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CHANGES IN THE BELIEFS OF COOPERATING
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THE STUDENT TEACHING EXPERIENCE.

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CHANGES IN THE BELIEFS OF COOPERATING TEACHERS
AND THEIR STUDENT TEACHERS DURING THE
STUDENT TEACHING EXPERIENCE

DISSERTATION
Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
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* * * * *

The Ohio State University
1971

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INTRODUCTION AND STATEMENT OF THE PROBLEM

Student teaching has generally become the culminating experience in the preparation of teachers. It is a most important element in their preservice education. Dr. James Conant (24) has singled out student teaching as the one aspect of teacher education about the need for which there is universal agreement.

Since student teaching does play a vital role in the education of future teachers, what factors in the student teaching experience are of most significance? Schorling (76) has designated the cooperating teacher as the most important variable at work in student teaching. Andrews (2) states: "Over the years, many have contended that any really competent teacher can be a good cooperating teacher, but long experience proves that for a surprising percentage of teachers this just isn't the case."

An outstanding problem in relation to assignments for student teaching experience is that departments of education are often forced to use all available cooperating teachers within a certain radius of the college. Therefore, factors other than the consideration of the two people involved who must work so closely together, quite often are the basis
for the selection of the cooperating teacher and the assignment of the student teacher. Public schools have policies which sometimes limit the number of student teachers who may be assigned to that particular school during one school year. Some cooperating teachers may enjoy and welcome student teachers; others may work with them for other reasons. Distance to the school becomes a major factor for the student teachers since many commute and do not live in the community for their student teaching experience. Whether or not a student teacher owns an automobile or can find a ride to a particular school is also considered in some institutions. An added factor in vocational home economics is the fact that student teachers must complete their experience in an approved vocational center. Thus, factors other than the relationships of the two people who have the most concern in the experience often take precedence. Expediency may be the basis for selection of the student teaching center rather than the best interests of those two persons most directly involved.

Even with the above conditions existing, attempts need to be made to give as careful attention to the selection of cooperating teachers as possible. In cases where a particular cooperating teacher may be considered, consideration of the possible relationships between cooperating teacher and student teacher may then be a factor in the selection of the student teaching center.
Sarason and other (75) suggested that: "What is desperately needed are studies which have as their aim a detailed description of what goes on between neophyte and supervisor..." A review of the research reveals many studies concerned with the dyadic relationship of the student teacher and the cooperating teacher. As long as cooperating teachers and student teachers must interact in order to accomplish a task or reach a goal, success or failure will be dependent upon how well they work together. Dissimilar characteristics may influence the interrelationship and thus affect the compatibility of the individuals involved.

Price (69) states that follow-up studies of student teachers reveal that cooperating teachers do influence their student teacher's behavior and the student teachers seemed to acquire many of the teaching practices of their cooperating teachers. He concluded that his finding reinforces the belief that only the best available teachers should be used in student teaching programs. Holmes (44) studying classroom behaviors, Tervillinger (84) verbal behavior, and Horowitz (45) expectations of the role of teacher have assessed the influence of the cooperating teacher. Markowitz (54) and Musella (62) have investigated the change in dogmatism of the student teacher as related to the change in this same characteristic of the cooperating teacher. Changes in attitude of the student teacher have been studied by Holl (43) who found that they were not
affected by the cooperating teacher, by Wiggins (95) who found that the changes were in the direction of the cooperating teacher, and by Vickery and Brown (90) who reported that the attitudes of the student teachers fell midway between the cooperating teacher and the education professors.

Attempts have been made at matching student teacher and cooperating teacher. Burnett (20), McReynolds (64), DiTosto (28), and Hill (42) matched student teachers and cooperating teachers on various characteristics and found disappointing results in these matching attempts. Hayes (38) and Burk (19) found more promising results from their studies. All felt that further investigation was needed and that some evidence was given for possibilities of matching dyads.

With the possibility that the cooperating teacher may be given greater responsibility for the guidance of the student teacher, trying to achieve a valid matching of the two people takes on more significance and brings to light many problems. The cooperating teacher brings to her position the total teaching experiences she has had, her personality characteristics, her ability to work with people and whatever deficiencies she may have due to inexperience, lack of training, and/or personality problems. Specific training in human relations has probably not been a part of the past experience of either the cooperating teacher or the student teacher, and may become
a need that is evidence as they work together during the student teaching experience.

**Purpose of the Study**

From a review of the literature such as precedes, a need was seen for further study of the interpersonal relationships of the student teacher and cooperating teacher. This investigator believed that other aspects such as student teachers' and cooperating teachers' personal beliefs, their beliefs about teaching practices and their openness needed examination. The questions asked were: 1. What changes in certain components of interpersonal relationships take place during the student teaching experience? 2. Does satisfaction with student teaching relate to changes in interpersonal relationships?

The major objective of the study was to assess the extent to which a change in the cooperating teacher is accompanied by a change in her student teacher during the student teaching experience. The components of change selected for study were: open- and closed-mindedness, basic personal beliefs, and beliefs regarding teaching practices. A further objective was to determine the degree of satisfaction with student teaching by student teachers and to relate this satisfaction to the three selected components of interpersonal relationships between the cooperating teachers and student teachers.
The following were the specific questions that gave direction to the study:

1. Will the cooperating teachers and student teachers' scores on open-mindedness be closer together at the end of the student teaching experience than at the beginning?

2. Will the cooperating teachers' scores and the student teachers' scores on the Personal Beliefs Inventory be closer together at the end of the student teaching experience than at the beginning?

3. Will the cooperating teachers' and student teachers' scores on the Teacher Practices Inventory be closer together at the end of the student teaching experience than at the beginning?

4. What satisfaction with student teaching will be expressed by the student teachers?

5. What relationship is there between changes in student teachers' beliefs and the student teachers' satisfaction?

6. What relationship is there between changes in cooperating teachers' beliefs and the student teachers' satisfaction?

7. Will there be a significant difference in the scores on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory for the student teachers?
after student teaching as compared with their scores after methods and just previous to student teaching?

8. What factors in the background of the cooperating teachers relate to their scores on the Teacher Practices Inventory?

9. What factors in the background of the student teachers relate to their satisfaction with student teaching?

10. Will the student teachers’ scores on each of the three instruments be closer to the scores of the cooperating teachers than to the score of the college supervisor?

**Statement of Hypotheses**

The following were the hypotheses postulated for the study:

**Hypothesis 1.** The level of the students’ scores after methods class experience and after the student teaching experience will be:

a. higher on the Dogmatism Scale (more open)

b. higher on the Personal Beliefs Inventory (more experimental)

c. higher on the Teacher Practices Inventory (more experimental)

**Hypothesis 2.** The student teachers' scores on the Dogmatism Scale will more closely approximate their cooperating teachers' scores at the end of the student teaching experience than at the beginning.
Hypothesis 3. The student teachers' scores on the Personal Beliefs Inventory will more closely approximate their cooperating teachers' scores at the end of the student teaching experience than at the beginning.

Hypothesis 4. The student teachers' scores on the Teacher Practices Inventory will more closely approximate their cooperating teachers' scores at the end of the student teaching experience than at the beginning.

Hypothesis 5. Higher scores of cooperating teachers on the Teacher Practices Inventory will correlate with:
   a. more years of teaching experience
   b. more experience as a cooperating teacher

Hypothesis 6. Higher scores of the student teachers on the Satisfaction with Student Teaching Inventory will correlate with their change to:
   a. higher scores on Dogmatism Scale (more open)
   b. higher scores on Personal Beliefs Inventory (more experimental)
   c. higher scores on Teacher Practices Inventory (more experimental)

Hypothesis 7. Higher scores of the student teachers on the Satisfaction with Student Teaching Inventory will correlate with their cooperating teachers' change to:
   a. higher scores on Dogmatism Scale (more open)
b. higher scores on Personal Beliefs Inventory
   (more experimental)

c. higher scores on Teacher Practices Inventory
   (more experimental)

**Hypothesis 8.** Higher scores of the student teachers on the Satisfaction with Student Teaching Inventory will correlate with:

a. more time spent with their cooperating teachers in conference

b. more incidence of out of school activities with their cooperating teachers

**Hypothesis 9.** The level of the student teachers' scores on the Dogmatism Scale, Personal Beliefs Inventory, and the Teacher Practices Inventory will compare more closely with their cooperating teachers' scores than with their college supervisor's score.

**Definition of Terms**

The following definitions were established as the basis for usage in the study.

**Student Teacher** is a college student assigned to student teaching experience.

**Student Teaching** is a period of guided teaching, during which a college student assumes increasing responsibility for directing the learning of a group or groups of learners over a period of consecutive weeks.
Cooperating Teacher is a regular teacher of school pupils who also directs the work of a student teacher with these same pupils.

College Supervisor is a regular college staff member who has as a part of his assigned workload the supervision of the activities of student teachers and the relationships and conditions under which these students carry on their work.

Upperclass Students are the junior and senior level home economics students who were enrolled in general courses (not methods or student teaching) during the first semester 1970 at Ashland College.

Dogmatism Scale, Form E is a measure of individual differences in openness or closedness of belief systems.

Personal Beliefs Inventory is a cognitive content instrument which measures agreement-disagreement with basic philosophic beliefs.

Teacher Practices Inventory is a cognitive content instrument which measures agreement-disagreement with beliefs about teaching practices.

Satisfaction with Student Teaching Inventory is an effective measure of the student teacher's satisfaction with student teaching.

Professional Semester is the college semester in which the student teacher is enrolled the first part in methods course and the last part in student teaching. The
methods course includes two full days per week of student teacher observation and participation in the student teaching center.

Limitations of the Study

The study was limited to the total number of home economics students enrolled in student teaching, and in junior and senior level general courses at Ashland College during the first semester 1970. The study included the seventeen cooperating teachers and their student teachers, the thirty-six upperclass students, and one home economics college supervisor.

The Following Chapter

Chapter II is an extended review of literature in which additional factors that have a bearing on the student teacher-cooperating teacher relationship are investigated. The review shows the trend of the studies over a period of time and the kinds of studies which currently show promise.
CHAPTER II

REVIEW OF LITERATURE

A survey of the literature relating to the relationship of the cooperating teacher and student teacher revealed that:
1. the cooperating teacher is seen as assuming an increasing share of the responsibility for teacher education; 2. the influence of the cooperating teacher on the student teacher is recognized as one of increasing importance.

Troisi (89) supported these conclusions when he stated that the cooperating teacher has assumed a more comprehensive role in the preparation of teachers due to the emphasis placed upon direct experience. He concluded that the cooperating teacher is becoming recognized as the most influential person in a teacher education program. Andrews (3) observed that the role of the cooperating teacher is a very complex one and that to be able to carry this role effectively requires that a cooperating teacher be a sympathetic guide and counselor of the neophyte.

The Importance of Skill in Human Relations

The thirty-eighth Yearbook of the Association for Student Teaching reports on much of the research which has been done concerning the supervision of student teaching up to the year 1959 (89). These studies and others done in the
early sixties indicate that the job of the cooperating teacher is not only complex, but is becoming more so (65). Studies which were done in the early 1930's list as few as ten tasks which the cooperating teacher was expected to perform, while later studies list as many as twenty-five specific activities. Nash (65) concluded the following are basic responsibilities associated with the position of the cooperating teacher:

1. being a friend, adviser, and counselor of student teachers,
2. being an outstanding teacher of boys and girls, 3. being an expert director of student teacher observation, 4. being a professional person and a good example for the student teacher, 5. being a precise evaluator of teaching proficiency and an accurate estimator of teaching potential, and 6. being a pioneer, innovator, and experimentor.

During the decade of the 1950's, there was a change in supervision from giving patterns for teaching to guiding the growth of student teachers in such a way as to develop individual potentialities and the ability to meet problems creatively (57). Donovan (29) interpreted this objective as including "the note of flexibility, referring particularly to the attitude of willingness to experiment with new methods and procedures and the continuous search for better ways of doing things." Harven (39) did a comprehensive study of research findings and articles in the professional literature of the Association for Student Teaching prior to 1962. The research
revealed that the strongest area of the cooperating teacher's work was in preparing for and making the student teacher "feel at home" in the new teaching situation. She felt that the contribution which may be made by the cooperating teacher had not been adequately explored.

The objectives of student teaching have been reflecting new and different emphases. Rogers (73) indicated student teacher's growth in creativity as a major objective. Bills (11) defined the general purpose of student teaching in terms of openness of prospective teachers to their experience. In studying the problems of student teaching, he noted these rarely relate to the student teacher establishing his identity as a teacher; most relate to his relationships with other people and to maintaining his own sense of worthwhileness. Simon (79) stressed value development and clarification as one important objective of student teaching. Psychological adjustment has been suggested by Rogers (73) as another.

Boykin (12) referred to attitudes of acceptance and appreciation of other people as a professional objective. Stratemeyer (82), in discussing the attitudes essential for the teacher educator, recommended that the cooperating teacher learn to accept the student teacher for what he is. Walters and Halstead (91) pointed out the importance of the supervisor learning to understand the personal as well as the professional needs of the supervisee. Richards and Robinson (72) believe
that the cooperating teacher shows keen insight into human behavior when he accepts the student teacher on his own merit rather than, in light of the cooperating teacher's experience with former students. Shunk (77) stated that the student teacher must feel that he is accepted as he is by the cooperating teacher. The cooperating teacher also has to know what he does best in establishing relationships with others and rely upon those techniques and procedures to learn to know and to appreciate his student teacher.

Edmund and Hemink (30) found that student teachers they studied considered most helpful those supervisory practices in which encouragement, interest, understanding, and sympathy were manifested toward them by their supervisors. Frankness and honesty on the part of the supervisor, whether in criticism or evaluation, have also been found qualities highly appreciated by student teachers. Swineford (81) concluded that the growth of a classroom personality is tied directly to the quality of the classroom supervisor and to some extent to the college supervisor. Growth in this area depended on student teaching security, support, and confidence.

Bradley (14) found high correlations between scores of college supervisors, cooperating teachers, and student teachers when she measured their perceptions of the factors characteristic of any good interpersonal relationship between a cooperating
teacher and his assigned student teacher. McConnell (63) found that student teachers want opportunities to show initiative and assume responsibility after a sense of security has been established by good personal relations with the cooperating teacher and by a definition of what is expected of them.

Thus, among teacher educators the importance of human relations has received increasing emphasis. More cooperating teachers are realizing that their work is as much exploratory as is that of the student teacher. As a result, the student teacher is now treated as a co-worker in the learning process.

Andrews (4) considered some of the conditions and forces throughout the country having considerable impact on student teaching. He cited the "explosion of knowledge" in related disciplines—particularly perceptual psychology, learning theory, personality theory, social psychology, sociology, and anthropology. Increasingly concepts and techniques from these fields are being applied in student teaching. He cited as an example the impact of a student's "self-concept" and of perception of his role as an ideal teacher as most illuminating in explaining behavior and problems of behavior change.

Lantz (49) believes that if self-concept and concepts of others are important determinants in teaching behavior, then in placing student teachers in student teaching situations, care must be given to placing them in non-threatening situations where their self-concepts and concepts of others may be able to change.
Weschler, et al. (93) states, "We have shifted from a stress on the development of interpersonal skills (narrowly defined) to a greater concern with an individual's understanding of himself and of his relations with others."

The Association for Student Teaching (70) published a bulletin on the subject of the student teacher and human relations. In this publication Ramsey suggested the student teacher develop and incorporate into his behavior human relation skills which would enable him to relate effectively during the student teaching experience. Evans (34) expressed a similar opinion noting the importance of such skills also in the students' relations with their peers and other adults. Boykin (12) proposes that student teachers be helped to acquire a working knowledge of group processes.

Thus, the area of human relations is seen as having increasing emphasis in the student teaching experience. Skill in human relations is a need that is seen not only for the cooperating teacher but also for the student teacher. The following section reviews programs that have been developed to give formal training to those involved in student teaching and the relation of this training to changes in the cooperating teacher and student teacher.

Programs Designed to Increase Skills in Human Relations

A recent national workshop of the Association for Student Teaching at Oshkosh, Wisconsin (August 1965), was
devoted exclusively to the question of mental health and student teaching. The point is made that student teaching and teacher education must be concerned with more than the act or acts of teaching, it must be concerned with the entire being of the prospective teacher and with his ability to significantly influence the being of the people who will become his students (11).

Taylor (83) in 1967 reported on a five-year experimental program concerning the relation of teacher education to mental health. The major feature of the program was a three-semester field experience concurrent with a seminar substituting for all the courses of the traditional professional sequence. The problem was identified by the project staff was: "How can the program of professional education be adapted so that, in the normal course of learning about the job of teaching, the candidate can move toward mental health and self-realization; to a style of teaching which will benefit the mental health of those he teaches?" One goal was to foster the development of sensitivity; this was an increased awareness of the feelings of others, sharpened empathy, hearing better what others try to communicate, and a general awareness that a person's behavior represents the best choice of action he knows how to make.

About self-direction Taylor wrote, "The self-autonomy of the students was encouraged. Students who understood this did things on their own, made decisions about their learning, and
experienced autonomy." Two basic assumptions about teacher education were identified in the project. The first assumption was that learning is a power within and under the control of the learner. The learner will retain and become only those things which have positive and rewarding meaning to him. The second assumption was that the behavior of a teacher is a function of his own personality; therefore, the most important thing about a teacher is the kind of a person he is.

The research report lists two important implications for teacher education: 1. Teacher education must be concerned with personality and with methods which will change personality. The student must find that his learnings fit him personally. If the student's personality characteristics interfere with facilitating and, if this personality is not alterable, he should be screened out of teaching. 2. Student teaching is a period of personal ferment and development. This is a period of reorganization and change directed at the student becoming a teacher, a mature person functioning effectively.

A three-week summer institute sponsored by the United States Office of Education was conducted for eighty-four cooperating teachers at Northern Illinois University during 1969 (33). The objectives of the institute, which was described as highly successful, were to develop the cooperating teachers' desire to work with student teachers, their concern for quality student teaching, and to develop technical and human
relations skills necessary for them to work effectively with student teachers.

Since 1966, Bringle (15), Bidwell (9), Heck (40), Thorman (86), and Moskowitz (61) have conducted studies on the relation of human relations training to changes in flexibility and supervisory attitude, openness, communication skills and interpersonal perception, and interpersonal skills among cooperating teachers and their student teachers. It was found that flexibility and attitudes on supervisory styles were increased, there was no apparent change in openness, and communication skills and interpersonal perception were increased as were interpersonal skills.

In summary, the literature indicates that attempts have been made in the last six years to include in some teacher education programs training in interpersonal relationships. The recognized need in this area has been shown by the development of these programs at both the preservice and inservice level for both the cooperating teacher and student teacher.

In the following section the investigator has chosen to review those aspects relating most directly to this study since there is a vast amount of literature and research concerned with student teaching. The first part of the section deals with the open-closed-minded characteristics and their bearing upon the relationship established by the cooperating
teacher and student teacher. The next part cites the few studies found which deal with basic personal beliefs. Studies of beliefs concerning teacher practices constitutes the third part of the review. Next, a few studies on satisfaction are reviewed. The fifth part is concerned with research related to the dyadic relationship with the last part of the section concerned with "matching" the student teacher and cooperating teacher for the purpose of obtaining specific results during the student teaching experience.

Open- and Closed-Mindedness as a Factor in Interpersonal Relationships

Individual differences among cooperating teachers and their student teachers may be many. Summarizing the findings reported in professional literature during the 1950's, Michaelis (57) listed a variety of personality related factors related to the difficulties encountered during student teaching. There have been a number of studies concerned with the effect of open- and closed-mindedness on the part of either or both of the cooperating teacher-student teacher dyad. Some studies have pointed to the significance of this factor in the relationship; others have not.

Bills et al. (10) found that the changes in the student teachers' openness are significantly related to the openness of their cooperating teachers. By contrast Elliott (32) found significant negative changes occurred in the
openness of the student teachers with these changes related to the openness of their cooperating teachers and not to their college supervisors.

Markowitz (54) concluded that open-mindedness or closed-mindedness of prospective teachers appears to have no significant bearing on the effectiveness with which they function in student teaching. Febinger (35) described a population of prospective teachers in terms of openness or closedness of belief systems and other personality correlates. He described the subjects who were open as being bright, emotionally mature, dominant, adventurous, trustful, bohemian, confident, self-sufficient, and relaxed as well as high achievers. The subjects who were closed-minded tended to be dull, emotionally immature, submissive, timid and withdrawn, suspecting, conventional, insecure, and tense as well as being low achievers. The primary implications of a study by Kinard (48) was that the experience of student teaching apparently had little measurable effect upon the concept of openness in student teachers.

The purpose of a study by Neidich (66) was to determine if there was a relationship between the degree of open- or closed-mindedness in cooperating teachers and the accuracy of their perceptions of the interpersonal needs of their student teachers. The findings indicated that there was no general relationship. The relationship between a student teacher's dogmatism and his evaluation of himself and his supervising
teacher was also investigated by Musella (62). The hypothesis that closed-minded student teachers would rate themselves higher and their cooperating teachers lower on teaching effectiveness and would describe themselves in more positive terms and with less variability than would open-minded student teachers was significantly supported. Brumbough et al. (18) found that open-minded cooperating teachers are no more likely to be accurate in their perceptions of their student teachers' interpersonal needs than are closed-minded cooperating teachers.

**Personal Beliefs as a Factor in Interpersonal Relationships**

Few studies were found that deal specifically with basic personal beliefs. Brown (17) concluded that his study had important implications for the selection of cooperating teachers and college supervisors. There was evidence to indicate that cooperating teachers and college supervisors, in some cases, are in serious value conflict with the purposes and objectives of the teacher education program of which they are an important part. He further stated that perhaps such a divergence of purpose is healthy or unavoidable but that its influence needs to be studied more thoroughly.

Vickery and Brown (90) studied the belief patterns of eight groups of school personnel including cooperating teachers, student teachers, college supervisors, and education professors. There was general rejection of experimental
attitudes toward matters of religion and morals. Cooperating teachers were found to be significantly less experiment oriented than other groups. The student teachers tended to fall midway between cooperating teachers and education professors in their pattern of beliefs.

Lantz (49) found that the student teachers' perceptions of themselves and other teachers are altered by their student teaching experience; their basic values do not seem to change, but they seem to feel a need for a greater harmony of ideas. They perceive themselves as being more trustful and accepting of their interpersonal behavior and they gain new insights into and appreciation of others. They also perceive other teachers as being more trustful and somewhat more normal and realistic than they did before student teaching.

Teacher Practices as a Factor in Interpersonal Relationships

There are many studies dealing with teacher practices and teaching behavior. The changes that take place in the student teacher have been studied with regard to the influence of the cooperating teacher and other factors. The bulk of the research centers on the changes in the student teacher's attitudes about himself and about teaching in general.

Lindsey (52) reported that the teaching behavior of student teachers changed during student teaching in that it tended to become similar to the teaching behavior of their
respective teachers. Nash (65) stated that the attitudes the cooperating teachers have toward newer practices will have great influence on the potential of the student teacher for experimentation. Horowitz (45) found that he could not say, as a result of his study, that individual student teachers become more similar to their cooperating teachers in their teaching role while Massey (55) found that the direction of influence is from cooperating teacher to student teacher.

Although the field experience of one group of pre-student teachers did not increase their positive attitudes toward education, it did change their attitudes measurably (27). Student teachers showed a significant decrease in consistency of ideas about education after they had completed student teaching according to the study of Newsome et al. (67).

The change in verbal behavior of student teachers has been investigated by a number of researchers. Flint (36), Mitchell (59), and Matthews (56) found that the verbal behavior of student teachers in the classroom does change in relation to the verbal behavior of their cooperating teachers, with Matthews finding the changes more pronounced during the first half of student teaching. Auger (5) found that student teachers as a group changed significantly during the student teaching experience with students judged "most successful" in student teaching being more similar to their cooperating
teachers. Holmes (44) investigated the effects of three classroom behaviors characteristic of cooperating teachers upon the same behaviors in the student teachers assigned to them. Two out of three characteristics were shown to be operational. The investigator stated these findings suggested implications for teacher education programs to study the importance of behavioral variables in relation to the training of cooperating teachers, to the selection of student teachers and cooperating teachers, and to the length and nature of the student teaching experience.

Terwillinger (84), using the Withall's Technique for categorizing the verbal behavior of teachers, showed no change in the verbal behavior of student teachers during the student teaching period. Also, through the use of a Climate Index instrument, the behavior of the student teacher was not found to approximate that of the cooperating teacher.

Many studies have dealt with changes in attitudes attributable to the student teaching experience. Corrigan and Griswold (25) found that there was an expressed attitude change in student teachers during their student teaching experience toward three principles of education held to be important in guiding learning opportunities. These principles were: 1. the learner's purposes are recognized and utilized, 2. the learner engages in problem solving, and 3. the learner is helped to develop generalizations which he can apply in a
variety of life situations. Elementary student teachers working with cooperating teachers rated as average made the greatest gains, those working with cooperating teachers rated as high made only average positive gains, and those working with cooperating teachers rated as low made still lower gains.

Berryman (8) found that changes in attitude toward democratic teaching do occur during student teaching with significant positive changes being associated with favorable placement situations, except in the case of students of relatively low academic ability.

Price (69) found the literature on attitudes of student teachers and cooperating teachers indicated that attitudes become more realistic with experience in teaching. His study showed that a considerable change occurred during the student teaching semester and that there was a tendency for the student teachers' attitudes to change in the direction of the attitudes held by their respective cooperating teachers, and they often acquired many teaching practices of their cooperating teachers. To a question asked by Sorenson (80), only twenty-four percent of one hundred sixty-three student teachers said that manifest originality can help a student teacher get an A from the cooperating teacher, while sixty-eight percent said that submissiveness, imitation, conservatism, and the like are likely to assure the supervisee of getting an A.
Inglis (46) studied the effect of a professional laboratory experience on the attitudes of student teachers toward children and teaching. Student teachers in the study did not develop highly favorable attitudes toward children and teaching during the professional education sequence, nor did they develop more positive attitudes during student teaching when viewed as a total group. Although cooperating teachers were shown to have little influence on the attitudes of student teachers, the cooperating teachers and student teachers in suburban and self-contained classrooms shared similar attitudes toward children and teaching. Holl (43) also found that the autocratic-democratic attitudes of student teachers were not affected by the attitudes held by their respective cooperating teachers even though some significant changes were found within and between groups of student teachers.

Other studies show attitudinal changes of the student teacher during the student teaching experience. Rawlins (71) found attitudes toward teaching and working with young people showed a significant positive increase during student teaching. Heddendorf (41) found that professional education programs do produce a significant change in the attitude of the teacher in knowledge of professional methods, and do have a positive influence on skills and image, and a negative influence on spirit. The investigator states that student teaching results in disenchantment with the value system and "reality shock"
appears as the person attempts to fulfill his role responsibilities.

Wiggins (95) found that when student teachers changed their attitudes toward teaching, they were significantly influenced to change toward the direction of the expressed opinion of their cooperating teacher. Seperson and Joyce (78) at Columbia University explored the relationship between the teaching behavior of student teachers and cooperating teachers. The influence of the cooperating teacher was felt during the very early weeks of student teaching rather than being the result of a slow and cumulative impact. There was no consistent pattern of influence once the early impact of the cooperating teacher had been felt.

Positive changes of attitude toward teaching were found to occur as a result of student teaching with a stated need for further exploration of the specific effect of the cooperating teacher on the attitude change of the student teacher according to Lipscomb (53).

**Satisfaction as a Factor in Interpersonal Relationships**

Few studies were found dealing with satisfaction in the student teaching situation. This points up a need for research in this area if satisfaction is held to be an important factor in interpersonal relationships.
Trimmer (88) notes that the student teacher, if he is given the opportunity to be on his own and is given encouragement and help in using his own ideas, assesses his experience as satisfactory. He concluded that the student teacher desired the cooperating teacher to be helpful, cooperative, and offer constructive criticism. Milanovich (58) found frankness and honesty on the part of the supervisors, whether in criticism or evaluation, were found qualities highly appreciated by student teachers.

The change of the role of the cooperating teacher through feedback from the student teacher was found to have positive effects by Collins (23). Cooperating teachers who were informed about their student teachers' satisfactions with their conference behavior were found to modify their conference behavior to provide greater satisfactions for their student teachers.

Whooley (94) found student teachers satisfied with their student teaching experience and with the college involvement in this experience.

Role Relationships and "Matching" the Dyad for Positive Interpersonal Relationships

Within the past decade studies have been conducted to determine the roles of the cooperating teacher and the student teacher and the interaction between these two. The influences
of the cooperating teacher on the student teacher have been explored as well as the concerns of the student teacher.

The professional competence or readiness of the cooperating teachers has been implicitly mentioned as a control variable by Edwards (31), who listed five broad categories of competencies identified in a survey as conditions for effective supervision. These competencies were said to be related primarily to classroom procedures and techniques, to the working relationship between the supervisor and the supervisee, to the transition from the less active status of the student teacher early in student teaching to his active status later in the experience, to the personality characteristics of the supervisor that might be imitated by the student teacher, and to developing professional responsibilities.

The Association for Student Teaching has published a research bulletin entitled "Studying Role Relationships" (26). In this bulletin the relationships among the positions operating in the student teaching situation was viewed as an interaction system. Role conflicts, or contradictory role expectations that are held by the student teacher and cooperating teacher tend to interfere in their interactive relationships in student teaching programs and lessen their effectiveness. Role theory, as a system of interrelated concepts, can provide a useful way of examining the positions involved in student teaching experiences and can help in the solving of problems of role conflicts.
Thompson (85) conducted an investigation of the anxieties of secondary and elementary student teachers and found that the problem checked the greatest number of times was "what the cooperating expected of the student teacher."

A study by Bradley (14) sought to identify those factors characteristic of an ideal interpersonal relationship between cooperating teachers and student teachers and to determine if the two groups agree as to the determinants of that relationship. The characteristics of the ideal cooperating teacher include one who gives the student teacher opportunities to develop his own fundamental philosophy of education on a constructive, positive basis. There was agreement by the student teacher and cooperating teacher as to the nature of the ideal relationship.

Yee (97) studied the interpersonal attitudinal relationships among student teachers, cooperating teacher, and college supervisors and found that the triad relationships more often resembled competitive triad settings rather than cooperative triad situations. The study's results indicated that the foremost concern for workers in student teaching is the development of greater cohesiveness and interaction in the student teaching triad.

In a subsequent article on interpersonal relationships in the student teaching triad, Yee (96) recommends greater qualitative development of the triad through better methods
of matching, further investigations of interaction patterns in triads, and increased emphasis on the triad itself.

Researchers have been quick to infer from compatibility studies that "matching" would be productive. According to O'Hanlon (68), "matching" of student teachers and cooperating teachers on the basis of key characteristics may have value. With regard to the personality of supervisors, Chaltas (22) mentioned personality dispositions and role perceptions as control variables, and suggested that the personality of the student teacher and that of his supervisor be considered not only in themselves but also in relation to one another as to their compatibility. Bennie (?7) maintains that a warm, human climate can only exist if student teachers and cooperating teachers are "matched." Hayes (38) reports his data to show that "cooperating teacher-student teacher-college supervisor 'matches' appear feasible and appear promising in improving student teacher attitudes although predisposition of student teachers are clearly more important than external influences during the intern period."

Disappointing results in attempted "matching" have been cited by Brabble (13), Burnett (20), McReynolds (64), DiTosto (28), Travis (87), and Hill (42). Hill stated that his study suggested the possibility for future studies with different kinds of personality criteria. Additional combinations of other factors in matching were felt to be worthy of
consideration. Burnett felt that, theoretically, matching remains as a promising aid to superior student teaching performance and attitudes although the overall potency of the student teaching experience itself tends to dilute the effects which any one person may have.

Ballagh's (6) study was designed to explore the feasibility of developing an instrument which would better enable teacher education institutions to avoid grossly unsatisfactory student teaching placements. A shortened form of the General Opinion Survey was developed but did not identify faulty placements as designated by the college supervisors. The student teacher evaluated his own placement lower in value than his college supervisors.

Burk (19) matched cooperating teacher and student teacher according to compatibility. His study indicated that the more successful pairs combined: 1. students who scored lower than their cooperating teachers in self-sufficiency, insecurity, and independence; 2. students who were similar to their cooperating teachers in dominance, anxiety, and superego; and in some cases 3. students who were overwhelmingly more self-sufficient and feminine than their cooperating teachers. By the use of these data, he felt it should be possible to place elementary, female student teachers with public school supervisors with the risks of incompatibility reduced to markedly below chance level.
Leslie (51) found that the various methods of matching on demographic and personality variables did not produce results superior to traditional student assignment, but that within-group comparisons appeared to demonstrate the theoretical advantages of matching in general.

**Summary**

Recent literature and research has been concerned with the importance of skill in human relations in the teacher education program. New programs have been developed to provide student teachers and cooperating teachers with training in the area of interpersonal relationships.

Open- and closed-mindedness of the cooperating teacher and student teacher have been studied as well as personal beliefs and teacher practices during the student teaching experience. Changes that take place during the direct experience and the influence of the cooperating teacher on the student teacher have been investigated with the bulk of the studies concerned with changes in attitude. A few studies have been directed toward student teacher satisfaction.

During the past decade, studies have been conducted to determine the roles of the cooperating teacher and the student teacher and the interaction between these two. As a result of the emphasis on human relations and the many studies that have been conducted concerning changes that take place during
student teaching, very recent studies have been concerned with "matching" of the student teacher and cooperating teacher.

Increased attention needs to be given to studying many of the various components of the two people most directly involved in student teaching if "matching" will ultimately be successful and to provide insight into what actually does take place during the student teaching experience.

Chapter III, following, is a discussion of the methodology of this study including selection of the population and instruments, the research design, data collection, and the analysis of data.
CHAPTER III

METHODOLOGY

This study was designed to determine the changes in selected beliefs of cooperating teachers and student teachers during the student teaching experience, and the relationship of the student teachers' satisfaction to these changes. It was decided that the changes could be determined through the use of instruments for which validity and reliability had been established. The specific instruments measured open- and closed-mindedness, personal beliefs, and beliefs concerning teaching practices. A satisfaction with student teaching instrument measured the student teachers' satisfaction. Background factors of the cooperating teachers and student teachers were also considered in relation to beliefs concerning teaching practices and satisfaction with student teaching. The college supervisor's scores were compared with the student teachers' scores and the cooperating teachers' scores to determine the level of the student teachers' scores in relation to the cooperating teachers' and college supervisor's scores.

Discussion of the research is presented according to the order in which it occurred.
Selection of Population

The population selected to participate in the study consisted of seventeen home economics cooperating teachers and their student teachers, one home economics college supervisor, and thirty-six upperclass home economics majors during the first semester of the 1970-1971 college year. This population constituted the entire number of cooperating teachers and their student teachers affiliated with the Ashland College home economics teacher education program the first semester. The upperclass students constituted the entire number of junior and senior home economics majors not enrolled in student teaching. The one college supervisor had the total responsibility for teaching the vocational home economics methods course and the supervision of the vocational home economics student teachers.

The upperclass students were selected to be used as a comparison population and were randomly assigned into two treatment groups designated as upperclass B and upperclass C.

Selection of Instruments

The data for this study were derived from the use of the following instruments in determining the changes in the beliefs of the cooperating teachers and their student teachers and the consequent satisfactions with student teaching.
Inventory I - Rokeach's Dogmatism Scale, Form E

Rokeach developed an instrument during the 1950's which has been widely used to measure individual differences in openness or closedness of belief systems. Dr. Rokeach was contacted for permission to use the scale and consent was given with directions to mimeograph it using the instructions from *The Open and Closed Mind* (74).

In discussing the scale the author (74) stated that it should also serve to measure general authoritarianism and general intolerance. The procedure used in constructing the scale began with the defining of various characteristics of the open and closed systems and proceeded to the construction of statements designed to tap these characteristics. The assumption was that if a person strongly agreed with such statements, it would indicate that he possessed one extreme of the particular characteristic being tapped, and if he strongly disagreed, that he possessed the opposite extreme. Therefore, the scale measures the extent to which the respondent's belief system is functionally "open" or "closed."

The work leading to the development and validation of the Dogmatism Scale which is utilized in this study is described in the basic writings of Rokeach (74). Test-retest reliability coefficients are also reported.
Inventory I lists representative items of the Dogmatism Scale, Form E, which involve the Belief-Disbelief Dimension, the Central-Peripheral Dimension and the Time-Perspective Dimension. (See Appendix A)

Inventory II - Personal Beliefs Inventory
Inventory III - Teacher Practices Inventory

Brown (17) developed two instruments in 1963 to measure agreement-disagreement with experimentalism according to Dewey's philosophy. After numerous revisions the final forms of the scales were published in The Experimental Mind in Education in 1968 (16). Dr. Brown was contacted for permission to use the scales which he granted with the instructions to duplicate the Personal Beliefs Inventory and Teacher Practices Inventory in sufficient numbers for this study.

In discussing the development of the scales (16) the author stated that a large number of statements of philosophical beliefs and educational practices were collected, primarily from the writings of Dewey. With some editing and modification these statements were fitted within the categories of the theoretical framework to comprise the belief-disbelief universe from which the instruments for measuring experimentalism were derived. These statements were incorporated into questionnaires and submitted to competent judges to determine the positive or negative connotation of each item with respect to Dewey's experimentalism. A statement was
accepted as compatible with experimentalism if rated positively by five or more judges and incompatible if rated negatively by five or more judges. It was assumed that if a person strongly agreed with the positive statements, it indicated that his beliefs are highly compatible with experimentalism, and if he strongly disagreed, it indicated that his beliefs are at the opposite extreme from experimentalism.

A description of the development and validation of the Personal Beliefs Inventory and Teacher Practices Inventory is provided by Brown; reliability figures are also given (16).

Inventory II lists representative items of the Personal Beliefs Inventory which involve mind and body, permanence and change, science and morals, emotions and intellect, freedom and authority, and knowing and doing. (See Appendix B)

Inventory III lists the seven categories of the Teacher Practice Inventory which represent the seven steps of the educative experience advocated by Dewey with a representative item from each, and the five categories of the Teacher Practices Inventory which represent the "evils in education" which Dewey opposed with a representative item from each. (See Appendix C)
Satisfaction with Student Teaching Inventory

The Satisfaction with Student Teaching Inventory was selected because it describes very well many of the experiences encountered by student teachers. It also is a good measure of satisfaction. It measures the student teachers' positive or negative affect toward his student teaching experience. The measurement contains thirty-two items. (See Appendix D) This instrument was developed by Ostreicher and Aikman at the College of the City of New York (1, 60).

Representative items from the Satisfaction with Student Teaching Inventory which involve the student teachers' personal feelings, the cooperating teacher, the college supervisor, the students in the classroom, the school, and the student teaching experience itself are as follows:

1. Item Involving Personal Feelings

   The regulations to which I, as a student teacher, had to conform seemed:

   a. unnecessary in many respects
   b. rather vague but not unreasonable
   c. reasonable and agreeable to me

2. Item Involving the Cooperating Teacher

   When planning the classroom activities, my cooperating teacher:

   a. sometimes assigned the planning to me but often ignored my efforts
   b. usually had me participate in the planning with her
   c. seldom gave me a chance to participate in the planning
3. Item Involving the College Supervisor

In discussions with my college supervisor, my viewpoint:

a. was accepted too often without adequate understanding
b. was accepted and understood practically all the time
c. was seldom accepted

4. Item Involving the Students

The students I had in my class:

a. seemed indifferent to school activities
b. mildly resisted my attempts to teach them
c. were easily motivated

5. Item Involving the School

My personal relationships with staff members at the school:

a. were very pleasant and cordial
b. were distant and impersonal
c. were somewhat satisfying

6. Item Involving the Student Teaching Experience

As I evaluate my student teaching in light of my other college work, I am convinced that:

a. it was one of my least valuable courses
b. it was the most valuable course I have taken
c. it was about as valuable as my other college courses

Cooperating Teacher Information Form

A form was designed to provide information regarding the preparation for teaching and supervision, teaching experience, and the supervision experience of the cooperating teachers. (See Appendix E) The teachers were asked their degree status,
the number of years of teaching experience, the number of student teachers previously supervised, the amount of time spent with their student teachers in conference, and evidence of out of school activities shared with their student teachers.

**Student Teacher Information Form**

A form was designed to provide information regarding the amount of time spent in conference with the cooperating teacher, the types of activities on which time was spent during student teaching conferences, and the type of activities and time spent with the cooperating teacher in out of school activities.

(See Appendix F)

**Research Design**

This research was planned to enable measurement of changes in the beliefs of cooperating teachers and their student teachers during the student teaching experience. The type of experimental research design was a variation of a Pretest-Posttest Control Group Design and is based upon Experimental Design 4 as defined by Campbell and Stanley (20).

<table>
<thead>
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<th>Group</th>
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<th>X_2</th>
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<tr>
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<td>Group C</td>
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Fig. 1.---Schematic of the Experimental Design
The student teachers provided the experimental group, Group A. Group B and Group C, two groups of upperclass students, provided the control groups. The three instruments used for the pretest were the Dogmatism Scale, Form E, the Personal Beliefs Inventory, and the Teacher Practices Inventory (01 and 04). These same instruments were used to test midway or six weeks through the semester (02 and 05) and for the posttest at the end of the semester (03, 06, and 07).

Treatment X1 was the methods course experience which included two full days of observation and participation by the student teachers in their assigned centers for the first six weeks of the semester. Treatment X2 was the student teaching experience which immediately followed the methods course for the last ten weeks of the semester.

The O's and X's in a given row are applied to the same specific group of persons. The left-to-right dimension indicates the temporal order, the O's and X's vertical to one another are simultaneous. R indicates random assignment of the upperclass students into two groups, Group B and Group C.

Group A, the student teachers, were tested three times during their professional semester. These testings occurred at the beginning, midway through, and at the end of the semester. These testings were just before the methods course, six weeks after the start of the semester at a time just after
the methods course and just prior to teaching, and immediately after student teaching. The cooperating teachers and college supervisor were pretested and posttested before and after student teaching which was at the beginning and at the end of the professional semester. Group B of the upperclass students were pretested at the beginning and posttested at the end of the semester with a testing midway between. Group C of the upperclass students were tested at the end of the semester only. Each cooperating teacher and each student teacher completed an information form. The point hour accumulative averages were recorded for all student teachers and all upperclass students. The student teachers were given the Satisfaction with Student Teaching Inventory at the completion of the student teaching experience.

The experimental design to determine the change in beliefs of the student teachers and cooperating teachers during the student teaching experience is diagrammed in Figure 2.

Data Collection

With the research design established and the instruments selected, the next task in conducting this research was to ask the members of the selected population to participate in the study.

Each cooperating teacher was visited the first week of the semester and personally asked to participate in the study.
<table>
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<th>Treatment</th>
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<td></td>
<td>Scores</td>
<td>Course</td>
<td>Scores</td>
<td>Experience</td>
<td>Scores</td>
</tr>
<tr>
<td>(16)*</td>
<td></td>
<td>0₁</td>
<td>X₁</td>
<td>0₂</td>
<td>X₂</td>
<td>0₃</td>
</tr>
<tr>
<td>Home Economics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upperclass Students</td>
<td></td>
<td>Group B</td>
<td>Pretest</td>
<td>Midtest</td>
<td>Posttest</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upperclass</td>
<td>Uperclass Students</td>
<td>Scores</td>
<td>Scores</td>
<td>Scores</td>
<td></td>
</tr>
<tr>
<td>(Exclusive of Student Teachers)</td>
<td></td>
<td>Inv. I, II, III</td>
<td></td>
<td>Inv. I, II, III</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(17)</td>
<td>0₄</td>
<td></td>
<td>0₅</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Semester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970-1971</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(36)</td>
<td></td>
<td>Group C</td>
<td></td>
<td></td>
<td></td>
<td>Posttest Scores</td>
</tr>
<tr>
<td></td>
<td>Upperclass</td>
<td>Students</td>
<td></td>
<td>Inv. I, II, III</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(19)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Economics</td>
<td></td>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
<td>Posttest Scores</td>
</tr>
<tr>
<td>Cooperating Teachers</td>
<td></td>
<td>Scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Semester</td>
<td></td>
<td>Inv. I, II, III</td>
<td></td>
<td>Inv. I, II, III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970-1971</td>
<td></td>
<td>0₈</td>
<td></td>
<td>0₉</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fig. 2.—The Experimental Design

*One student teacher had a split experience.
All willingly gave their consent. Each cooperating teacher was given a brown envelope with a letter repeating the information which the investigator personally had told them (See Appendix G); one copy each of the Dogmatism Scale, Form E, entitled only Inventory I, the Personal Beliefs Inventory entitled only Inventory II, and the Teacher Practices Inventory entitled only Inventory III; and a self-addressed stamped envelope for the return of the completed instruments.

The three inventories were administered to Group A, the student teachers, and also to the college supervisor during the first class period of the methods course that semester. A letter was sent to Group B, upperclass students, to come to the home economics department to take the inventories; there was a total response from that group. (See Appendix H) Since the college campus is small, many of the students knew of the investigator's anticipated research and were pleased to be a part of the study.

Six weeks after the start of the semester on the last class period of the methods course, the student teachers and college supervisor again filled out the three inventories. A letter was sent to Group B of the upperclass students and again they all responded. (See Appendix I)

Near the end of the semester each student teacher contacted her cooperating teacher for the investigator to establish a time during the last week of the semester for the
purpose of again completing the inventories. Times were
established and all of the cooperating teachers except two
filled out the inventories at the designated times. This
investigator went to the student teaching centers and waited
while the cooperating teachers completed the instruments.
Two of the cooperating teachers felt that they needed to give
more time and thought to the inventories and preferred to
complete them at home. The inventories were then mailed to
the investigator. The student teachers completed the three
inventories, the Satisfaction with Student Teaching Inventory,
and the Student Teaching Information Form during the Thursday
after school seminar the last week of the semester. The
college supervisor also completed the three inventories at
this time. A letter was sent to Group B of the upperclass
students at the end of the semester asking them to come in
again for the final collection of data. (See Appendix J) A
letter was also sent to Group C of the upperclass students.
(See Appendix K) There was a total response from both groups.

The cooperating teachers were sent the Cooperating
Teacher Information Form to be completed with a cover letter
and a self-addressed stamped envelope for their use in return­
ing the form. (See Appendix L)

Analysis of Data

Data were analyzed in relation to the experimental
design of the study to determine changes in the beliefs of
cooperating teachers and their student teachers. The analysis was to answer the following questions:

1. What changes in components of interpersonal relationships under study take place during the student teaching experience?

2. How does satisfaction with student teaching relate to changes in interpersonal relationships?

Various measurements were used to analyze and interpret the data to answer the above questions. All calculations for the measurements were performed on the IBM 360/75 computer using various computer programs.

Through the use of the Biomedical Computer Program (BMD01D) from the University of California at Los Angeles Medical Center, the mean scores and standard deviation scores were calculated on pretest, midtest, and posttest administrations of the Dogmatism Scale, Form E, the Personal Beliefs Inventory, and the Teacher Practices Inventory to student teachers, cooperating teachers, and Group B of the upperclass students; on the posttest administration of the three inventories to Group C of the upperclass students; and on the administration of the Satisfaction with Student Teaching Inventory to the student teachers. The output also included the sample size, maximum and minimum scores, and the range of scores.

To determine whether change took place in the scores on the Dogmatism Scale, Personal Beliefs Inventory or the
Teacher Practices Inventory, a paired "t" test was completed using the Ohio State University Instruction and Research Computer Center Program (PROGLIB). This test was run for change in scores on the three inventories for student teachers and upperclass students Group B.

To determine whether significant differences existed an analysis of variance test was completed using the Biomedical Computer Program (BMD01V). This test compared the student teachers, upperclass students Group B and upperclass students Group C to determine if significant differences existed between the groups (pretest, midtest, and posttest) on each of the measures (Dogmatism Scale, Personal Beliefs Inventory, Teacher Practices Inventory). The program provided the mean scores, standard deviations, between groups variations, sum of squares, degrees of freedom, and mean squares from which the F ratios were determined. The between group variations included the pretest scores on each of the three inventories for the student teachers and upperclass students, Group B, the midtest scores on each of the three instruments for the student teachers and Group B, and the posttest scores on each of the three instruments for the student teachers, Group B and upperclass students, Group C.

Correlation coefficients using the Biomedical Computer Program (BMD03D) were applied to determine if relationships existed between: 1. the student teachers' scores on the
three inventories and their cooperating teachers' scores on the same instruments, 2. the student teachers' scores on the three inventories and their scores on the Satisfaction with Student Teaching Inventory, 3. the student teachers' scores on the Satisfaction Inventory and their cooperating teachers' scores on the three inventories, 4. the student teachers' scores on the Satisfaction with Student Teaching Inventory and their change scores from pretest to posttest on the three inventories, 5. the student teachers' scores on the Satisfaction with Student Teaching Inventory and their cooperating teachers' change scores from pretest to posttest on the three inventories, and 6. the student teachers' scores on the Satisfaction Inventory and measures of time spent with cooperating teachers in conferences and evidences of out of school activities with their cooperating teachers.

A chi square test with the presentation of findings in a contingency table using the Biomedical Computer Program (BMD04V) was applied for the purpose of determining if:
1. higher scores of cooperating teachers on the Teacher Practices Inventory are independent of the factor of more years of teaching experience of the cooperating teacher, and
2. higher scores of cooperating teachers on the Teacher Practices Inventory are independent of the factor of more experience as a cooperating teacher.

The comparison of the student teachers' scores on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher
Practices Inventory with their cooperating teachers' scores and the college supervisor's scores were analyzed descriptively.

To measure the relation between the sets of scores of the student teachers, upperclass Group B, and upperclass Group C on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory, an analysis of co-variance test was applied using the grade point average as the co-variante. Biomedical Computer Program (BMD04V) was used in the computation.

Chapter IV, which follows, is a quantitative analysis of the data and a presentation of findings.
CHAPTER IV

FINDINGS AND DISCUSSION OF RESULTS

A compilation of the findings of the study and a discussion of the results are reported in this chapter which is organized into five sections. The first section deals with the findings related to the student teachers' changes in beliefs and their changes compared to the cooperating teachers' changes in beliefs. Section two presents the findings related to certain background factors of the student teachers and cooperating teachers and the relationship of these factors of the cooperating teacher to their changes in beliefs. The third section is concerned with the student teachers' satisfaction with student teaching and their satisfaction in relation to certain background factors, their beliefs, and the cooperating teachers' beliefs. Section four presents the findings related to the beliefs of the student teachers in comparison with the beliefs of their cooperating teachers and the college supervisor. Section five is concerned with the change in the student teachers' beliefs during the semester and the relationship of this change to the change in beliefs of the upperclass students.
Changes in Beliefs of Student Teachers
and Cooperating Teachers

Answers to the first three research questions reveal whether or not the student teachers' and cooperating teachers' beliefs were closer together after the student teaching experience.

Research Question 1

Will the cooperating teachers' and student teachers' scores on open-mindedness/closed-mindedness be closer together at the end of the student teaching experience than at the beginning?

Research Question 2

Will the cooperating teachers' and the student teachers' scores on the Personal Beliefs Inventory be closer together at the end of the student teaching experience than at the beginning?

Research Question 3

Will the cooperating teachers' and the student teachers' scores on the Teacher Practices Inventory be closer together at the end of the student teaching experience than at the beginning?

The answer to these research questions was determined by testing the following three hypotheses:

Hypothesis 2: The student teachers' score on the Dogmatism Scale will more closely approximate their cooperating teachers' scores on the same instrument at the end of the student teaching experience than at the beginning.

Hypothesis 3: The student teachers' scores on the Personal Beliefs Inventory will more closely approximate their cooperating teachers' scores on the same instrument at the end of the student teaching experience than at the beginning.
Hypothesis 4: The student teachers' scores on the Teacher Practices Inventory will more closely approximate their cooperating teachers' scores on the same instrument at the end of the student teaching experience than at the beginning.

Data for these hypotheses were obtained from the pretest posttest scores of the student teachers and the cooperating teachers on the Dogmatism Scale, Form E, Personal Beliefs Inventory, and Teacher Practices Inventory. Table 1 provides the means and standard deviations of the three inventories at pretest and at posttest. Correlation coefficients were computed to determine if relationships existed. The highest possible raw score on each of the three inventories was 240.

**TABLE 1.—Means and Standard Deviations of the Dogmatism Scale, Personal Beliefs Inventory, Teacher Practices Inventory**

<table>
<thead>
<tr>
<th></th>
<th>Dogmatism Scale</th>
<th>Personal Beliefs Inventory</th>
<th>Teacher Practices Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>Pretest CTs</td>
<td>15*</td>
<td>148.8</td>
<td>19.58</td>
</tr>
<tr>
<td>STs</td>
<td>15*</td>
<td>147.0</td>
<td>11.99</td>
</tr>
<tr>
<td>Posttest CTs</td>
<td>15</td>
<td>149.0</td>
<td>17.24</td>
</tr>
<tr>
<td>STs</td>
<td>15</td>
<td>143.2</td>
<td>14.04</td>
</tr>
</tbody>
</table>

*Only 15 pairs of student teacher-cooperating teacher dyads were usable due to the incorrect completion of the inventories by two cooperating teachers.

Table 2 shows the correlation coefficients which are not statistically significant.
TABLE 2.—Correlation Coefficients of Student Teachers' and Cooperating Teachers' Pretest and Posttest Score on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory

<table>
<thead>
<tr>
<th></th>
<th>Pretest Scores</th>
<th>Correlation Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>STs' DS with CTs' DS</td>
<td></td>
<td>-0.180</td>
</tr>
<tr>
<td>STs' PBI with CTs' PBI</td>
<td></td>
<td>0.022</td>
</tr>
<tr>
<td>STs' TPI with CTs' TPI</td>
<td></td>
<td>0.224</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Posttest Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>STs' DS with CTs' DS</td>
<td>0.087</td>
</tr>
<tr>
<td>STs' PBI with CTs' PBI</td>
<td>0.003</td>
</tr>
<tr>
<td>STs' TPI with CTs' TPI</td>
<td>0.009</td>
</tr>
</tbody>
</table>

The statistical data show that the mean scores of the student teachers on the three inventories are not closer to the cooperating teachers' mean scores on these same instruments at the end of the student teaching experience than at the beginning. There was no high degree of relationship at any time.

Figures 3, 4, and 5 present the differences from pretest to posttest on the three inventories for each of the dyads. The posttest mean scores for both the student teachers and cooperating teachers are also shown. The Dogmatism Scale and Personal Beliefs Inventory each show four dyads that have reversed their directions. The student teachers who had been more open or more experimental than their cooperating teacher became less open or less experimental after the student teaching experience. Only one dyad had this reversal on the Teacher Practices Inventory.
Fig. 3.—Pretest-Posttest Scores of Cooperating Teacher and Student Teacher on Dogmatism Scale.
Fig. 4.—Pretest-Posttest Scores of Cooperating Teacher and Student Teacher on Personal Beliefs Inventory.
Fig. 5.—Pretest-Posttest Scores of Cooperating Teacher and Student Teacher on Teacher Practices Inventory.
On the Dogmatism Scale ten of the fifteen dyads came closer together on their scores with half of these either assuming the same score or a score within five points of each other on a 210 scale.

Of the five dyads which were farther apart on the posttest scores of the Dogmatism Scale, the greatest divergence was from a nineteen-point spread to a sixty-two point spread. The least divergence was from a five-point spread to a seven-point spread.

On the Personal Beliefs Inventory most of the dyads clustered closer to the mean scores than on the other figures. Seven of the fifteen dyads became closer together. The number of points spread from pretest to posttest was not as great with this instrument.

On the posttest scores of the Teacher Practices Inventory six of the fifteen dyads were closer together with three having just one-point difference in their scores. Of those dyads which became farther apart, the greatest divergence was from a twenty-seven point spread to a forty-nine point spread.

Thus, the visual data show that on the Dogmatism Scale two-thirds of the dyads became closer together at the end of the student teaching experience with one-third assuming a score within five points of each other. Less, but approximately half of the dyads became closer together on the Personal Beliefs Inventory and Teacher Practices Inventory.
Therefore, hypotheses 2, 3, and 4 are rejected. The student teachers' scores on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory do not more closely approximate their cooperating teachers' scores on the same instruments at the end of the student teaching experience than at the beginning. On the Dogmatism Scale the visual data show a closer approximation for most dyads but the statistical data do not give support for the total group.

Background Factors

The concern of this section of the analysis is with answering research question 8 dealing with the relationship of the cooperating teachers' background factors to their scores on the Teacher Practices Inventory.

The degree status, teaching experience, and supervision background of the cooperating teachers were determined. All of the seventeen cooperating teachers had baccalaureate degrees with home economics majors. Two of these teachers had taken thirty hours in education beyond the Bachelor's degree; three teachers had taken hours beyond their Bachelor's degree ranging from six to fifteen.

An equal number and also the largest number of teachers had taught home economics for a period of one to three years, and eleven to fifteen years, respectively (Table 3). The two participants who had thirty hours beyond their Bachelor's
degree had taught in the range of four to six years, and eleven to fifteen years.

TABLE 3.--Years Classroom Teaching Experience of Cooperating Teachers

<table>
<thead>
<tr>
<th>Years Experience</th>
<th>Cooperating Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 3</td>
<td>6</td>
</tr>
<tr>
<td>4 - 6</td>
<td>2</td>
</tr>
<tr>
<td>7 -10</td>
<td>1</td>
</tr>
<tr>
<td>11 -15</td>
<td>6</td>
</tr>
<tr>
<td>over 16</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

None of the cooperating teachers had any formal preparation for supervisory responsibility. This was the first supervisory experience for eight of the cooperating teachers. As seen in Table 4, the cooperating teachers had supervised a range of from one to thirteen student teachers prior to the research period.

TABLE 4.--Number of Student Teachers Previously Supervised by Cooperating Teachers

<table>
<thead>
<tr>
<th>Number of Student Teachers</th>
<th>Cooperating Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>


The student teachers were all seniors majoring in home economics. The grade point average was recorded with a mean of 3.009, and range of 2.422 to 3.743. This statistic was recorded for use as the co-variate in computing an analysis of co-variance to determine if there was any significant difference on the mean scores of the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory among the treatment groups.

In summary, the cooperating teachers had from one to twenty years of classroom experience with approximately one-third in the four- to six-year range, and one-third in the eleven- to fifteen-year range. A little less than half of the cooperating teachers had never supervised previously. The student teachers had a 3.0 mean average on a 4.0 scale in their grade point average.

Research Question 8

What factors in the background of the cooperating teachers relate to their scores on the Teacher Practices Inventory?

The answer to this research question was determined by testing the following hypothesis:

Hypothesis 5: Higher scores of cooperating teachers on the Teacher Practices Inventory will correlate with:

a. more years of teaching experience
b. more experience as a cooperating teacher
Data for a contingency table were recorded to determine whether these variables are independent or related. The boundary points for the range of the low scores on the Teacher Practices Inventory were established at 102 to 161 and for the high scores at 167 to 197. The number of years of teaching experience was divided into two groups: a range of one to six years, and seven or more years. Table 5 is a two-way table showing the discrete categories.

**TABLE 5.**--Contingency Table for Teaching Experience

<table>
<thead>
<tr>
<th></th>
<th>1 - 6 Years</th>
<th>7 Years or More</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPI, High Score</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>TPI, Low Score</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Totals</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

A chi square test was done on the contingency table to see whether or not the variables were related in the sample. The chi square value for the table was .04 with 1 degree of freedom (P > .05), which is not significant.

The variables, Teacher Practices Inventory scores and years of teaching experience, are not related in this sample.

Table 6 is a contingency table for experience in supervision. The boundary points for the Teacher Practices Inventory were the same as in Table 5. The experience as a cooperating teacher was divided into two groups: those with
no experience and those cooperating teachers who previously had supervised student teachers.

TABLE 6.—Contingency Table for Experience in Supervision of Student Teachers

<table>
<thead>
<tr>
<th></th>
<th>No Experience</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPI, High Score</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>TPI, Low Score</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Totals</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 6 has identical categories to Table 5. The variables, Teacher Practices Inventory scores, and experience in supervision are not related in this sample. The chi square value for the contingency table is .04 with 1 degree of freedom (P > .05), which is not significant.

Therefore, hypothesis five is rejected. The variables—Teacher Practices Inventory scores and teaching experience and Teacher Practices Inventory scores and supervision experience—are not related in this sample but are independent variables. In answer to the research question, these factors under study in the cooperating teachers' background did not relate to their scores on the Teacher Practices Inventory.

Satisfaction with Student Teaching

In this section, research question four, five, six, and nine are answered. The results of testing hypotheses of the
relationships of the student teachers' satisfaction with student teaching to their beliefs and their cooperating teachers' beliefs are presented. Each student teacher completed a post Satisfaction with Student Teaching Inventory to express her satisfaction or dissatisfaction with various aspects of the student teaching experience. (See pages 42-43) This was a quantitative measure of satisfaction. (See Appendix D)

Research Question 4

What satisfaction with student teaching will be expressed by the student teachers?

The student teachers' satisfaction involving personal feelings, the cooperating teacher, the college supervisor, the students in the classroom, the school, and the student teaching experience itself are summarized in Table 7. The student teachers' total satisfaction was a little over 80% on a 32-point scale which indicates that they considered the student teaching experience to be satisfying. A study of the percentages shows that the student teachers were most satisfied in their relationship with their cooperating teachers (89.1 percent) and least satisfied in their relationships with their college supervisor (70.8 percent) and with the students in the classroom (76.0 percent). All of the student teachers were satisfied that they were made responsible for conducting the class at just about the right time and also that the cooperating teachers'
interests in their professional improvements and growth were sincere and helpful. Half of the student teachers checked the item that the college supervisor was not critical enough when discussing their student teaching performance with them. The individual item of least satisfaction in relation to the students in the classroom was concerned with the students' intelligence level. Approximately half of the student teachers checked that the intelligence level of most of the students they taught was lower than they would have liked.

TABLE 7.--Student Teachers' Satisfaction and Dissatisfaction During the Student Teaching Experience

<table>
<thead>
<tr>
<th>Categories</th>
<th>Satisfaction</th>
<th>Dissatisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Feelings</td>
<td>82.3</td>
<td>17.7</td>
</tr>
<tr>
<td>CT</td>
<td>89.1</td>
<td>10.9</td>
</tr>
<tr>
<td>Students</td>
<td>76.0</td>
<td>24.0</td>
</tr>
<tr>
<td>School</td>
<td>84.3</td>
<td>15.7</td>
</tr>
<tr>
<td>CS</td>
<td>70.8</td>
<td>29.2</td>
</tr>
<tr>
<td>STing Experience</td>
<td>83.9</td>
<td>16.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>486.4</strong></td>
<td><strong>113.6</strong></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>81.07</strong></td>
<td><strong>18.93</strong></td>
</tr>
</tbody>
</table>

Research Question 5

What relationship is there between student teachers' satisfaction and changes in student teachers' beliefs?

The answer to this research question was determined by testing the following hypothesis.
Hypothesis 6: Higher scores of the student teachers on the Satisfaction with Student Teaching Inventory will correlate with their change to:

a. higher scores on the Dogmatism Scale (more open)
b. higher scores on the Personal Beliefs Inventory (more experimental)
c. higher scores on the Teacher Practices Inventory (more experimental)

Data for this hypothesis were obtained from the student teachers' Satisfaction with Student Teaching Inventory and the posttest scores of the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory. Table 8 provides the means and standard deviations of the three inventories at posttest and the means and standard deviation of the Satisfaction with Student Teaching Inventory. Correlation coefficients were computed to determine if relationships existed.

TABLE 8.—Student Teachers' Means and S.D. of Dogmatism Scale, Personal Beliefs Inventory, Teacher Practices Inventory, and Satisfaction with Student Teaching Inventory

<table>
<thead>
<tr>
<th>Posttest N</th>
<th>D.S.</th>
<th>P.B.I.</th>
<th>T.P.I.</th>
<th>S.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>STs</td>
<td>16</td>
<td>143.3</td>
<td>13.58</td>
<td>134.3</td>
</tr>
</tbody>
</table>

Table 9 shows the correlation coefficients with sample size of 16.

The data show that the scores of the student teachers on the Satisfaction with Student Teaching Inventory are significantly related to their scores on the Dogmatism Scale,
TABLE 9.--Correlation Coefficients of the Student Teachers' Scores on the Satisfaction with Student Teaching Inventory, Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory

<table>
<thead>
<tr>
<th>Variable No.</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.517*</td>
<td>-0.112</td>
<td>-0.244</td>
</tr>
</tbody>
</table>

*P < .05. Variable 1, Satisfaction Inventory; Variable 2, Dogmatism Scale; Variable 3, Personal Beliefs Inventory; Variable 4, Teacher Practices Inventory.

but not related to their scores on the Personal Beliefs Inventory and Teacher Practices Inventory. The correlation coefficient for the Satisfaction with Student Teaching Inventory and Dogmatism Scale was 0.517 which is statistically significant (P < .05). The more open the student teachers, the more they expressed satisfaction.

Correlation coefficients were computed to determine if a relationship existed between the student teachers' scores on the Satisfaction with Student Teaching Inventory and student teachers' change scores from pretest to posttest on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory. The change scores were obtained by subtracting the pretest scores from the posttest scores on each of the three inventories and adding to these difference scores the largest negative number in the set of scores. The resultant change scores were recorded in positive numbers.

Table 10 provides the means and standard deviation of the Satisfaction with Student Teaching Inventory and the change
scores on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory.

TABLE 10.—Means and Standard Deviations of Student Teachers' Satisfaction with Student Teaching Inventory and Their Change Scores on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory

<table>
<thead>
<tr>
<th></th>
<th>D.S.</th>
<th>P.B.I.</th>
<th>T.P.I.</th>
<th>S.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.D.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N STs</td>
<td>16</td>
<td>33.9</td>
<td>14.99</td>
<td>13.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.54</td>
<td>20.8</td>
<td>10.08</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>26.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.69</td>
</tr>
</tbody>
</table>

Table 11 shows the correlation coefficients with sample size of 16.

TABLE 11.—Correlation Coefficients of the Student Teachers' Scores on the Satisfaction with Student Teaching Inventory, and Their Change Scores on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory

<table>
<thead>
<tr>
<th>Variable No.</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.417*</td>
<td>0.336</td>
<td>-0.111</td>
</tr>
</tbody>
</table>

*P < .05. Variable 1, Satisfaction with Student Teaching Scores; Variable 2, Change Scores on Dogmatism Scale; Variable 3, Change Scores on Personal Beliefs Inventory; Variable 4, Change Scores on Teacher Practices Inventory.

The data show that the scores of the student teachers on the Satisfaction with Student Teaching Inventory are significantly related to their change scores from pretest to posttest on the Dogmatism Scale, but not related to their change scores from pretest to posttest on the Personal Beliefs
Inventory and Teacher Practices Inventory. The correlation coefficient for the Satisfaction with Student Teaching Inventory and change score on the Dogmatism Scale was 0.417 which was statistically significant ($P < .05$). The more change in openness of the student teachers, the more they expressed satisfaction.

The answer to the research question is that there is a relationship between the student teachers' positive change in open-mindedness and their satisfaction in student teaching, but there is no relationship between their personal beliefs and satisfaction or between their teaching practices beliefs and satisfaction.

Research Question 6

What relationship is there between student teachers' satisfaction and changes in cooperating teachers' beliefs?

The answer to this research question was determined by testing the following hypothesis:

**Hypothesis 7**: Higher scores of the student teachers on the Satisfaction with Student Teaching Inventory will correlate with their cooperating teachers' change to:

a. higher scores on Dogmatism Scale (more open)

b. higher scores on Personal Beliefs Inventory (more experimental)

c. higher scores on Teacher Practices Inventory (more experimental)

Data for this hypothesis were obtained from the posttest scores of the cooperating teachers on the Dogmatism Scale,
Personal Beliefs Inventory, Teacher Practices Inventory, and the Satisfaction with Student Teaching Inventory. Table 12 provides the means and standard deviations of these scores. Correlation coefficients were computed to determine if relationships existed.

**TABLE 12.**—Means and Standard Deviations of Cooperating Teachers' Scores on the Dogmatism Scale, Personal Beliefs Inventory, Teacher Practices Inventory, and Student Teachers' Scores on the Satisfaction Inventory

<table>
<thead>
<tr>
<th>Posttest</th>
<th>N</th>
<th>D.S. Mean</th>
<th>S.D.</th>
<th>P.B.I. Mean</th>
<th>S.D.</th>
<th>T.P.I. Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT</td>
<td>15</td>
<td>149.0</td>
<td>17.24</td>
<td>134.9</td>
<td>12.93</td>
<td>170.9</td>
<td>18.32</td>
</tr>
<tr>
<td>ST</td>
<td>15</td>
<td></td>
<td>26.3</td>
<td></td>
<td>2.76</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 13 shows the correlation coefficients with the sample size at 15.

**TABLE 13.**—Correlation Coefficients of the Student Teachers Satisfaction with Student Teaching Inventory Scores and Cooperating Teachers' Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory Scores

<table>
<thead>
<tr>
<th>Variable No.</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.129</td>
<td>-0.146</td>
<td>-0.226</td>
</tr>
</tbody>
</table>

Variable 1, Satisfaction with Student Teaching Inventory; Variable 2, Dogmatism Scale, Variable 3, Personal Beliefs Inventory; Variable 4, Teacher Practices Inventory.
The data show that the scores of the student teachers on the Satisfaction with Student Teaching Inventory are not related to their cooperating teachers' scores on the Dogmatism Scale, Personal Beliefs Inventory, or Teacher Practices Inventory. It is interesting to note that additional correlations show that the cooperating teachers' scores on the Dogmatism Scale are related to their scores on the Personal Beliefs Inventory, with a correlation coefficient of 0.651 (P < .05). The student teachers did not have any such relationship between their scores on the Dogmatism Scale and Personal Beliefs Inventory.

Correlation coefficients were computed to determine if a relationship existed between the student teachers' scores on the Satisfaction with Student Teaching Inventory and their cooperating teachers' change scores from pretest to posttest on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory. The change scores were obtained by subtracting the pretest scores from the posttest scores on each of the three inventories and then adding to these difference scores the largest negative number in the set of scores. The resultant change scores were recorded in positive numbers.

Table 14 provides the means and standard deviations of the Satisfaction with Student Teaching Inventory and the change scores on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory.
TABLE 14.--Means and Standard Deviations of Student Teachers' Satisfaction with Student Teaching Inventory and Their Cooperating Teachers' Change Scores on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory

<table>
<thead>
<tr>
<th></th>
<th>D.S.</th>
<th>P.B.I.</th>
<th>T.P.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT</td>
<td>15</td>
<td>24.2</td>
<td>14.77</td>
</tr>
<tr>
<td>ST</td>
<td>15</td>
<td>26.3</td>
<td>2.76</td>
</tr>
</tbody>
</table>

Table 15 shows the correlation coefficients with the sample size of 15.

TABLE 15.--Correlation Coefficients of the Student Teachers' Scores on the Satisfaction with Student Teaching Inventory and Their Cooperating Teachers' Change Scores on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory

<table>
<thead>
<tr>
<th>Variable No.</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.263</td>
<td>-0.209</td>
<td>-0.348</td>
</tr>
</tbody>
</table>

Variable 1, Satisfaction with Student Teaching Scores; Variable 2, Cooperating Teachers' Change Scores on Dogmatism Scale; Variable 3, Cooperating Teachers' Change Scores on Personal Beliefs Inventory; Variable 4, Cooperating Teachers' Change Scores on Teacher Practices Inventory.

The data show that the scores of the student teachers on the Satisfaction with Student Teaching Inventory are not significantly related to their cooperating teachers' change scores from pretest to posttest on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory.
Figures 6 and 7 are scattergrams showing the scatter of points, each of which indicate values on a pair of variables of each student teacher-cooperating teacher dyad. The variables include the student teachers' Satisfaction with Student Teaching Inventory scores and the difference scores from pretest to posttest for the student teachers and cooperating teachers on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory. The difference scores were obtained by subtracting the pretest scores from the posttest scores.

Correlation coefficients were computed from the student teachers' scores on the Satisfaction with Student Teaching Inventory, and the difference scores on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory for student teachers and cooperating teachers. Table 16 shows the correlation coefficients which are not significant.

Thus, the answer to the research question is that no relationships exist between changes in the cooperating teachers' beliefs and the student teachers' satisfaction.

Research Question 9

What factors in the background of the student teachers relate to their satisfaction with student teaching?
Student Teachers' Changes on Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory

\( x \) = Dogmatism Scale; \( + \) = Personal Beliefs Inventory; \( o \) = Teacher Practices Inventory

Fig. 6.—Student Teachers' Satisfaction and Student Teachers' Changes on Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory.
Cooperating Teachers' Changes on Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory.

- $x$ = Dogmatism Scale; $+$ = Personal Beliefs Inventory; $o$ = Teacher Practices Inventory

Fig. 7--Student Teachers' Satisfaction and Cooperating Teachers' Changes on Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory.
TABLE 16.—Correlation Coefficients of Student Teachers' Satisfaction with Student Teaching Inventory Scores and Student Teacher-Cooperating Teacher Difference Scores on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory

<table>
<thead>
<tr>
<th></th>
<th>Correlation Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>STs' SI with STs' difference score on DS</td>
<td>-0.245</td>
</tr>
<tr>
<td>STs' SI with STs' difference score on PBI</td>
<td>-0.151</td>
</tr>
<tr>
<td>STs' SI with STs' difference score on TBI</td>
<td>0.025</td>
</tr>
<tr>
<td>STs' SI with CTs' difference score on DS</td>
<td>0.432</td>
</tr>
<tr>
<td>STs' SI with CTs' difference score on PBI</td>
<td>-0.064</td>
</tr>
<tr>
<td>STs' SI with CTs' difference score on TPI</td>
<td>-0.153</td>
</tr>
</tbody>
</table>

To answer this research question the following hypothesis was tested:

**Hypothesis 8**: Higher scores of the student teachers on the Satisfaction with Student Teaching Inventory will correlate with:

1. more time spent with their cooperating teachers in conference
2. more incidence of out of school activities with their cooperating teachers

The student teachers' Satisfaction with Student Teaching Inventory scores were used as data for this hypothesis. Additional data concerned with time spent in conference and out of school activities were recorded from the Student Teacher Information Form. Each student teacher was asked to check the length of time spent in conference with her cooperating
teacher. The items checked were one conference per day, three conferences per week, and one conference per week. (See Appendix F) The item checked the most number of times was one conference per day with twelve student teachers checking. These items and the number of incidence of out of school activities were given numeric values. Table 17 shows the mean and standard deviation of the scores of the three variables. Correlation coefficients were computed to determine if relationships existed.

### TABLE 17.--Mean and Standard Deviation of Satisfaction with Student Teaching Inventory, Conference Time, and Activity Time

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>Mean</th>
<th>S.D.</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.I.</td>
<td></td>
<td></td>
<td>Conference Time</td>
<td></td>
<td>Activity Time</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ST</td>
<td>16</td>
<td>26.2500</td>
<td>2.6957</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Conference Time</td>
<td>2.8125</td>
<td>0.9106</td>
<td>2.1875</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Activity Time</td>
<td>1.0468</td>
<td>1.0468</td>
<td>1.0468</td>
</tr>
</tbody>
</table>

Table 18 shows the correlation matrix with sample size 16.

### TABLE 18.--Correlation Coefficients of the Student Teachers' Satisfaction with Student Teaching Inventory, Conference Time, and Activity Time

<table>
<thead>
<tr>
<th>Variable No.</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.129</td>
<td>0.029</td>
</tr>
</tbody>
</table>

Variable 1, Student Teacher Satisfaction Score; Variable 2, Time Spent in Conference; Variable 3, More out of School Activities.
The data show that the scores on the Satisfaction with Student Teaching Inventory are not significantly related to more time spent with cooperating teachers in conference or to more incidence of out of school activities with cooperating teachers.

In answer to the research question, none of the background factors of the student teachers tested related to satisfaction with student teaching. It may be that there was not a wide enough range in either of the factors to show a statistical relationship. The range for the amount of time spent in conference was from 1 to 3 and the range in evidences of out of school activities was from 1 to 4.

Changes in Beliefs of Student Teachers in Relation to Cooperating Teachers and College Supervisor

Research Question 10

Will the student teachers' scores on each of the three instruments be closer to the scores of the cooperating teachers than to the score of the college supervisor?

To determine whether the scores of the student teachers were closer to the cooperating teachers' scores than to the college supervisor's scores, the following hypothesis was tested:

Hypothesis 9: The level of the student teachers' scores on the three instruments (higher Dogmatism scores, higher Personal Beliefs Inventory scores, higher Teacher Practices Inventory scores) will compare more closely with their cooperating teachers' scores than with their college supervisor's scores on these same instruments.
Table 19 shows the mean and standard deviation posttest scores of the student teachers and cooperating teachers on the three inventories and the raw scores of the college supervisor on these same instruments.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dogmatism Scale</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>143.3</td>
<td>13.58</td>
</tr>
<tr>
<td>CT</td>
<td>149.0</td>
<td>17.24</td>
</tr>
<tr>
<td>CS</td>
<td>186.0</td>
<td></td>
</tr>
<tr>
<td><strong>Personal Beliefs Inventory</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>134.3</td>
<td>9.74</td>
</tr>
<tr>
<td>CT</td>
<td>135.0</td>
<td>12.93</td>
</tr>
<tr>
<td>CS</td>
<td>154.0</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher Practices Inventory</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>170.3</td>
<td>14.08</td>
</tr>
<tr>
<td>CT</td>
<td>170.9</td>
<td>18.32</td>
</tr>
<tr>
<td>CS</td>
<td>211</td>
<td></td>
</tr>
</tbody>
</table>

On each of the inventories the student teachers' scores compare more closely with their cooperating teachers' scores on these same instruments. The student teachers' scores are slightly lower on each inventory than either the cooperating teachers' scores or the college supervisor's scores. Therefore, this places the cooperating teachers between the college supervisor and the student teachers in their beliefs.
Figures 8, 9, and 10 are graphic presentations representing the frequencies of the classes into which the data have been grouped. These polygons show the student teachers to be closer to their cooperating teachers than to their college supervisor.

Therefore, hypothesis nine is accepted. In answer to the research question, the student teachers' scores compare more closely with their cooperating teachers' scores than with their college supervisor's scores.

**Changes in Beliefs of Student Teachers and Upperclass Students**

**Research Question 7**

Will there be a significant difference in the scores on the Dogmatism Scale, Personal Beliefs Scale, and Teacher Practices Inventory for the student teachers after student teaching as compared with their scores after methods and just previous to student teaching?

Results are now presented from testing the hypotheses concerned with the level of the student teachers' scores after methods class and after student teaching on the three inventories. Results of testing the upperclass students, the control group, are also reported.

**Hypothesis 1:** The level of the students' scores after the methods class experience and after the student teaching experience will be:

a. higher on the Dogmatism Scale (more open)
Fig. 8.—Frequency Polygon for the Student Teachers', Cooperating Teachers', and College Supervisor's Scores on Dogmatism Scale.
Fig. 9—Frequency Polygon for Student Teachers', Cooperating Teachers', and College Supervisor's Score on Personal Beliefs Inventory.

- = Student Teacher; + = Cooperating Teacher; * = College Supervisor
Fig. 10.—Frequency Polygon for Student Teachers', Cooperating Teachers', and College Supervisor's Scores on Teacher Practices Inventory.

- o = Student Teacher
- + = Cooperating Teacher
- * = College Supervisor
b. higher on the Personal Beliefs Inventory (more experimental)
c. higher on the Teacher Practices Inventory (more experimental)

A paired "t" test was run to determine change in scores of the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory from pretest to posttest and from pretest to midtest. The "t" value needed for statistical significance for student teachers was 1.753; for upperclass students Group B was 1.746. There was significant change in the student teachers' scores on the Teacher Practices Inventory from pretest to midtest at the .025 level of confidence and from pretest to posttest at the .01 level of confidence.

Table 20 shows the "t" values for both treatment groups.

TABLE 20.—"t" Values on Dogmatism Scale, Personal Beliefs Inventory, Teacher Practices Inventory Scores from Pretest to Midtest and Pretest to Posttest by Treatment Groups

<table>
<thead>
<tr>
<th></th>
<th>D.S.</th>
<th>P.B.I.</th>
<th>T.P.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ST</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest to Midtest</td>
<td>-0.749</td>
<td>0.670</td>
<td>2.491*</td>
</tr>
<tr>
<td>Pretest to Posttest</td>
<td>-0.816</td>
<td>-1.556</td>
<td>2.703†</td>
</tr>
<tr>
<td><strong>UCB</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest to Midtest</td>
<td>-1.184</td>
<td>0.981</td>
<td>1.687</td>
</tr>
<tr>
<td>Pretest to Posttest</td>
<td>-0.572</td>
<td>0.818</td>
<td>0.149</td>
</tr>
</tbody>
</table>

*P < .025.
†P < .01.
Therefore, there was a significant change in the scores on the Teacher Practices Inventory for the student teachers after the student teaching experience as compared with their scores just previous to student teaching, and also there was a significant change after the methods class experience as compared with their scores just previous to methods class. The student teachers did change in their beliefs concerning teaching practices after the methods class experience and after the student teaching experience. The student teachers became more experimental in their beliefs concerning teaching practices.

A one-way analysis of variance was used to obtain an F value which could defend the hypothesis (47). (See Appendix M, Tables 23-31) Table 21 shows the mean and standard deviation scores for each treatment group.

The analysis of variance shows that: 1. all groups were the same on pretest for the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory; 2. all groups were the same on midtest for the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory; and 3. all groups were the same on the posttest for the Dogmatism Scale and the Personal Beliefs Inventory. Therefore, for the Dogmatism Scale and the Personal Beliefs Inventory any changes that occurred from pretest to posttest for the student teachers also occurred for students not doing student teaching.
TABLE 21.— Description of Sample

<table>
<thead>
<tr>
<th></th>
<th>D.S. Mean</th>
<th>S.D.</th>
<th>P.B.I. Mean</th>
<th>S.D.</th>
<th>T.P.I. Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>16</td>
<td>146.4</td>
<td>11.86</td>
<td>137.2</td>
<td>12.67</td>
<td>163.5</td>
</tr>
<tr>
<td>UCB</td>
<td>17</td>
<td>145.5</td>
<td>21.53</td>
<td>134.9</td>
<td>9.50</td>
<td>157.1</td>
</tr>
<tr>
<td></td>
<td>Midtest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>16</td>
<td>144.3</td>
<td>11.41</td>
<td>138.7</td>
<td>10.11</td>
<td>173.1</td>
</tr>
<tr>
<td>UCB</td>
<td>17</td>
<td>140.9</td>
<td>19.99</td>
<td>136.8</td>
<td>8.76</td>
<td>161.7</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>16</td>
<td>143.3</td>
<td>13.58</td>
<td>134.3</td>
<td>9.74</td>
<td>170.3</td>
</tr>
<tr>
<td>UCB</td>
<td>17</td>
<td>143.9</td>
<td>18.47</td>
<td>136.1</td>
<td>10.20</td>
<td>157.5</td>
</tr>
<tr>
<td>UCC</td>
<td>19</td>
<td>150.2</td>
<td>18.06</td>
<td>139.1</td>
<td>12.18</td>
<td>151.1</td>
</tr>
</tbody>
</table>

The analysis of variance indicated the only significant difference was in the posttest scores of the teachers, upperclass Group B, and upperclass Group C on the Teacher Practices Inventory with a calculated F ratio of 4.0945 (P < .05).

Using the Scheffe’ method of multiple comparisons, each of the three differences between pairs of means were tested for significance (37). The analysis indicated that there was a statistically significant difference between the student teachers' posttest Teacher Practices Inventory and posttest Teacher Practices Inventory scores of the upperclass students Group C. A test was also done between the means of the student teachers' scores and the combined means of scores of the upperclass students Group B and Group C. This difference was also statistically significant.
The following statements are in answer to the research question. The portion of the hypothesis that stated that the level of the students' scores after methods class will be higher on the Dogmatism Scale and the Personal Beliefs Inventory was rejected. Also rejected was the statement that the students' scores after the student teaching experience will be higher on the Dogmatism Scale and the Personal Beliefs Inventory. The only part of the hypothesis that was accepted was that the students' scores after methods class experience and after the student teaching experience will be higher on the Teacher Practices Inventory.

Therefore, the students do not change in their beliefs after methods class experience on open-mindedness or personal beliefs. They do not change in their beliefs after the student teaching experience on open-mindedness and personal beliefs. However, the students do change in their beliefs concerning teaching practices and have become more experimental after the methods class experience and also at the end of the student teaching experience.

To determine whether the scores of the student teachers are significantly different from the scores of the upperclass students, the following null hypothesis was tested.

**Hypothesis:** There will be no significant difference among treatment groups after adjusting for grade point average.
Analysis of co-variance using the grade point average of the student teachers and upperclass students as the co-variate was used to obtain an F value to test the hypothesis. Analysis of co-variance is a form of analysis of variance that tests the significance of the differences between means of final experimental data by taking into account and adjusting initial difference in the data (47). That is, the analysis of co-variance analyses the differences between the student teachers and the upperclass students on the three inventories after taking into account differences in the grade point average. Since the three groups (student teachers, upperclass students Group B and upperclass students Group C) differed on the grade point average, and assuming that grade point average is related to the scores on the tests, the investigator wished to adjust for that difference by using an analysis of co-variance.

Table 22 shows the means, adjusted mean, and standard deviation for each treatment group. An analysis of co-variance was done on the posttest scores of the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory for the student teachers and both groups of upperclass students, Group B and Group C. (See Appendix M, Tables 32-34)

From the analyses of co-variance, it was concluded that there was no significant difference among the mean scores of the student teachers, upperclass Group B and
TABLE 22.—Description of Sample

<table>
<thead>
<tr>
<th></th>
<th>Dogmatism Scale Mean</th>
<th>Adjusted Mean</th>
<th>Personal Beliefs Inventory Mean</th>
<th>Adjusted Mean</th>
<th>Teacher Practices Inventory Mean</th>
<th>Adjusted Mean</th>
<th>Grade Point* Average Mean</th>
</tr>
</thead>
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<tr>
<td>ST</td>
<td>16</td>
<td>143.3</td>
<td>143.9</td>
<td></td>
<td>170.3</td>
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<td>UCB</td>
<td>17</td>
<td>143.9</td>
<td>143.5</td>
<td></td>
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<td>2.8185</td>
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<td>UCC</td>
<td>19</td>
<td>150.2</td>
<td>150.1</td>
<td></td>
<td>151.1</td>
<td>151.3</td>
<td>2.8822</td>
</tr>
</tbody>
</table>

*Co-variates.
upperclass Group C. This analysis cancelled out the one significant difference previously found on the Teacher Practices Inventory. Thus, there was no difference among treatment groups after adjusting with the co-variante.

Summary

The findings show that student teachers' beliefs do not change in relation to their cooperating teachers during the student teaching experience. The student teachers' scores and cooperating teachers' scores were not closer together on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory at the end of the student teaching experience than at the beginning. Satisfaction with student teaching was expressed by the student teachers especially in relationships with their cooperating teachers. There was no relationship between the student teachers' satisfactions and their cooperating teachers' beliefs. There was, however, a relationship between the student teachers' satisfactions and their own open-mindedness. The more open-minded the student teachers, the more they expressed satisfaction with student teaching. The background factors of the student teachers that were studied did not relate to their satisfaction.

There was no significant difference in the student teachers' scores on the Dogmatism Scale and Personal Beliefs Inventory after the methods class experience or after the student teaching experience. There was, however, a
statistically significant difference in the scores on the Teacher Practices Inventory after the methods class experience and also after the student teaching experience. This indicated that they became more experimental in their beliefs concerning teaching practices.

None of the factors under study in the cooperating teachers' background related to their scores on the Teacher Practices Inventory.

The student teachers' scores on beliefs were closer to their cooperating teachers' scores than to their college supervisor's scores, with the cooperating teachers' scores falling between the student teachers' scores and the college supervisor's scores.

In conclusion, there was not a statistically significant difference between the student teachers and the upperclass students. They were comparable on the measures used.
CHAPTER V

SUMMARY AND IMPLICATIONS

Summary

The purpose of this study was to determine the relationship of the changes in selected beliefs of the cooperating teachers and their student teachers during the student teaching experience and the satisfaction of the student teacher in relation to those changes. What changes in certain components of interpersonal relationships take place during the student teaching experience? Does satisfaction with student teaching relate to changes in interpersonal relationships?

Seventeen home economics cooperating teachers and their student teachers, thirty-six upperclass home economics majors, and one home economics college supervisor affiliated with Ashland College during the first semester of the 1970-1971 college year participated in the study.

A variation of the pretest-posttest control group design was used in the study with the upperclass students randomly assigned to two treatment groups. The student teachers were enrolled in both methods class and student teaching during the semester.

Data collection techniques to determine the changes in beliefs of the cooperating teachers and student teachers,
and the student teachers' satisfaction consisted of four instruments: 1. Dogmatism Scale, Form E, to measure individual differences in open-mindedness and closed-mindedness of belief systems, 2. Personal Beliefs Inventory to measure agreement-disagreement with experimentalism in basic personal beliefs, 3. Teacher Practices Inventory to measure agreement-disagreement with experimentalism in beliefs regarding teaching practices, and 4. Satisfaction with Student Teaching Inventory to measure the student teachers' expressed satisfaction with student teaching.

In addition, two information forms were developed. The Cooperating Teacher Information Form was designed to provide information regarding the preparation for teaching and supervision, teaching experience, and supervisory experience. The Student Teacher Information Form was designed to provide information regarding the amount of time spent in conference with the cooperating teacher and the time spent with the cooperating teacher in out of school activities.

The results of the pretests-posttests provided the primary data used to test hypotheses to answer the research questions:

1. Will the cooperating teachers' scores and the student teachers' scores on open-mindedness be closer together at the end of the student teaching experience than at the beginning?
2. Will the cooperating teachers' score and student teachers' scores on the Personal Belief Inventory be closer together at the end of the student teaching experience than at the beginning?

3. Will the cooperating teachers' scores and student teachers' scores on the Teacher Practices Inventory be closer together at the end of the student teaching experience than at the beginning?

4. What satisfaction with student teaching will be expressed by the student teachers?

5. What relationship is there between changes in the student teachers' beliefs and the student teachers' satisfactions with the student teaching experience?

6. What relationship is there between changes in cooperating teachers' beliefs and student teachers' satisfactions with the student teaching experience?

7. Will there be a significant difference in the scores on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory for the student teachers after student teaching as compared with their scores after methods and just previous to student teaching?

8. What factors in the background of the cooperating teachers positively relate to their scores on the Teacher Practices Inventory?
9. What factors in the background of the student teachers positively relate to their satisfaction with student teaching?

10. Will the student teachers' scores on each of the three instruments be closer to the scores of the cooperating teachers than to the score of the college supervisor?

At the beginning and at the end of the semester the investigator visited each cooperating teacher and asked her to complete the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory which were designated only as Inventory I, II, and III. The student teachers, college supervisor, and Group B of the upperclass students completed these same instruments at the beginning, midway through, and at the end of the semester. Group C of the upperclass students completed the inventories only at the end of the semester. In addition, the student teachers completed the Satisfaction with Student Teaching Inventory at the end of the semester.

Open- and Closed-Mindedness

Correlation coefficients were computed from the student teachers' and cooperating teachers' pretest and posttest scores on the Dogmatism Scale, Form E, to determine if a relationship existed. The correlation coefficient of the pretest scores was $-0.18021$ and of the posttest scores was $0.08750$. Therefore, the scores of the student teachers were not closer to the
cooperating teachers' scores at the end of the student teaching experience.

The mean scores of the student teachers, cooperating teachers, and college supervisor were compared to determine if the student teachers were significantly closer to their cooperating teachers' scores or to their college supervisor's scores on the Dogmatism Scale. The student teachers compared more closely with their cooperating teachers than with their college supervisor with the following scores: student teachers' mean score, 143.3; cooperating teachers' mean score, 149.0; and the college supervisor's score, 186.0.

Pretest to posttest scores and pretest to midtest scores on the Dogmatism Scale were recorded for a paired "t" test to determine change. The test was run on student teachers and upperclass students Group B. No significant "t" value was found. Thus, the student teachers did not become more open during the student teaching experience.

The student teachers' and upperclass students' mean scores on the Dogmatism Scale pretest, midtest, and posttest comprised the data for the analysis of variance to test for differences among the groups on openness. An F ratio of 0.0221 for the pretest, and 0.3478 for the midtest was not significant since an F value > 4.15 was needed. An F ratio of 0.9162 was obtained for the posttest with an F value > 3.19 needed for a significant difference. Thus, the student
teachers did not differ on openness during the student teaching experience.

To determine if there was a significant difference among treatment groups, an analysis of co-variance was done. The calculated F ratio was 0.877 (P .05 > 4.04). It was concluded that there was no significant difference among the treatment groups: student teachers, upperclass B, and upperclass C.

Based on the preceding results, the student teachers did not change significantly in open-mindedness and did not become more similar to their cooperating teachers in open-mindedness during the student teaching experience. The student teachers were found to be more comparable to their cooperating teachers than to their college supervisor in openness. In comparing student teachers with upperclass students, it was concluded from an analysis of variance that there was no significant difference in treatment groups.

**Personal Beliefs**

Correlation coefficients were computed from the student teachers' and cooperating teachers' pretest and posttest scores on the Personal Beliefs Inventory to determine if a relationship existed. The correlation coefficient of the pretest was 0.022 and of the posttest was 0.003. Thus, the student teachers' scores were not closer to the cooperating teachers' scores at the end of the student teaching experience.
To determine if the student teachers were closer to their cooperating teachers or their college supervisor, the mean scores on the Personal Beliefs Inventory were compared. The student teacher compared more closely with their cooperating teachers than their college supervisor with the following scores: student teachers' mean score, 134.3; cooperating teachers' mean score, 135.9; and the college supervisor's score, 154.0.

A paired "t" test was run to determine change in the scores from pretest to posttest, and pretest to midtest on the Personal Beliefs Inventory for student teachers and upper-class students Group B. There was not a significant change. Thus, the student teachers did not become more experimental in their personal beliefs during the student teaching experience.

An analysis of variance was done to test for differences among the groups on experimentalism in personal beliefs. The student teachers' and upperclass students' mean scores on the Personal Beliefs Inventory pretest, midtest, and posttest comprised the data. An F ratio of 0.35\( \times \)4 for the pretest, and 0.34\( \times \)9 for the midtest was not significant since an F value > 4.15 was needed. An F ratio of 0.89\( \times \)9 was obtained for the posttest with an F value > 3.19 needed for a significant difference. Thus, the student teachers did not differ on experimentalism in the personal beliefs during the student teaching experience.
An analysis of co-variance was done to determine if there was a significant difference among treatment groups. The calculated F ratio was 0.961 \( (P < 0.05 > 4.04) \). Therefore, it was concluded that there was no significant difference among the treatment groups.

Thus, it was concluded, that the student teachers did not become more experimental in their personal beliefs and did not become more similar to their cooperating teachers in personal beliefs during the student teaching experience. The student teachers compared more closely to their cooperating teachers than to their college supervisor in their personal beliefs. No significant difference was found in treatment groups when student teachers and upperclass students were compared.

**Teacher Practices**

Correlation coefficients were computed from pretest and posttest scores on the Teacher Practices Inventory to determine if the scores of the student teacher and cooperating teacher were closer after student teaching. The correlation coefficient of the pretest scores was 0.22469 and of the posttest scores was 0.00958. Thus, the scores of the student teachers were not closer to the cooperating teachers' scores at the end of the student teaching experience.

The mean scores of the student teachers, cooperating teachers, and college supervisor were compared to determine if
the student teachers were closer to their cooperating teachers' scores or to their college supervisor's scores on the Teacher Practices Inventory. The student teachers compared more closely with their cooperating teachers than with their college supervisor with the following scores: student teachers' mean score, 170.3; cooperating teachers' mean scores, 170.9; and the college supervisor's mean score, 211.0.

A paired "t" test was run to determine change in the scores from pretest to posttest, and pretest to midtest on the Teacher Practices Inventory for student teachers and upper-class students Group B. There was a significant change in the student teachers' scores from pretest to midtest ("t" value = 2.491), and from pretest to posttest ("t" value = 2.703). Thus, the student teachers did become more experimental in their beliefs concerning teaching practices during the student teaching experience.

To test for differences among the groups on experimentalism in personal beliefs, an analysis of variance was computed from the student teachers and upperclass students mean scores on the Teacher Practices Inventory. An F ratio of 2.1400 for the pretest, and 3.5055 for the midtest was not significant since an F value > 4.15 was needed. An F ratio of 4.0945 was obtained for the posttest with an F value > 3.19 needed for a significant difference. Therefore, the student teachers differed from the upperclass students on
experimentalism in their beliefs concerning teaching practices during the student teaching experience.

To determine where the significant difference was, each of the three differences between pairs of means (student teacher-upperclass B, student teacher-upperclass C, upperclass B-upperclass C) were tested. A test was also done between the means of the student teachers' scores and the combined means of the upperclass B and upperclass C scores. A significant contrast was found between the student teachers' scores and the upperclass C scores, and between the student teachers' scores and the combined scores of the upperclass B and upperclass C. Since the student teachers received the student teaching experience and the upperclass students did not, it could be said that the student teachers had become more experimental in their beliefs concerning teaching practices as a result of the student teaching experience.

An analysis of co-variance was done to determine if there was a significant difference among treatment groups. The calculated F ratio was 3.672 (P .05 > 4.04). It was concluded that there was no significant difference among the treatment groups.

To determine if the background factors of the cooperating teachers related to their becoming more experimental in their beliefs concerning teaching practices, data for contingency tables were recorded. The background
factors were: 1. more years of teaching experience, and 2. more experience as a cooperating teacher. The chi square value for both tables was the same, .04 with 1 degree of freedom which was not significant. Therefore, it was concluded that becoming more experimental in beliefs concerning teaching practices is not related to more years of teaching experience or to more experience as a cooperating teacher but are independent variables.

Therefore, in this study, the student teachers did hold more experimental beliefs concerning teaching practices at the end of the student teaching experience, but they did not become more similar to their cooperating teachers in these beliefs. The student teachers compared more closely to their cooperating teachers than to their college supervisor in their beliefs concerning teaching practices. The background factors of the cooperating teachers that were studied did not relate to their becoming more experimental in their beliefs concerning teaching practices.

Satisfaction with Student Teaching

The student teachers expressed satisfaction with the student teaching experience. They were most satisfied in their relationships with their cooperating teachers and least satisfied in their relationships with their college supervisor and the students in the classroom. The student teachers believed that the college supervisor was not
critical enough when discussing their student teaching performance and that the students in the classroom had intelligence levels lower than they would have liked.

To determine the relationship between the student teachers' satisfaction and their beliefs, posttest scores on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory, and the Satisfaction with Student Teaching Inventory scores were recorded. A statistically significant relationship was found between satisfaction and open-mindedness with a significant correlation of 0.517. The student teachers' higher scores on the Satisfaction with Student Teaching Inventory (more satisfied) related to their higher scores on the Dogmatism Scale (more open).

The relationship between the student teachers' satisfaction and changes in their beliefs was determined using the student teachers' scores on the Satisfaction with Student Teaching Inventory, and the student teachers' change scores on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory. The correlation coefficients for the Satisfaction with Student Teaching Inventory and change scores on the Dogmatism Scale was 0.417 which was statistically significant. The more change in openness of the student teachers, the more they expressed satisfaction.

The relationship between the student teachers' satisfaction and their cooperating teachers' beliefs was
determined using the cooperating teachers' posttest scores on the Dogmatism Scale, Personal Beliefs Inventory, and Teacher Practices Inventory, and the student teachers' scores on the Satisfaction with Student Teaching Inventory. No significant correlation was found. Thus, it was concluded that no relationship existed between the student teachers' higher scores on the Satisfaction with Student Teaching Inventory (more satisfied) and their cooperating teachers' higher scores on the Dogmatism Scale (more open), Personal Beliefs Inventory (more experimental), and Teacher Practices Inventory (more experimental).

To determine the relationship between the student teachers' satisfaction and changes in their cooperating teachers' beliefs, change scores on the Dogmatism Scale, Personal Beliefs Inventory and Teacher Practices plus scores on the Satisfaction with Student Teaching Inventory were recorded. No significant correlation was found. There was no relationship between student teachers' satisfaction and changes in their cooperating teachers' beliefs.

To determine if factors in the background of the student teachers relate to their satisfaction with student teaching, correlation coefficients were computed from the scores of the Satisfaction with Student Teaching Inventory, conference time (more time spent in conference with their cooperating teacher) and activity time (more incidence of out of school activity with their cooperating teacher).
analysis of data showed that the student teachers' satisfaction is not related to time spent with cooperating teachers in conference or to more incidence of out of school activity.

It was concluded that the student teachers in the study were satisfied with their student teaching experience especially in their relationships with their cooperating teachers. Their satisfaction was significantly related to their open-mindedness but not to their personal beliefs or their beliefs concerning teaching practices. No relationship was found between the student teachers' satisfaction and their cooperating teachers' open-mindedness, personal beliefs, or beliefs concerning teaching practices. More time spent with the cooperating teacher in conference and in out of school activities did not relate to the satisfaction of the student teachers.

**Implications and Recommendations**

Although limited in scope, this study brought to light a number of considerations that need to be kept in mind when further experimentation is undertaken.

Many of the relationships which the investigator studied showed no significance. Perhaps the pursuit of some of these combinations may not be too profitable.

It is possible that basic personal beliefs do not change. Values obtained so early and so deeply are more fundamental and continue. The investigator may have been
studying something that does not change in ten weeks. Also, the instruments may measure things on which student teaching would have little effect.

No relationship was found between satisfaction and time spent with the cooperating teacher. The definition of conference time may have been interpreted differently by the investigator and the student teachers. The many informal conferences and contacts during out of school hours need to be studied to evaluate if these relate to satisfaction.

Despite the fact that the investigator had prepared the cooperating teachers and others in the sample for this research, two of the cooperating teachers or approximately 12 percent felt the inventories to be too personal in nature and, therefore, returned unusable forms. This problem has two facets: 1. Is there a time or place in our teacher education programs where the importance of educational research can be stressed and a cooperative attitude developed? The results of this study have important implications for the selection of cooperating teachers if a climate favorable to research is to be encouraged. 2. Do we have a moral right to ask personal questions in the process of our research? The invasion of privacy is a great concern to many in the teacher education field today.

Significant findings of this study showed the student teachers who were more open-minded to be more satisfied with their student teaching experience. Open-mindedness is often
stated as an objective in education. If we want student teachers to be more open-minded, how can we as teacher educators affect this change? Should we early in undergraduate education subject potential teachers to programs, courses, and/or experiences for the expressed purpose of "opening" their minds?
The cooperating teachers' open-mindedness in this study had no relationship to the open-mindedness of the student teachers. The student teaching experience is so complex that many things may contribute either alone or together to a change in the open-mindedness of the student teachers. Contradictory results are found in research.

The student teachers' beliefs become more experimental concerning teaching practices during the student teaching experience but this change was not related to their cooperating teachers' beliefs concerning teaching practices. What changed their beliefs? Did their actual teaching practices change along with their beliefs concerning teaching practices?

This study suggests other possibilities for research. This investigator believes that it would be desirable to design a similar study and include evaluation of teaching performance in relation to the other factors in this study. If a student teacher is more open-minded, more experimental in beliefs concerning teaching practices, and also more satisfied, is it likely that this student teacher rated higher in teaching performance?
There is a need for large scale studies to be made and cross-validation of various instruments measuring these same selected components of interpersonal relationships so that they may be studied in the light of many research findings. A study of the independent-dependent characteristics of the dyad in relation to the factors in this study may give further light to what actually goes on between the two persons.

Information needs to be gathered on other factors that may influence the relationship of the student teacher and cooperating teacher during the student teaching experience, such as the following: 1. institutional climate, 2. socioeconomic status of the cooperating teacher and student teacher, 3. professional status of the cooperating teacher, 4. distance and time in relation to the location of the college and student teaching center, 5. rural or urban setting, and 6. personal trauma during the student teaching experience.

Since none of the cooperating teachers in this study had specific courses, workshops or in-depth orientation to prepare them for supervision, a similar study comparing cooperating teachers with preparation and those without preparation may answer questions in this area. Does the "prepared" cooperating teacher affect more changes in the student teacher than the "unprepared" cooperating teacher?

Is matching of the student teacher and cooperating teacher indeed a fruitful effort as Leslie questions (51)?
With sufficient research, can we find ways of matching to bring about the desired objectives of student teaching?
INVENTORY I

REPRESENTATIVE ITEMS FROM DOGMATISM SCALE, FORM E
INVOLVING THE BELIEF-DISBELIEF DIMENSION
(ISOLATION BETWEEN AND WITHIN BELIEF SYSTEMS)

(1) Accenuation of differences between the belief and disbelief systems

1. The United States and Russia have just about nothing in common.

(2) The coexistence of contradictions within the belief system

2. The highest form of government is a democracy and the highest form of democracy is a government run by those who are most intelligent.

3. Even though freedom of speech for all groups is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.

(3) Relative degrees of differentiation of the belief and the disbelief system

4. It is only natural that a person would have a much better acquaintance with ideas he believes in than with ideas he opposes.
REPRESENTATIVE ITEMS FROM DOGMATISM SCALE, FORM E
INVolvING THE CENTRAL-PERIPHERAL DIMENSION
(PRIMITIVE BELIEFS)

(1) Beliefs regarding the aloneness, isolation, and helplessness of man

5. Man on his own is a helpless and miserable creature.

6. Fundamentally, the world we live in is a pretty lonesome place.

(2) Beliefs regarding the uncertainty of the future

9. It is only natural for a person to be rather fearful of the future.

10. There is so much to be done and so little time to do it in.

(3) Beliefs about self-adequacy and inadequacy

14. It is better to be a dead hero than to be a live coward.

(4) Self-aggrandizement as a defense against self-adequacy

16. The main thing in life is for a person to want to do something important.

17. If given the chance, I would do something of great benefit to the world.
INVENTORY I--continued

REPRESENTATIVE ITEMS FROM DOGMATISM SCALE, FORM E
IN InvOLLING THE CENTRAL-PERIPHERAL DIMENSION
(INTERMEDIATE BELIEFS)

(1) Beliefs in positive and negative authority

18. In the history of mankind there have probably been just a handful of really great thinkers.

19. There are a number of people I have come to hate because of the things they stand for.

(2) Belief in the cause

20. A man who does not believe in some great cause has not really lived.

26. In times like these, a person must be pretty selfish if he considers primarily his own happiness.

(3) Intolerance toward the renegade

27. The worst crime a person could commit is to attack publicly the people who believe in the same thing he does.

28. A group which tolerates too much differences of opinion among its own members cannot exist for long.

(4) Intolerance toward the disbeliever

30. There are two kinds of people in this world: those who are for the truth and those who are against the truth.

32. A person who thinks primarily of his own happiness is beneath contempt.
INVENTORY I—continued

REPRESENTATIVE ITEMS FROM DOGMATISM SCALE, FORM E
INVOLVING THE CENTRAL-PERIPHERAL DIMENSION
INTERRELATIONS AMONG PRIMITIVE,
INTERMEDIATE, AND PERIPHERAL
BELIEFS)

(1) Tendency to make a party-line change

34. In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.

35. It is often desirable to reserve judgment about what's going on until one has had a chance to hear the opinions of those one respects.

(2) Narrowing (referring to the selective avoidance of contact with facts, events, etc., incongruent with one's belief-disbelief system)

36. In the long run the best way to live is to pick friends and associates whose tastes and beliefs are the same as one's own.
INVENTORY I--continued

REPRESENTATIVE ITEMS FROM DOGMATISM SCALE, FORM E
IN INVOLVING THE TIME-PERSPECTIVE DIMENSION
(CLOSED SYSTEMS FUTURE OR PAST ORIENTED)

(1) Attitude toward the past, present, and future

37. The present is all too often full of unhappiness. It is only the future that counts.

(2) Knowing the future

38. If a man is to accomplish his mission in life, it is sometimes necessary to gamble "all or nothing at all."

39. Unfortunately, a good many people with whom I have discussed important social and moral problems don't really understand what's going on.

40. Most people just don't know what's good for them.
APPENDIX B
INVENTORY II

REPRESENTATIVE ITEMS FROM PERSONAL BELIEFS INVENTORY

(1) Items Involving Mind and Body
   (a) Plus-item compatible with Dewey
       1. There is no spiritual realm which lies beyond man's experience in the natural world.
   (b) Minus-item conflict with Dewey
       5. The mind is formed from without, as one molds and shapes a piece of clay.

(2) Items Involving Permanence and Change
   (a) Plus-item compatible with Dewey
       8. All "truths" are relative.
   (b) Minus-item in conflict with Dewey
       16. Reaching a condition in which there were no more problems would be the ideal life.

(3) Items Involving Science and Morals
   (a) Plus-item compatible with Dewey
       19. Questions of value and moral judgment ought to be open to experimentation.
   (b) Minus-item in conflict with Dewey
       23. The ends and laws which should regulate human conduct have been determined by the superior intelligence of an ultimate Being.

(4) Items Involving Emotions and Intellect
   (a) Plus-item compatible with Dewey
INVENTORY II—continued

24. Man's primitive impulses are neither good nor evil, but become one or the other according to the objects for which they are employed.

(b) Minus-item in conflict with Dewey

25. The mind turns outward to truth; the emotions turn inward to considerations of personal advantage and loss.

(5) Items Involving Freedom and Authority

(a) Plus-item compatible with Dewey

29. Man is capable of managing his own destiny in an understandable and predictable natural world.

(b) Minus-item in conflict with Dewey

31. Man's destiny is in the hands of a supernatural power.

(6) Items Involving Knowing and Doing

(a) Plus-item compatible with Dewey

32. Knowledge is artificial and ineffective in the degree in which it is merely presented as truth to be acquired and possessed for its own sake.

(b) Minus-item in conflict with Dewey

36. Knowledge is truth to be accepted, held, and treasured for its own sake.
INVENTORY III

REPRESENTATIVE ITEMS FROM TEACHER PRACTICES INVENTORY
WHICH REPRESENT THE SEVEN STEPS OF THE EDUCATIVE
EXPERIENCE ADVOCATED BY DEWEY

(1) Item Involving Situations of Experience
   (a) Plus-item compatible with Dewey
       1. Teacher focuses attention on what the
          students do or say, rather than on what
          the teacher does or says.

(2) Item Involving the Development of Challenging Problems
   (a) Plus-item which agrees with Dewey's philosophy
       of education
       7. Teacher lets students become involved in
          ugly or distressing aspects of subjects.

(3) Item Involving the Generation of Ideas
   (a) Plus-item compatible with Dewey
       10. Teacher encourages students to suggest
           what might be done - to make "hypothet-
           ical leaps" into the unknown or untested.

(4) Item Involving the Observation and Collection of Data
   (a) Plus-item which agrees with Dewey's philosophy
       of education
       14. Teacher gives students opportunity to
           select facts and information which
           they consider appropriate to the
           question.

(5) Item Involving the Development of Reasoned Hypothesis
   (a) Plus-item compatible with Dewey
       15. Teacher has students compare the value
           of alternative courses of action and
           pass judgment on their relative
           desirability.
INVENTORY III—continued

(6) Item Involving Experimental Application and Testing

(a) Plus-item compatible with Dewey

17. Teacher permits students to go ahead with plans based on foresight, observation, and consideration of several alternatives - even when sure their judgment is mistaken.

(7) Item Involving the Evaluation and Judgment of Results

(a) Plus-item compatible with Dewey

20. Teacher asks the students to help decide when questions have been satisfactorily answered.
INVENTORY III—continued

REPRESENTATIVE ITEMS WHICH REPRESENT THE "EVILS IN EDUCATION" WHICH DEWEY OPPOSED

(1) Item Involving Neglect of Direct Experiences
   (a) Minus-item in conflict with Dewey

22. Teacher calls for the undivided attention of the group and scolds those who do not respond.

(2) Item Involving Reliance Upon Extrinsic Motivation
   (a) Minus-item in conflict with Dewey

24. Teacher motivates students to greater intellectual effort by rewarding them with grades, marks, prizes, or privileges.

(3) Item Involving the Making of Learning a Direct and Conscious End in Itself
   (a) Minus-item in conflict with Dewey

29. Teacher makes the acquisition of knowledge and skills the center of students' attention and effort.

(4) Item Involving the Mechanical Following of an Established Method
   (a) Minus-item in conflict with Dewey

36. Teacher tells students where to start and what to do to accomplish the task at hand.

(5) Item Involving the Imposition of a General Method on All Alike
   (a) Minus-item in conflict with Dewey

37. Teacher uses a set standard to judge the work of all students in the class.
APPENDIX D
Satisfaction With Student Teaching Inventory

This inventory consists of 32 multiple choice statements designed to sample opinions about student teaching experiences. There is considerable variation as to the experiences encountered by student teachers. What is wanted is your feeling about your own individual experiences. There are, of course, no "right" or "wrong" answers.

Your opinions about the student teaching experience will, of course, be held strictly confidential. The data will be used for research purposes only. Please respond to every item.

1. I feel that the contributions I have to the class activity as a whole:
   a. were not usually effective
   b. were constructive and helpful
   c. were too infrequent to be effective

2. The comments made by my cooperating teacher regarding my mistakes were:
   a. just critical enough to be helpful
   b. overly critical
   c. not critical enough

3. In general, I thought the behavior of the students I taught was:
   a. too subdued
   b. too rowdy
   c. satisfactory
4. I was made responsible for conducting the class:
   a. sooner than I would have liked
   b. later than I would have liked
   c. at just about the right time

5. My student teaching experience left me with a feeling that teaching is:
   a. somewhat disorganized
   b. very challenging and interesting
   c. a little too routine

6. When discussing my student teaching performance with me, my college supervisor was:
   a. too critical
   b. not critical enough
   c. just critical enough

7. When planning the classroom activities, my cooperating teacher:
   a. sometimes assigned the planning to me but often ignored my efforts
   b. usually had me participate in the planning with her
   c. seldom gave me a change to participate in the planning

8. The goals toward which I was striving in my student teaching:
   a. were generally attained to my satisfaction
   b. were seldom attained to my satisfaction
   c. were probably not appropriate to the students I taught

9. The kinds of activities in which students in my student teaching class participated:
   a. were too routine to stimulate their interests
   b. were about like those I would like in my own classroom
   c. were lacking in purpose and meaning for most of the children

10. The skills I learned during student teaching:
    a. should be of enormous value when teaching "on my own"
    b. will probably be unimportant to my future teaching performance
    c. were actually too few in number to affect my future teaching
11. The intelligence level of most of the students I taught:
   a. was lower than I would have liked
   b. was just about what I would like in my own class
   c. was higher than I would have liked

12. A comparison of what I strived for and what I attained in teaching my students made me:
   a. feel that I may have expected too much of myself
   b. feel a sense of accomplishment
   c. feel a bit discouraged

13. In preparing me to become a member of the teaching profession, student teaching has left me with a feeling of being:
   a. unqualified to enter the school as a teacher
   b. barely prepared to teach in the school
   c. adequately prepared to teach in the school

14. My personal relationships with staff members at the school:
   a. were very pleasant and cordial
   b. were distant and impersonal
   c. were somewhat unsatisfying

15. My cooperating teacher's interest in my professional improvement and growth was:
   a. somewhat superficial
   b. sincere and helpful
   c. intense to the point of being annoying

16. The regulations to which I, as a student teacher, had to conform seemed:
   a. unnecessary in many respects
   b. rather vague but not unreasonable
   c. reasonable and agreeable to me

17. The assignments given to me by my cooperating teacher:
   a. were about as varied as they should be
   b. were too varied to learn any one aspect of teaching
   c. were not varied enough to broaden my experience
18. In discussions with my college supervisor, my viewpoint:
   a. was accepted too often without adequate understanding
   b. was accepted and understood practically all the time
   c. was seldom accepted

19. My own plans for using methods and materials:
   a. were needed a little too often
   b. were employed often enough
   c. were not employed often enough

20. I was given complete charge of the class:
   a. not as often as I would have liked
   b. about the right number of times
   c. more often than I would have liked

21. The students I had in my class:
   a. seemed indifferent to school activities
   b. mildly resisted my attempts to teach them
   c. were easily motivated

22. The amount of clerical work given by my cooperating teacher was:
   a. too little for me to learn this aspect of the teaching job
   b. appropriate and helpful
   c. a little more than I considered necessary

23. As I evaluate my student teaching in light of my other college work, I am convinced that:
   a. it was one of my least valuable courses
   b. it was the most valuable course I have taken
   c. it was as valuable as my other college courses

24. My college supervisor's suggestions were:
   a. of little help to me
   b. too demanding of my time
   c. reasonable and helpful
25. Student teaching gave me a feeling of:
   a. personal inadequacy in some respects
   b. achievement and personal satisfaction
   c. discouragement with the gap between educational theory and practice

26. In general, the atmosphere of the classroom to which I was assigned was:
   a. too easy going for maximum learning by students
   b. about as democratic as it should be
   c. overly dominated by the teacher

27. If I had the opportunity to do my student teaching over again, I would want to:
   a. have a more free choice of school and cooperating teacher
   b. teach more in accord with the theory I have learned
   c. do very much what I have done

28. I found that my personal relationships with school personnel during student teaching prompted me to:
   a. just coast along until the end of the term
   b. consider postponement of my teaching career
   c. put forth a great deal of effort

29. Ideally, I would like to teach students whose socio-economic background is:
   a. lower than the socio-economic background of those whom I taught
   b. about the same as the socio-economic background of those whom I taught
   c. higher than the socio-economic background of those whom I taught

30. The amount of satisfaction I had from student teaching experience made me wonder:
   a. whether student teaching couldn't be organized more satisfactorily
   b. whether some activity shouldn't be substituted for it
   c. why some people dislike this experience
31. When delegating tasks to me, my cooperating teacher:

a. proportioned my work according to the amount of time I had available
b. was not too considerate of the amount of work I had to do outside of student teaching
c. was often unable to find enough things to keep me busy

32. The methods adhered to by my cooperating teacher:

a. were too subject-centered to meet the needs of enough students
b. were too student centered to effectively teach the necessary subject matter
c. were appropriate for obtaining the desired student growth
COOPERATING TEACHER INFORMATION FORM

High School ______________

Directions: The following form is designed as an aid in the collection of information concerning the professional and educational background of home economics cooperating teachers. Please respond to each item in terms of what is true at this particular time (this semester).

1. Degree Status:

<table>
<thead>
<tr>
<th>Major</th>
<th>Institution</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Bachelors
Bachelors plus
30 quarter hours
Masters
Masters plus
30 quarter hours
Other (State)

2. Number of years home economics teaching experience (please check).

1 - 3 years ________
4 - 6 years ________
7 - 10 years ________
11 - 15 year ________
over 16 years ________

3. Number of years teaching experience in other areas ________.

What areas? __________________________________________________________________.

4. Student teachers supervised prior to your current student teachers: (Answer 4 on back if more space is needed)

Number From what institution Year supervised

5. If beginning supervisor, check here_____.

6. Supervision courses or workshops taken specifically to prepare you as a cooperating teacher:

<table>
<thead>
<tr>
<th>Name of course or Descriptive Title</th>
<th>Institution</th>
<th>Date taken</th>
</tr>
</thead>
</table>

7. Length of time spent in conferences with student teacher. Please check

- Approximately one conference every day
- Three conferences every week
- One conference each week
- One conference every other week
- Other (please specify)

8. Types of activities on which time was spent during student teaching conferences. Please list and star those that were most important.

________________________________________

________________________________________

________________________________________

9. Time spent with student teacher in out of school activities. Please list and star those that were most important.

________________________________________

________________________________________

________________________________________
APPENDIX F
STUDENT TEACHER INFORMATION FORM

1. Age _______ Major: Vocational ______;
   Comprehensive ______; General ______

2. Overall Accum. ______

3. Home Economics Accum. ______

4. Education Courses Accum. ______

5. Grade in Student Teaching ______

6. College Activities: Offices __________________________
   Organization __________________________
   Committee Work __________________________
   Organization __________________________

7. Length of time spent in conferences with cooperating teacher. Please check.
   Approximately one conference per day ______
   " three conferences per week ______
   " one conference per week ______
   " one conference every other week ______
   Other (please specify) __________________________

8. Types of activities on which time was spent during student teaching conferences. Please list and star those that were most important.
9. Time spent with cooperating teacher in out of school activities. Please list and star those that were most important.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
APPENDIX G
I am asking you to be a part of my doctoral research. On August 3rd my committee approved my research proposal and I plan to conduct my research the first semester of this school year.

My need is for you to fill out the three beliefs inventories now and at the end of the semester. The inventories will be considered as a group and no one person will be identified in any way. These individual inventories will not be shown to anyone other than myself and will be held in the strictest confidence. When you read them you will see that there are no right or wrong answers to any of them. They merely give your beliefs. These standardized inventories are under a copyright and I have received permission from the authors to use them.

I appreciate your considering this request. Since I have the minimum number to conduct my research, I am truly looking forward to your participation.

I shall be most happy to share the total results of this research with you and I plan to provide you with a copy of the dissertation abstract next spring when my writing is completed.

The enclosed stamped self-addressed envelope is for your convenience. Please feel free to phone me if you have any questions. I would appreciate having them returned within the week, if this is at all possible, so that I may begin my preliminary analysis.

Best wishes for this new school year.

Sincerely yours,

Mrs. Gwen Cooke, Associate Professor
Assistant Chairman, Home Economics Department
Dear Home Economics Major,

I would like to have you as a participant in my doctoral research study. This would involve taking approximately 35 to 45 minutes of your time to fill out some inventories.

Can you please come to room 305 Founders at 4 p.m. on Thursday (tomorrow), Sept. 24th? If this is inconvenient, please let me know so that you could complete the inventories at another time.

I really appreciate your consideration of this request. I must have a comparison group for my study and I truly do need you.

Sincerely,

Mrs. Cooke

Will you please drop off the following information to Mrs. Prosser in room 305 Founders today?

Name _________________________________

Please check:

_____ I can come to room 305 Founder tomorrow at 4 p.m.

_____ I can come to room 305 Founders on ________________ at ________ a.m. or __________ p.m.
APPENDIX I
Dear Home Economics Major,

Thank you for being a participant in my doctoral research. I really appreciate your willingness and cooperation in making this study a reality.

It is time again to gather more data. Can you please come to room 305 Founders at 4 p.m. on Thursday (tomorrow), October 29th? It will take approximately 35 to 45 minutes of your time. If this is impossible, please let me or Mrs. Prosser know so that you could complete the inventories at another time during this week. (It is best, however, to meet at the same time, if possible.)

I really appreciate your contribution. The research is going very well and I am looking forward to preparing a resume of the results for you!

Sincerely yours,

Mrs. Cooke
Dear Home Economics Major,

I truly appreciate your participation in my doctoral research. Thank you for being so faithful in coming in to take the inventories.

It is time now for the final collection of data. Can you please come to room 305 Founders at 4 p.m. on Tues., January 24th? It will take approximately the same amount of time as previously. If this is impossible, please let me or Mrs. Prosser know so that you could complete the inventories at another time during this week.

Thank you so much for being a part of my study. I'm looking forward to sending you a resume' of the results.

Sincerely yours,

Mrs. Cooke
APPENDIX K
Dear Home Economics Major:

I am now in the process of completing the final collection of data for my doctoral research. I truly do need you as a participant in my study.

Can you please come to room 305 Founders at 4 p.m. on Tuesday, January 12th? It will take approximately 35 to 45 minutes of your time. If this is impossible, please let me or Mrs. Prosser know so that you could complete the inventories at another time during this week.

Thank you so very much for this consideration. I'm really looking forward to sending to you a resume' of the study.

Sincerely yours,

Mrs. Cooke
January 12, 1971

Dear

I truly do thank you for your fine cooperation in working with me on my doctoral research. The final collection of data is in progress and other than the completion of the inventories, I am asking each cooperating teacher to do one last form for the research. Enclosed is an Information Form to be completed. Your response will be strictly confidential and used only for this research. Only the name of the high school should be on the form. There is a self-addressed stamped envelope for your use in returning the form at your earliest convenience.

Thank you for considering this request.

Best wishes to you for the remainder of the school year.

Sincerely yours,

Gwen Cooke, (Mrs.)
Assistant Chairman
Home Economics Department
APPENDIX M
### TABLE 23. -- Analysis of Variance on Student Teachers' and Upperclass B Pretest Scores on the Dogmatism Scale

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>6.6971</td>
<td>1</td>
<td>6.7971</td>
<td>0.221*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>9528.1602</td>
<td>31</td>
<td>307.3599</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9534.9570</td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at .05 level.

### TABLE 24. -- Analysis of Variance on Student Teachers' and Upperclass B Pretest Scores on the Personal Beliefs Inventory

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>43.9377</td>
<td>1</td>
<td>43.9377</td>
<td>0.3534*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>3853.9404</td>
<td>31</td>
<td>124.3206</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3897.8779</td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at .05 level.

### TABLE 25. -- Analysis of Variance on Student Teachers' and Upperclass B Pretest Scores on the Teacher Practices Inventory

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>335.7490</td>
<td>1</td>
<td>335.7490</td>
<td>2.1400*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4863.7617</td>
<td>31</td>
<td>156.8955</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5199.5078</td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at .05 level.
### TABLE 26. -- Analysis of Variance on Student Teachers and Upperclass B Midtest Scores on the Dogmatism Scale

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>93.6821</td>
<td>1</td>
<td>93.6821</td>
<td>0.3478*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>8350.3672</td>
<td>31</td>
<td>269.3665</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8444.0469</td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at .05 level.

### TABLE 27. -- Analysis of Variance on Student Teachers' and Upperclass B Midtest Scores on the Personal Beliefs Inventory

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>30.5904</td>
<td>1</td>
<td>30.5904</td>
<td>0.3429*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2765.4690</td>
<td>31</td>
<td>89.2087</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2796.0593</td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at .05 level.

### TABLE 28. -- Analysis of Variance on Student Teachers and Upperclass B Midtest Scores on the Teacher Practices Inventory

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1063.7383</td>
<td>1</td>
<td>1063.7383</td>
<td>3.5055*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>9406.8047</td>
<td>31</td>
<td>303.4453</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10470.5430</td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at .05 level.
TABLE 29.--Analysis of Variance on Student Teachers', Upper-class B, Upperclass C Posttest Scores on the Dogmatism Scale

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>527.3159</td>
<td>2</td>
<td>263.6580</td>
<td>0.9162*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>14100.3516</td>
<td>49</td>
<td>287.7622</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14627.6641</td>
<td>51</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at .05 level.

TABLE 30.--Analysis of Variance on Student Teachers', Upper-class B, Upperclass C Posttest Scores on the Personal Beliefs Inventory

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>210.6401</td>
<td>2</td>
<td>105.3201</td>
<td>0.8959*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>5760.4297</td>
<td>49</td>
<td>117.5598</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5971.0664</td>
<td>51</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at .05 level.

TABLE 31.--Analysis of Variance on Student Teachers', Upper-class B, Upperclass C Posttest Scores on the Teacher Practices Inventory

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3251.8633</td>
<td>2</td>
<td>1625.9316</td>
<td>4.0945*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>19458.1641</td>
<td>49</td>
<td>397.1052</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>22710.0273</td>
<td>51</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*P < .05.
<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error (Within Groups)</td>
<td>13733.8281</td>
<td>48</td>
<td>286.1213</td>
<td>0.877*</td>
</tr>
<tr>
<td>Treatment and Error (Total)</td>
<td>14235.8086</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference for Testing Adjusted Treatment Means</td>
<td>501.9805</td>
<td>2</td>
<td>250.9902</td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at .05 level.

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same</td>
<td>5701.2109</td>
<td>48</td>
<td>118.7752</td>
<td>0.961*</td>
</tr>
<tr>
<td>Same</td>
<td>5929.3867</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>228.1758</td>
<td>2</td>
<td>114.0879</td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at .05 level.

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same</td>
<td>18604.0234</td>
<td>48</td>
<td>387.5837</td>
<td>3.672*</td>
</tr>
<tr>
<td>Same</td>
<td>21450.5391</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2846.5156</td>
<td>2</td>
<td>1423.2578</td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at .05 level.
BIBLIOGRAPHY


53 Lipscomb, Edra E. "A Study of the Attitudes of Student Teachers in Elementary Education," The Journal of Educational Research, 60 (December, 1966), 159-163.


