that learning is a very personal event and that structured learning experiences which are logically complete are many times not personally convincing to students. Child study and in-service programs devoted to child psychology would contribute to teacher insight. Teachers would increase their knowledge and understanding of how children think: this is the essence of the empathic process.

Implications for Further Research

Further research is suggested by the present research study to enhance knowledge of empathic processes and student teaching variables. This section discusses some areas of needed research.

Teacher Empathy and Student Development. Although professional educators and psychologists emphasized the importance of empathic processes in teaching-learning environments and in interpersonal relations, student teacher success did not correlate with pre-student teaching empathic ability. The failure of empathic ability to correlate with teaching success implicates intuitive measures of success. Evidently neither implicit nor explicit consideration was given by coordinators to empathic processes as a strong

criterion measure of student teaching success.

Intuition and theory support the hypothesis that empathy is an important component of good teaching. Teacher sensitivity to pupil cognitive and affective needs would appear to be related to teaching success. A host of research studies could evolve from this hypothesis. Is empathy related to teaching success when other criterion measures of success are employed? When outstanding teachers are identified, are they more sensitive to pupil non-verbal cues than less successful colleagues? Does a teacher's ability to empathize change during his career?

Perhaps some teachers are even more empathic with pupils of varying socio-economic or ability levels. Is student achievement related to teacher empathy? Is student problem solving ability related to teacher empathy? Is student understanding related to teacher empathy? Is student socialization related to teacher empathy? Are student learning attitudes related to teacher empathy?

Teachers have expressed views relative to their varying effectiveness with pupils of different age levels. This, too, implies the need for further research for individual differences exist among teachers just as they exist among pupils. The unique characteristics of teacher interpersonal relations effect empathy. Exploration for deeper understanding of these factors

would be of immeasurable assistance in the selection and assignment of teachers to schools and in placing pupils in appropriate classroom settings.

Enhancement of Empathic Ability. To what extent can empathic ability be increased? Is it possible to make a low empathizer highly empathic through appropriately structured experiences? Questions such as these need to be researched before empathic ability can be established as a teacher-candidate selection criterion. A longitudinal study of teacher empathy would reveal implications concerning some of the variables related to empathy.

In-service Teacher Empathy. An important question raised by the present research was related to supervising teacher empathy. The empathic ability of supervising teachers was much lower than student teachers and guidance and counseling personnel. Are supervising teachers representative of the entire elementary teacher population? Why are supervising teachers low?

Are factors operating in the elementary classroom which interact with and perhaps restrict teacher empathy? Perhaps the nature of elementary classrooms is such that teachers become group workers, and that an individual-orientation is not a requisite teacher characteristic. Are individual-child-focusing teachers capable of functioning effectively when working with

groups? Can the teacher who is group-oriented be a skillful teacher of individuals? Perhaps basic differences between individual- and group-oriented teachers exist which could be investigated and exploited in the elementary classroom. Are skills of working with small groups identical with those skills characteristic of one-to-one interaction?

Student Teacher-Supervising Teacher Empathy Interaction. Student teachers of low empathic ability tended to decrease in empathy when placed with high-empathy supervising teachers. Whether this was a phenomenon unique to the population of this study is worthy of further investigation. These data suggested an interaction. If this phenomenon was not merely a function of these data, what factors could have been related? Do student teachers with low empathy have difficulty establishing meaningful personal relations with highly empathic supervisors? Do they withdraw from circumstances in which they are forced to interact with such individuals?

Empathy and the Changing Role of the Teacher. Today's technological revolution in education has already affected the role of the teacher and from all indications will have further impact in the future. What relation, if any, has the importance of teacher empathy to such change?

Teachers spend considerable time as authority figures for children, and they undoubtedly influence children's attitudes and behavior. To what extent is there a relation between teacher empathy and pupil empathy? In an age of computerized technology, how will students become humanized? Perhaps the role of the teacher of the future will be to maintain the element of humanness in the classroom.

As educational technology advances, the teacher become increasingly a diagnostician of learning difficulties and a prescriber of remedial instruction. Can a teacher be simultaneously highly empathic and highly competent in subject matter or are these traits incompatible? Is this folklore supported by research?

Empathy was important in the past because of its role in diagnosis. It will become increasingly important in an age when technology dehumanizes education. In a technological age in which misunderstandings in communications can affect the lives of untold numbers of people, the development of sound interpersonal understandings will be important. To deny the importance of empathic processes is to deny what is an essentially human capability: understanding.

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A P P E N D I C E S

APPENDIX A

STUDENT TEACHER-SUPERVISING TEACHER INDEPENDENT, DEPENDENT AND DESCRIPTIVE VARIABLE DATA

Appendix A

Student Teacher-Supervising Teacher Independent, Dependent and Descriptive Variable Data

	Student Teacher					Supervising Teacher					
Instructional Level	Age	Grade Point Average**	Success Rating	Empathy Pre-test Score	Empathy Post-test Score	Empathy Score	Sex	Age	Years of Teaching Experience	Class Size	School Size
K-2	21	2.6	4	49	33	38	F	26	4	35	900
K-2	25	2.5	2	49	48	33	F	45	20	27	900
K-2	20	2.2	3	42	48	47	F	48	20	38	450
K-2	20	3.3	2	49	40	37	F	48	10	25	400
K-2	21	2.4	3	53	54	69	F	47	14	25	750
K-2	25	3.2	4	51	57	52	F	25	4	26	256
K-2	20	2.5	2	52	54	56					
K-2	24	2.7	3	53	55	55	F	26	5	29	430
K-2	21	2.2	2	50	46	54	F	26	5	27	
K-2	21	2.5	3	55	51	48	F	31	5	25	250
K-2	22	2.5	3	56	58	39	F	54	30	25	
K-2	20	2.5	3	51	51	39	F	40	8	27	350
K-2	21	2.8	3	51	47	33	F	46	7	23	650
K-2	23	2.1	2	61	44	22	F	33	9	30	200
K-2	20	3.0	1	43	41	42					
K-2	21	3.2	3	44	51	39	F	38	17	23	140
K-2	20	2.6	2	48	45	50	F	28	7	28	710
K-2	20	2.6	3	45	56	38	F	48	15	26	350
K-2	21	2.1	2	35	33	41	F	48	25	23	350
3-6	20	3.1	2	44	41	39	F	46	10	25	426
3-6	21	3.4	3	41	34	41	F	27	5	32	650
3-6	23	2.3	2	48	46	41	F	33	12	30	300
3-6	22	2.2	3	36	35	49	F	27	4	26	560
3-6	21	2.6	3	44	35	29	F	26	5	27	420
3-6	22	2.5	2	50	58	50	F	51	21	30	900
3-6	22	2.2	3	57	62	37	F	36	16	28	350
3-6	21	3.2	3	52	49	43	F	38	7	32	360
3-6	22	2.6	3	58	52	44	F	39	11	29	287
3-6	21	3.1	3	59	52	40	F	26	4	27	420
3-6	20	3.6	1	57	53	41	F	32	11	24	900
3-6	21	3.2	3	63	65	46	F	23	2	33	710
3-6	20	2.4	3	56	54	46	F	35	11	30	750
3-6	21	3.3	2	52	62	56	F	45	22	23	350

	Student Teacher					Supervising Teacher					
Instructional Level	Age	Grade Point Average**	Success Rating	Empathy Pre-test Score	Empathy Post-test Score	Empathy Score	Sex	Age	Years of Teaching Experience	Class Size	School Size
3-6	21	3.2	3	50	50	57	F	25	4	30	400
3-6	21	3.8	2	50	55	55	M	37	7	64	490
3-6	20	3.1	2	48	39	53	F	39	11	33	270
3-6	21		3	44	37	52	F	39	18	31	600
3-6	36		1	53	46	23	F	42	15	34	460
3-6	20	2.5	2	58	52	37	F	57	18	33	900
3-6	20	2.5	3	40	37	47	F	46	22	30	375
3-6	20	2.3	4	46	46	50	F	28	7	31	308
3-6	22	2.5	2	36	39	42	F	40	6	28	550
3-6	21	2.6	3	37	48	35	F	60	23	24	287
3-6	20	2.8	2	50	52	47	F	40	17	30	600
K-2*			2	58							
K-2*			2	61							
K-2*			2	40							
K-2*			2	53							
3-6*			2	53							
3-6*			2	47							
3-6*			2	49							
3-6*			2	54							
3-6*			2	53							
3-6*			3	47							
3-6*			3	59							
3-6*			3	57							
3-6*			1	52							

*Utilized only for Hypothesis Two.
**A = 4.

APPENDIX B

PERSONAL INFORMATION FORM UTILIZED BY COORDINATORS IN STUDENT TEACHER PLACEMENT

MICHIGAN STATE UNIVERSITY
COLLEGE OF EDUCATION

PERSONAL INFORMATION TO SUPPORT REQUEST FOR STUDENT TEACHING PLACEMENT

Name Mr. Mrs. Miss ..... (Last / First / Middle initial / Maiden name if appropriate)

Secondary Majors - What subjects and at what level do you wish to teach?

Subjects: 1st choice ..... 2nd choice ..... 3rd choice .....

Grade Level: Senior high ☐ Junior high ☐ either ☐

Elementary and Special Education Majors -
What grade level do you wish to teach?

1st choice .....
2nd choice .....
3rd choice .....

Special Education Majors - What is your area?

☐ Speech Correction ☐ Deaf ☐ Visually Handicapped
☐ Physically Handicapped ☐ Emotionally Disturbed ☐ Mentally Handicapped

Is this your Regular . . . . . Special Education . . . . . Term?

When is/was your other term of student teaching? .....

In which center was this done? .....

For Music Majors:

☐ Vocal Music
☐ Instrumental Music
☐ Both-General Supervisory
☐ Major instrument .....

For Art Majors:

In which of these areas would you prefer to do the *major part* of your teaching?
☐ In the elementary school ☐ In the secondary school

Will you have a car when you student teach? .....Yes
.....No

This form is to be completed *before* you will be assigned in student teaching. One copy will go to your supervising teacher and one to your coordinator. You may fill them out separately or use carbon paper.

Since resident student teaching coordinators will use this information in arranging the best placement for you, please answer questions carefully and to the best of your ability.

Return completed form to:

Student Teaching Office
Room 134
Erickson Hall
Campus

DATE..... Student number .....

Your present address .....
Number and Street

.....Telephone:.....
City and State Zip Code

Your home address .....
Number and Street

.....Telephone:.....
City and State Zip Code

Your marital status .....Number of children .....Ages..... ....

Your present all-college scholastic average.....Name of academic Advisor .....

Your age .....Birthplace.....Social Security #.....

List the ages of your sisters ..... Brothers.....

What close friends or relatives are teachers or engaged in professional education activities?

Relationship	Kind of position
.....	.....
.....	.....
.....	.....

What is your father's occupation? .....

What are your hobbies? List and check:

1.	☐ Actively pursue	☐ Occasionally	☐ Not very often
2.	☐ Actively pursue	☐ Occasionally	☐ Not very often
3.	☐ Actively pursue	☐ Occasionally	☐ Not very often
4.	☐ Actively pursue	☐ Occasionally	☐ Not very often

What traveling have you done? Where? When?.....

.....

.....

.....

Military service (branch, location, time and type of assignment) .....

Present draft status .....

YOUR HIGH SCHOOL EXPERIENCES:

Name and location of High School from which you graduated .....

Year graduated ..... List extra-curricular activities in high school .....

.....

.....

IN CASE OF ACCIDENT OR EMERGENCY:

Who is your next of kin?.....Relationship to you.....

His address.....

His telephone..... Your church preference.....

Health-accident insurance Company .....

Do you have any history of fainting spells, seizures, comas or other physical disabilities or nervous disorders? Yes ☐ No ☐ If yes, explain .....

Your father's name ..... Your mother's name .....

YOUR COLLEGE EXPERIENCES:

Have you attended colleges other than M.S.U.? ..... (if so, please name the College)

Date you entered M.S.U. ..... Your class standing.....

Date you expect to graduate .....

Do you already hold a college degree? ☐ Yes ☐ No

If "Yes", Where was this degree earned? .....

Please list the extra-curricular college activities in which you participated .....

.....

.....

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.....

IN THIS SPACE

Please staple or clip snapshot or photograph.

This will help resident coordinators begin to know you better, and enable the school people to identify you easier during the orientation visit. It will also help to refresh coordinator's memory of you if you request recommendations in the future.

In which of the following activities would you be willing to *help supervise* or participate? (Please check)

☐ Scouting Activities	☐ Dramatic Activities and Plays	☐ Vocal Music Activities
☐ Instrumental Music Activities	☐ Athletic Activities Which Sports?	
☐ Recreation Activities	☐ School Yearbook	☐ Boys' Safety Patrol
☐ School Newspaper	☐ Student Council	☐ Girls' Service Squad
☐ School Store	☐ YMCA Activities	☐ Swimming Activities
☐ Book Store	☐ YWCA Activities	☐ Art Club
☐ P.T.A. Affairs	☐ School Radio or TV Programs	☐ Chaperoning High School Affairs

WORK EXPERIENCES:

A. Describe experiences, activities, or work with children or young people: .....

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B. Describe other work experiences you have had: .....

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.....

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.....

TEACHING OUTLOOK:

Write a brief statement about reasons for your interest in teaching. Why you entered the field of teaching, your aspirations and goals, etc. . . . (If you prefer, you may comment upon: (1) what you believe will be your major contribution to the teaching profession and/or: (2) What you believe student teaching will offer you.)

(Write in this space)

Please list all the courses taken in your teaching fields (include current enrollments):

MAJOR FIELD: Name of Courses	
.....	.....
.....	.....
.....	.....
.....	.....
.....	MINOR FIELD: Name of Courses
.....	.....
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APPENDIX C

MICHIGAN STATE UNIVERSITY STUDENT TEACHING PROGRAM OBJECTIVES

Course Three*

It is proposed that Student Teaching be assigned four primary functions:

a. Providing remedial instruction on an individualized basis as the clinical experiences of students in the classroom are analyzed and weaknesses in their ability to implement previous learnings are identified.

b. Teaching specific substantive content most appropriately and/or most effectively handled in the student teaching context. This would be included as a part of the seminar for student teachers conducted weekly by our resident coordinator.

c. Confronting students with sociological phenomena and philosophical and professional issues as a basis for concept and value development in ED 301.

d. Developing in each student a realistic self-concept as a teacher.

The specific content assigned to student teaching (b above) provide that the student who completes the course:

Relationships in the School and Community

1. Understands the line and staff organization of schools and the functions of specific school personnel.

2. Recognizes the existence of unique sanctions, norms and codes of behavior which affect the operation of the school.

3. Studied the contribution of non-school agencies to the curricular experiences of youngsters.

4. Studies the role of the specialist in the school program, e.g., nurse, visiting teacher, homebound teacher, diagnostician.

5. Recognizes the sources and allocation of funds for all levels of education.

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*Student teaching.

6. Understands the role of the teacher in guidance and his relationship to the guidance specialist.

7. Develops procedures for interpreting pupil progress to parents.

The Teacher and the Profession

8. Recognizes the nature, program, purpose, values and value of professional organizations in education.

9. Develops personalized criteria for evaluating, choosing and securing a teaching position.

Planning and Managing Instruction

10. Prepares defensible written plans in appropriate detail.

11. Selects and uses instructional materials and community and technological resources of various types to fit specific instructional needs.

12. Utilizes the elementary tactics of educational research in conducting simple studies in the classroom.

13. Develops a variety of motivational techniques for the classroom.

14. Understands the utility of cumulative record information on pupils as clues to effective modes of instruction.

Evaluating Instruction

15. Constructs tests for measuring student growth when standardized measures are unavailable.

16. Analyzes patterns of test scores as one means of diagnosing pupil strengths and weaknesses.

17. Uses evaluation techniques for a wide range of teaching purposes (pupil diagnosis, evaluation of teaching, assessing readiness to profit from instruction, grading).

18. Assigns grades or other evaluative indices in a manner consistent with a clearly defined position regarding grades.

- Recommendations of the Curriculum Review Committee

APPENDIX D

AFFECTIVE SENSITIVITY SCALE, FORM B

AFFECTIVE SENSITIVITY SCALE
Instructions

You will be viewing short scenes of actual counseling sessions. You are to identify what feelings the clients have toward themselves and toward the counselors they are working with.

Although in any one scene a client may exhibit a variety of feelings, for the purposes of this instrument you are to concentrate on identifying his last feelings in the scene.

On the following pages are multiple choice items consisting of three responses each. Most scenes have two items, but a few have three. After you view each scene, you are to read the items and ask yourself the following question:

> If the client were to view this same scene, and if he were completely open and honest with himself, which of these three responses would he use to describe his feelings?

After you decide which response accurately describes what the client is actually feeling either about himself or the counselor he is with, indicate your choice on the answer sheet.

Here is a sample item:

CLIENT I
Scene 1

Item 1

1. This exploring of my feelings is good. It makes me feel good.
2. I feel very sad and unhappy.
3. I'm groping and confused; I can't bring it all together.

After you had viewed Scene 1 for CLIENT I, you would read these three statements (Item 1) and would then decide which one best states what the client would say about his own feelings after viewing the same scene. For example, if you decide number two best states what the client is feeling, you would then find the number 1 on your answer sheet and darken in the space for number two.

1. 1 2 3 4 5

We will only make use of the first three answer spaces following each item on your answer sheet.

Remember you are to concentrate on the latter part of each scene in determining the most accurate description of the client's feelings.

After you view the appropriate scenes, you will have thirty seconds to answer each of the first twelve items. For each of the remaining items, you will be allowed twenty seconds.

CAUTION: The item numbers on your answer sheet go across the page, not down the page as you would usually expect!

AFFECTIVE SENSITIVITY SCALE REVISED FORM B

CLIENT I
Scene 1

Item 1
1. I'm just a little confused, I always have trouble expressing myself.
2. I'm feeling glum at this point, kind of a sad feeling.
3. I'm groping and confused; I can't bring it all together.

Item 2
1. You're (counselor) trying to understand what I'm feeling, but I'm not sure you're completely with me.
2. You really understand me. I like that.
3. You're just not with me today. Please try.

CLIENT I
Scene 2

Item 3
1. I feel sorry for my husband and the relationship we have.
2. I don't really understand what I feel. Yet, I do feel guilty about creating pain in others which returns to me.
3. I feel pleased at seeing a possible relationship between my feelings of anger and pain.

Item 4
1. He (counselor) doesn't have to like me. I just want him to agree with me and tell me I'm right.
2. I'm trying to please you. Do you like me?
3. He's really understanding me now.

CLIENT I
Scene 3

Item 5
1. I'm not sure what I feel; I'm confused, mixed up.
2. It's pretty damned hard to understand what is going on in me.
3. I'm pleased with this insight, but I'm afraid to face the anger that I really feel. It scares me!

Item 6
1. He's (counselor) on the track with me. Let's go on. This feels good.
2. I'm impatient; let's not go back. Let's go on.
3. He (counselor) makes me feel very insecure with myself. I wish he wouldn't keep going.

CLIENT I
Scene 4

Item 7
1. I feel irritated, confused, frustrated.
2. I don't feel angry; I'm feeling comfortable because I don't have any loss or hurt involved.
3. If I wanted to get angry, I could easily, but I would have to have a good reason first.

Item 8
1. This is embarrassing, I feel embarrassed.
2. I'm angry and that makes me feel guilty.
3. It frightens me to think about being completely honest about my feelings.

Item 9
1. He thinks I may be angry with him, but I'm not at all. I really feel very good about him (counselor) right now.
2. He (counselor) isn't leveling with me so why should I level with him?
3. I just can't tell him the truth--he might leave me.

CLIENT I
Scene 5

Item 10
1. I feel calm and collected. I just want to think for a while.
2. Yes, that is when I get angry. I see it all clearly now.
3. I feel anxious and stimulated.

Item 11
1. I'm feeling very distant--lost in thought.
2. I like the questions he (counselor) asks. I respect him and have confidence in him.
3. He (counselor) doesn't help me at all; he just confuses me, so I'm escaping him.

Item 12
1. I'll pretend I'm agreeing with him (counselor), but I don't see the connection at all.
2. I like what he's doing. I don't feel as uncomfortable now.
3. I wish he would stop pushing me in this direction.

CLIENT II
Scene 1

Item 13
1. I'm pleased, happy; I feel good all over!
2. It was brought right back, that amazes me, but it hits quite bad too. It hurts!
3. I'm not bothered by this. I can handle it. I'm confident.

Item 14
1. He's (counselor) caught me; careful, I'm not sure I want that.
2. I like him. He's trying to make the situation a little lighter and made me feel better about it.
3. I don't feel he understands. He's sarcastic. I don't like that.

CLIENT II
Scene 2

Item 15
1. I feel a little uneasy and self-conscious, but not much.
2. This scares me. I feel frightened!
3. I feel flirtatious. I like this!

Item 16
1. I feel a little bit embarrassed, but that's all right as long as I can keep my composure.
2. I have a feeling of sadness.
3. I feel flustered and embarrassed.

Item 17
1. He's asking for some touchy material, but that's all right. It's about time he knew.
2. He's being very frank and open! I'm not sure I want that.
3. I want him to leave me alone--I want out of here. I don't like this.

CLIENT II
Scene 3

Item 18
1. I'm getting so much attention. I really enjoy this. It makes me feel good.
2. I'm scared by what I'm feeling. I feel embarrassed and threatened.
3. I have the feeling that what I wanted was wrong, and I'm a little ashamed of myself.

Item 19
1. This is good. We're really moving into my feelings.
2. He's too perceptive; he's looking right through me.
3. He's getting a little sticky; I'm not sure I like that.

CLIENT III
Scene 1

Item 20
1. I'm unhappy and uncomfortable with my whole life.
2. I feel "so--so" about this whole thing, but it will probably help.
3. I'm bored; I wish this was over.

Item 21
1. I don't feel any emotion towards the counselor--just kind of neutral.
2. He's asking the questions. I'll give him some answers, but I don't see any sense to all this.
3. The counselor is nice. He's trying very hard to understand me, but I'm not sure I want him to really know me.

CLIENT III
Scene 2

Item 22
1. I feel protective and defensive of what people may think about my family.
2. All this seems so pointless! I'm puzzled and bored.
3. We're having a nice conversation. Some of these things really make me think.

Item 23
1. This guy (counselor) embarrasses me with the questions he asks.
2. The questions he asks really make me think. I'm not sure I like that.
3. I can't follow this guy's line of thought. What's he trying to do?

CLIENT IV
Scene 1

Item 24
1. I'm concerned about my physical condition. I'm worried about it.
2. I want pity. I want her to think "Oh, you poor boy."
3. I feel good--nothing's bothering me, but I enjoy talking.

Item 25
1. She's too young to be counseling, and she's a girl. I'm not sure I like this.
2. She likes me; I know she does.
3. I'd like her to think I'm great.

CLIENT IV
Scene 2

Item 26
1. I'm a little annoyed with my family's ambitions for me.
2. That's a hell of a lot to ask! It makes me mad!
3. I feel sorry for myself, and I want others to feel the same.

Item 27
1. She (counselor) really understands me! She's with me now.
2. I don't feel much either way towards the counselor; she's not important to me.
3. I wonder if she appreciates the pressure that's put on me?

CLIENT IV
Scene 3

Item 28
1. This whole thing just makes me feel sad and unhappy.
2. It kind of angers me that they don't appreciate me when I feel I did my best. I wish I could tell them off.
3. No matter how well I do, I'm always criticized. It doesn't bother me too much though because I know that I did my best.

Item 29
1. I can tell she understands what I'm saying. She's really with me.
2. I wish I could get out of here; I don't like her.
3. Understand what I'm saying; I want her to know how I feel.

CLIENT IV
Scene 4

Item 30
1. I really want to be successful, and somehow I know that I can be.
2. That makes me feel kind of sad, unhappy. I don't want to believe that it's true--I want to be good.
3. I don't know what I feel here. It's all very confusing.

Item 31
1. I feel neutral towards her here. I'm not paying any attention to her.
2. Please feel sorry for me and try to help me. I wish she would praise me.
3. I like talking to her. She can be trusted even to the point of telling her how I really feel about myself.

CLIENT V
Scene 1

Item 32
1. It's just that I'm not very happy at school. I feel a little uncomfortable there.
2. I'm not sure how I feel about that question. I guess I just feel kind of neutral now.
3. I'm angry at the school, but that question surprised me. I'm kind of confused; I'm trying to understand, but I don't see any other connections.

Item 33
1. He's (counselor) completely wrong! I dislike him for questioning me! I told him what was bothering me; can't he accept what I say?
2. He's O.K. I like him real well. He asks good questions.
3. What's he driving at? I don't quite understand his question.

CLIENT V
Scene 2

Item 34
1. I feel rejected and empty inside. Am I unlovable?
2. I feel a little lonely. I want my boy friend to pay a little more attention to me.
3. I really don't feel much here; I'm just kind of talking to fill up space.

Item 35
1. Please say it isn't fair, Mr. Counselor.
2. He really understands me. I can tell him anything.
3. I'm not sure I care what he says. It's kind of unimportant to me what he feels about me at this time.

CLIENT V
Scene 3

Item 36
1. I'm afraid of marriage--insecure; it might not work out, and I'd be lost.
2. I really can give him all the affection he needs, I feel I'm a worthwhile person to be desired. He wouldn't dare step out on me.
3. I'm really not too worried; it'd all work out in the end even if we have to go to a marriage counselor.

Item 37
1. I don't care if he (counselor) can help me or not. I'm not sure I want his help.
2. He's so sympathetic. That makes me feel good.
3. Can you help me?

CLIENT V
Scene 4

Item 38
1. I feel I have some need to be liked, but it's not real strong.
2. I'm not lovable; I don't really like myself.
3. I'm a good person; I'm lovable. Down deep I know I am.

Item 39
1. I feel dejected, kind of insecure. I want to be likeable!
2. My main concern is that it's hard for me to take criticism. I usually think of myself as perfect.
3. I feel a little sad about all this; I do kind of want people to like me.

Item 40
1. He thinks well of me; I know he does, I can tell.
2. I want the counselor to really like me, but I'm not sure he does.
3. I like it when he asks questions like that. They make me really think about deeper things.

CLIENT V
Scene 5

Item 41
1. I wouldn't want to be treated like he treats Mother, but I don't mind him (stepfather) too much.
2. I feel very little emotion about anything at this point.
3. I hate him (stepfather)!

Item 42
1. Boy, I'm happy that he (counselor) agrees with me. He sympathizes with me. I feel completely accepted.
2. I'm embarrassed to tell the counselor how strong my feelings really are.
3. I'm not sure he'll be able to help me much after all. I'll just have to work this out by myself.

CLIENT V
Scene 6

Item 43
1. I'm kind of feeling sorry for myself, but I'm not really too worried.
2. I want to move out of the house as soon as possible. I feel I would be better off on my own.
3. My own parents don't want me; I feel cut off and hurt.

Item 44
1. I don't feel he's (counselor) helpful at all, and if he can't help me and see my side, I'm not going to like him either.
2. He's got me in a spot, but I feel I can still get him to see me as a good girl who is persecuted.
3. I wish the counselor were my father. He's listening; he understands how I feel.

CLIENT VI
Scene 1

Item 45
1. Disapprove! She'd kill me!
2. I feel jovial; this is real interesting.
3. I'm not sure how she would feel but the whole idea of her finding out excites me.

Item 46
1. He (counselor) understands me completely. He certainly is relaxed and comfortable.
2. I really don't care what he feels about me. I just want someone to talk to--anyone will do.
3. I was wondering how he would feel about me and what I'm saying.

CLIENT VI
Scene 2

Item 47
1. I think my brother is O.K. We have fun together.
2. I don't know what I'm saying here. I'm a little mixed up and confused.
3. I'm saying something that's important to me. I like Doug.

Item 48
1. He's (counselor) evaluating me. He thinks I'm bad!
2. I'm feeling more comfortable with him now.
3. I don't care much for this counselor. He doesn't understand me.

CLIENT VI
Scene 3

Item 49
1. This is very confusing for me. I'm not sure I understand what is going on.
2. This is how I really feel, I'm kind of starting to be myself.
3. I'm just talking to be talking here; this really doesn't mean much to me.

Item 50
1. I guess he's (counselor) all right, but I'm still not sure he understands me.
2. Let's get going. I'm impatient! I want to move to more important matters.
3. I feel comfortable with him. He understands me.

CLIENT VI
Scene 4

Item 51
1. I love my brother, but not romantically. We just have a good brother-sister relationship.
2. I don't know about feeling this way about Doug; it feels so good, but it concerns me too.
3. I feel better about my relationship with Doug now. It helps to get it out in the open. Now I feel it's all right.

Item 52
1. The counselor really reads me.
2. I feel no emotion towards the counselor. I'm too wrapped up in my own feelings.
3. He's seeing me in a good light, and he understands how fine I am.

CLIENT VI
Scene 5

Item 53
1. I'm not feeling much of anything here. I'm just kind of talking to be talking.
2. I'm mad at everyone at this point and don't know which way to turn; I guess I'm mad at myself too.
3. Now I'm talking about things that are real. I'm not on stage anymore. She is a louse!

Item 54
1. He (counselor) feels she's a bad person too. I can tell; he agrees with me.
2. Don't you agree with me? I want to know what you think.
3. He thinks this all sounds petty. He doesn't understand.

CLIENT VII
Scene 1

Item 55
1. I felt angry with my mother, but this made me feel guilty. I needed to make an excuse for her.
2. I'm really not angry with mother. It's not her fault.
3. I'm in a very passive mood. I'm just relaxing and talking about things that interest me.

Item 56
1. This counselor is all right. I feel I can confide in him.
2. I feel uncomfortable. I'm not sure what this counselor wants me to do.
3. I feel he wants me to talk about myself, but I don't care. I'm going to talk about what I want to talk about.

CLIENT VII
Scene 2

Item 57
1. I'm very sensitive; I'm very easily hurt.
2. I'm somewhat sensitive and easily hurt, but not deeply so.
3. I'm not sensitive or easily hurt at all. I just like to make people think I am.

Item 58
1. That makes me mad, I can do it--I know I can, but things just keep getting in my way.
2. It's really all his fault, if he just wouldn't have been such a joker.
3. This makes me feel guilty; I need to blame someone else instead of blaming myself.

Item 59
1. I'm neutral towards the counselor. I don't care what he feels about me.
2. I'm afraid he doesn't like me and what I'm saying about myself. I don't want him to be harsh with me.
3. He's easy to talk to. He understands what I'm like, and he still likes me. I can confide in him.

CLIENT VIII
Scene 1

Item 60
1. Say, this is all right. I like this.
2. I'm not feeling anything deeply. I know what I need!
3. It's embarrassing and difficult. I feel a little annoyed.

Item 61
1. I feel I can rely on this guy, so I'll let him talk and I'll just answer his questions.
2. I wonder what you think about this--please respond. Give me some help!
3. The counselor is a good guy. I like his questions; they make it easier for me.

CLIENT VIII
Scene 2

Item 62
1. I feel very unhappy about what I may eventually have to do.
2. I don't know what I feel; I'm confused about what I feel.
3. I'm damned uncomfortable; it's so confusing. I feel kind of 'blah' about it all.

Item 63
1. He's (counselor) missing the point. He bugs me.
2. I can't really tell about this guy. I don't know how I feel about him.
3. He seems like a good guy. He asks nice questions. I like him.

CLIENT IX
Scene 1

Item 64
1. That's good information to have, but I can take college or leave it. I don't know whether I want to go or not.
2. That's nice to know, but I feel that I kind of want to go to college.
3. That was great news; it made me feel good because I really don't want to go to college.

Item 65
1. He (counselor) helped me to relax. I'm not as nervous anymore. I like him.
2. I feel neutral towards this counselor.
3. I'm not sure this guy can help me. I'm not sure I believe what he's saying.

CLIENT IX
Scene 2

Item 66
1. I have kind of neutral feelings here. I'm just talking to pass the time.
2. I feel embarrassed; I really don't know why I came.
3. This feels good, I feel important and grown-up.

Item 67
1. I'm not sure how I feel about this counselor. I don't feel one way or the other about him.
2. I like the counselor very much--he makes me feel good.
3. He understands me pretty well and is trying to help. I guess I kind of like him.

CLIENT IX
Scene 3

Item 68
1. Goody, goody people don't really know any better, so I can't be too disgusted with them, but it does make me angry.
2. I don't really mind people feeling superior to me. It just makes me a little angry.
3. It tears me up inside when people think they're better than I am. I want people to be the same as me.

Item 69
1. I'm every bit as good as they are. I really feel I am. I know I am.
2. I kind of wished they liked me, but I can live without being a member of their group.
3. Those smart kids make me feel stupid.

Item 70
1. I feel sorry for them; they just don't realize what they're doing to people like me.
2. I feel I'm not as good as they are, and it really hurts when people act that way.
3. It makes me a little angry. I'm every bit as good as they are.

CLIENT IX
Scene 4

Item 71
1. I feel a little insignificant, and this makes me a little unhappy.
2. I'm a nobody. I'm always left out.
3. I'm unhappy with school. That's what is really bothering me.

Item 72
1. He (counselor) doesn't quite understand, but I don't care. It doesn't matter.
2. I don't feel one way or the other towards this counselor, we're just having a nice talk.
3. He (counselor) is really listening to me, and I feel he understands what I'm feeling.

CLIENT X
Scene 1

Item 73
1. I'm feeling scared, concerned. Is this for me?
2. I just feel uncertain about what to talk about. If I once get started, I'll be all right.
3. I feel very deeply depressed.

Item 74
1. This is interesting; I'm glad I came.
2. This all seems so useless--a waste of time.
3. This isn't too bad. I'm not sure I like it real well, but I'm kind of enjoying myself.

Item 75
1. He (counselor) seems to be listening--can he understand how I feel?
2. He's really with me. I can tell he understands me.
3. He doesn't keep things moving enough. I don't like that.

CLIENT X
Scene 2

Item 76
1. I'd like to think I could make it, but I'm not sure. I feel inadequate.
2. I just have an I-don't-care feeling; that's my real attitude towards all of this.
3. I'm confused here. I really don't have any definite feelings.

Item 77
1. I want to impress the counselor. I want him to believe I can do it.
2. He believes me; he thinks I can do it; I can tell.
3. I really don't care what the counselor thinks. It's not important to me.

CLIENT X
Scene 3

Item 78
1. What's the use of looking ahead? I'm scared to think about it.
2. I can accept my situation. Really, things aren't so bad. Things may bother me a little, but really not much.
3. I enjoy just living for today.

Item 79
1. He's (counselor) all right. He really understands me.
2. Nobody can really understand this. I don't think he will be any different.
3. I don't care what he thinks or feels; he's not important to me anyway.

CLIENT X
Scene 4

Item 80
1. I feel somewhat unhappy. I don't like to feel this way.
2. There's something about me; I just don't fit in, and that makes me feel real inadequate.
3. In some instances, I'm unsure of myself. I'm afraid I'll do the wrong thing, but I can handle this just by avoiding these situations.

Item 81
1. Why did they send me--I don't want to be here. I don't like this counselor.
2. I really like this counselor. He really understands me.
3. I'm more relaxed with this counselor now--I feel more at ease.

CLIENT XI
Scene 1

Item 82
1. I'm unhappy about all this, but I'm afraid to make a change.
2. It's not that I don't like school, it's just that I want to do the things I like most.
3. I'm not the student type. School bores me, but it embarrasses me when I say it.

Item 83
1. The counselor is a nice guy. I like him, and I think he likes me.
2. I wonder what the counselor thinks of me. He'll probably think less of me for saying this.
3. I don't care what he thinks of me. It doesn't really matter to me.

CLIENT XI
Scene 2

Item 84

1. I feel I should make a decision, but I feel insecure and uncertain about what I should do.
2. I could care less; I feel 'blah' about the whole thing. I'm just filling the time with idle chit-chat.
3. I'm somewhat sure of myself. I think I know what I'm doing.

Item 85

1. He's (counselor) giving me good advice--I probably should consider following it.
2. This counselor is a pain! His values are showing. That makes me uncomfortable.
3. The counselor understands me very well, but he is also evaluating me.

CLIENT XI
Scene 3

Item 86

1. I've found some new dimensions. I like to feel that I can have some excitement, but this kind of scares me too.
2. This doesn't really mean much. I'm not feeling much of anything.
3. This makes me feel very guilty; I'm very ashamed.

Item 87

1. I suppose he'll (counselor) tell me that's wrong, too. I'm not sure he understands me very well.
2. He's O.K.; he's listening to what I have to say. He really understands me and my feelings.
3. I don't care what he thinks or feels; it's not important. I don't have any feelings towards the counselor.

CLIENT XI
Scene 4

Item 88

1. I'm concerned about whether I can handle this situation. I want to leave, but at the same time I want to stay.
2. I really want to stay at home, but I know Mother doesn't love me enough.
3. I really feel I want to leave, but this makes me feel guilty.

Item 89

1. He's really with me; he understands just how I'm feeling.
2. I'm not concerned about what he feels or thinks about me. It doesn't matter to me one way or the other.
3. I'm afraid of what he'll think or feel about what I'm saying.

APPENDIX E

SUMMARY OF NINE SAMPLE GROUPS UTILIZED TO ESTABLISH PSYCHOMETRIC DATA ON THE AFFECTIVE SENSITIVITY SCALE

Summary data, including item analysis results and other statistical data, from administering Revised Form B of the Affective Sensitivity Scale to Sample Groups I, J, K, L, M, N, and P.*

Statistical	Testing	Sample Groups						
Identification	Time	J[a]	K[a]	P[b]	I[c]	L[c]	M[c]	N[c]
Mean Item Difficulty	Pre	44	39	42				
	Post	39	36	42	34	39	45	43
Mean Item Discrimination	Pre	17	16	20				
	Post	19	17	14	16	22	23	22
Mean Point Biserial Correlation	Pre	20	19	21				
	Post	24	21	20	22	25	27	25
Standard Error of Measurement	Pre	4.14	4.12	4.16				
	Post	4.01	3.95	4.17	4.00	4.11	4.22	4.16
Standard Deviation	Pre	6.71	6.37	8.02				
	Post	7.35	6.97	6.08	6.39	8.35	8.83	8.36
Range	Pre	34-62	41-68	36-73				
	Post	41-67	42-72	34-67	40-68	37-70	32-65	37-74
Mean	Pre	50.4	54.0	51.26				
	Post	54.1	56.8	51.73	58.7	53.9	48.8	50.7
Number in Group	Pre	34	31	50				
	Post	27	31	26	27	27	24	24

[a]Time interval between pretest and posttest was six months.

[b]Time interval between pretest and posttest was one week.

[c]When the scale was administered to a group only once, the results are reported in the row labelled "Post".

Description of Sample Groups

I, J, and K - Individuals attending master's degree full-year NDEA Counseling and Guidance Institutes at large universities located in midwestern states.

P - Undergraduate students attending a large northern midwestern university.

L and M - Individuals attending master's degree full-year NDEA Counseling and Guidance Institutes at large universities located in southern states.

N - Group of practicing school counselors in a northern midwestern state.

*Norman Kagan, David R. Krathwohl, et al, Studies in Human Interaction (East Lansing, Mich.: Educational Publication Services, College of Education, Michigan State University, 1967), p. 487.

APPENDIX F

SUCCESS RATING SCALE

SUCCESS RATING CHART

CRITERIA OF SUCCESS

A. Working with People

B. Establishing Classroom Climate

C. Planning Instruction

D. Managing Instruction

E. Command of Subject and Teaching Materials

F. Personal Qualities

G. Professional Qualities

H. General Effectiveness as a Teacher

SUCCESS RATING NUMBER	INTERPRETATION	PERCENTAGE OF STUDENTS LIKELY TO RECEIVE THIS NUMBER
1	**ONE OF THE VERY BEST STUDENT TEACHERS I HAVE EVER SEEN.** Assign rating 1 to the MOST EXCEPTIONAL and OUTSTANDING student teacher of all. If you judge that a student is of ABSOLUTELY OUTSTANDING ACCOMPLISHMENT and will make a potentially GREAT and PROFOUND effect on students, assign rating 1.	2% or about 15 out of 850
2	**HIGHLY SUCCESSFUL.** Assign rating 2 to those of somewhat lesser overall ability than rating 1 but nevertheless represent ACCOMPLISHED and OUTSTANDING student teaching performance. The highly successful student would rate close to rating 1 but is not one of the best student teachers you have ever seen.	13% or about 110 out of 850
3	**SUCCESSFUL.** Assign rating 3 to COMPETENT student teachers. Most should receive this rating and do not show the outstanding qualities of ratings 1 or 2.	About 70% or most or about 595 out of 850
4	**LESS SUCCESSFUL** Assign rating 4 to those student teachers who have some problems and rate below the middle, that is, competent and successful, group in your center.	13% or about 110 out of 850
5	**PASSED BUT SHOULD NOT BE IN TEACHING.** Assign rating 5 to those students who you feel OUGHT to fail - they really are not inclined to teaching - but because of various reasons should not receive a failing grade.	2% or about 15 out of 850
6	**FAILED.** Assign rating 6 to all student teachers who fail student teaching in your center.	
7	**DROPPED/GRADE POSTPONED.** Assign rating 7 to all student teachers who DROPPED student teaching or had their GRADE POSTPONED for any reason at all.	