

INTERPERSONAL INFLUENCE ON THE
OCCUPATIONAL AND EDUCATIONAL
ASPIRATIONS AND EXPECTATIONS OF
SIXTH GRADE STUDENTS

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
Mildred Beatty Smith
1961

This is to certify that the

thesis entitled

**Interpersonal Influence on the
Occupational and Educational
Aspirations and Expectations of
Sixth Grade Students**
presented by

Mildred Beatty Smith

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Education

Date Noveml



FEB 12 1975 046

INTERPERSONAL INFLUENCE ON THE OCCUPATIONAL AND
EDUCATIONAL ASPIRATIONS AND EXPECTATIONS
OF SIXTH GRADE STUDENTS

By

Mildred Beatty Smith

AN ABSTRACT OF A THESIS

Submitted to the School for Advanced Graduate Studies of
Michigan State University in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

College of Education

1961

Approved _____

ABSTRACT

INTERPERSONAL INFLUENCE ON THE OCCUPATIONAL AND EDUCATIONAL ASPIRATIONS AND EXPECTATIONS OF SIXTH GRADE STUDENTS

by Mildred Beatty Smith

In this study the investigator undertook to ascertain some factors that relate to change in occupational and educational aspirations and expectations of sixth grade students. Hypotheses formulated were concerned with: (1) expected socio-economic status of student and teacher-student expressed relationship, (2) students' perceptions and teachers' expectations, (3) teachers' expectations and observed teacher-student relationship, (4) socio-economic status and change in occupational and educational aspirations and expectations, and (5) closeness of teacher-student relationship and change in occupational and educational expectations.

Interview schedules were formulated to obtain information from a sub-sample of forty boys and their seven teachers concerning students' perceptions of teachers' expectations and expressed relationships. A checklist of items relating to teacher behavior was developed to observe teacher-student relationships to determine if teachers were positive and encouraging, or negative and discouraging toward selected students, and to determine if observed teachers' behavior was related to teachers' expectations of students. Two questionnaires were developed and administered to 850 sixth grade boys and girls in pre- and post-test situations

to ascertain change in occupational and educational aspirations and expectations. Data were collected from sixth grade students and teachers in the Flint Public Schools during the 1959-60 school year. A. B. Hollingshead's occupational and educational scales were used to classify students' socio-economic status, occupational goals, teachers' expectations of the socio-economic status students will attain, and students' years of school attendance expectations. Two scales were developed to classify grade expectations and teacher-student expressed relationships. An observation checklist was formulated to evaluate observed teacher-student relationships.

Highly significant associations were found to exist between the closeness of the teacher-student expressed relationship and the expected socio-economic status of students.

Highly significant associations were found to exist between teachers' expectations and students' perceptions of teachers' expectations for years of school attendance and grades. These findings show that teachers have different expectations for different students and most students are accurately perceiving these expectations.

Highly significant associations were found to exist between teachers' expectations and the observed teacher-student relationship. Teachers were more positive and encouraging if they had high expectations of students. They were more negative and discouraging if they had low expectations of students.

In general, change in students' occupational and educational aspirations was not related to socio-economic

status. Associations were found to exist, however, between socio-economic status and change in occupational expectations for boys, years of school attendance expectations for girls, and arithmetic grade expectations for all students. Lower-class boys tended to lower their occupational goals during the sixth grade school year. Low positive but not quite significant associations were disclosed between change in occupational expectations for girls and socio-economic status. The hypothesized association between change in expectations and socio-economic status was, therefore, given some, but not conclusive support.

Predicted associations between change in students' occupational and educational expectations and the closeness of the teacher-student relationship were not entirely supported. Associations were found to exist, however, for change in arithmetic grade expectations among students expressing very friendly relationships with arithmetic teachers. Associations were also disclosed for change in years of school attendance expectations and change in arithmetic grade expectations among class III students.

Data to compute change in aspirations and expectations were collected within a nine-month period. This makes evident that change computed occurred within a short period of time. The low positive but not quite significant association that existed may well become significant as students mature.

Results of the study suggest that students' occupational and educational expectations are changing as students are becoming aware of individual differences and the

expectations of person with whom they identify. Findings suggested the teacher as a source of influence for some students. Results from this study also suggest the teacher as a source of motivation for the social class "deviant."

INTERPERSONAL INFLUENCE ON THE OCCUPATIONAL AND
EDUCATIONAL ASPIRATIONS AND EXPECTATIONS
OF SIXTH GRADE STUDENTS

By

Mildred Beatty Smith

A THESIS

Submitted to the School for Advanced Graduate Studies of
Michigan State University in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

College of Education

1961

20815
5/24/63

ACKNOWLEDGMENTS

The author wishes to express her gratitude to the chairman of her guidance committee, Dr. George Myers, for his help and encouragement at all stages of this study; to Dr. Wilbur B. Brookover, for his assistance given to this study; and to the other members of her guidance committee, Dr. Harold Dillon and Dr. Charles Blackman, for their counsel.

The author is also indebted to Mrs. Ann Paterson, Mr. Shailer Thomas, and Mr. Max Murphy, for their assistance with the observation phase of the study; and to Mr. John Paterson, for his assistance with statistical procedures.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
The Socialization Process	1
Theoretical Frame of Reference	5
The Purpose of the Study	7
Assumptions and Hypotheses	9
II. REVIEW OF RELATED RESEARCH	16
Family Influence on Aspirations and Expectations	17
Peer Group Influence on Aspirations and Expectations	29
III. PROCEDURE	30
Sampling Procedure	35
Instrument Development	42
Collecting the Data	45
Classifying the Data	50
Statistical Techniques	54
IV. PRESENTATION OF FINDINGS	56
Teacher-Student Closeness of Relationship	57
Teachers' Expectations and Students' Perceptions of Teachers' Expectations	63
Observed Teacher-Student Relationship	74
Socio-Economic Status and Change in Students' Aspirations and Expectations	77
Interpersonal Relationships and Change in Students' Expectations	88
V. SUMMARY AND CONCLUSIONS	103
VI. LITERATURE CITED	113
APPENDIX A. TABLES REFERRED TO BUT NOT INCLUDED IN TEXT	115
APPENDIX B. QUESTIONNAIRES AND INSTRUCTIONS FOR THEIR ADMINISTRATION	143
Flint Student Study - 1	144

Chapter	Page
Flint Student Study - 2	152
Your School Plans: Students' Perceptions of Teachers' Expectations . .	157
About Your Pupils: Teachers' Expectations of Students	161
Observation Form: Observed Teacher-Student Relationship	167

LIST OF TABLES

Table	Page
1. Composition of student population in Flint public elementary school communities	36
2. Classification of Flint public elementary schools into category types	37
3. Schools selected for sampling	38
4. Selected sub-sample of teachers and students . .	41
5. Observation schedule arranged to randomize classroom observations	47
6. The observation time schedule for the three observers	47
7. Relationship between reading and arithmetic teachers' expressed relationship toward students and students' expressed relationships toward teachers	59
8. A comparison of reading and arithmetic teachers' expressed relationship toward students and students' expressed relationships toward teachers	60
9. A comparison of students' expressed relationships toward reading teachers and reading teachers' expressed relationships toward students	61
10. A comparison of students' expressed relationships toward arithmetic teachers and arithmetic teachers' expressed relationships toward students	62
11. Relationship between reading and arithmetic teachers' expectations and students' perception of expectation for grades students will earn in school	67
12. A comparison of reading and arithmetic teachers' expectation of students and students' perception of teachers' expectation for grades students will earn in school	67

Table	Page
13. A comparison of students' perceptions of reading teachers' expectations for grades students will earn in school	68
14. A comparison of students' perceptions of arithmetic teachers' expectations for grades students will earn in school	69
15. Relationship between reading and arithmetic teachers' expectations and students' perception of expectations for years of school attendance	72
16. A comparison of reading and arithmetic teachers' expectations and students' perception of teachers' expectations for years of school attendance	72
17. A comparison of students' perceptions of reading teachers' expectations and reading teachers' expectations for years of school attendance	73
18. A comparison of students' perceptions of arithmetic teachers' expectations and arithmetic teachers' expectations for years of school attendance	74
19. Reading teachers' observed behavior toward students	76
20. Arithmetic teachers' observed behavior toward students	77
21. Summary of associations between socio-economic status and change in occupational aspirations and expectations	86
22. Summary of associations between socio-economic status and change in years of school attendance aspirations and expectations	87
23. Summary of associations between socio-economic status and change in grade expectations	88
24. Summary of associations between socio-economic status and change in occupational expectations with relationship with teachers held constant	99
25. Summary of associations between change in occupational expectations and relationships with teachers with socio-economic status held constant	99

Table	Page
26. Summary of association between socio-economic status and change in years of school attendance expectations with relationship with teachers held constant	100
27. Summary of associations between change in years of school attendance expectations and relationships with teachers with socio-economic status held constant	100
28. Summary of associations between socio-economic status and change in grade expectations with relationship with reading teachers held constant	101
29. Summary of associations between change in grade expectations and relationships with reading teachers with socio-economic status held constant	101
30. Summary of associations between socio-economic status and change in grade expectations with relationships with arithmetic teachers held constant	102
31. Summary of associations between change in grade expectations and relationships with arithmetic teachers with socio-economic status held constant	102
32. Association between change in boys' and girls' occupational aspirations and socio-economic status	116
33. Association between change in boys' and girls' occupational expectations and socio-economic status	116
34. Association between change in boys' occupational aspirations and socio-economic status	117
35. Association between change in boys' occupational expectations and socio-economic status	117
36. Association between change in girls' occupational aspirations and socio-economic classes	118
37. Association between change in girls' occupational expectations and socio-economic status	118

Table	Page
38. Association between change in all students' years of school attendance aspirations and socio-economic status	119
39. Association between change in boys' years of school attendance aspirations and socio-economic status	119
40. Association between change in girls' years of school attendance aspirations and socio-economic status	120
41. Association between change in all students' years of school attendance expectations and socio-economic status	120
42. Association between change in boys' years of school attendance expectations and socio-economic status	121
43. Association between change in girls' years of school attendance expectations and socio-economic status	121
44. Association between change in all students' reading and arithmetic grade expectations and socio-economic status	122
45. Association between change in boys' reading and arithmetic expectations and socio-economic status	122
46. Association between change in girls' reading and arithmetic grade expectations and socio-economic status	123
47. Association between change in all students' reading grade expectation and socio-economic status	123
48. Association between change in boys' reading grade expectations and socio-economic status	124
49. Association between change in girls' reading grade expectation and socio-economic status	124
50. Association between change in all students' arithmetic grade expectations and socio-economic status	125
51. Association between change in boys' arithmetic grade expectations and socio-economic status	125

Table	Page
52. Association between change in girls' arithmetic grade expectations and socio-economic status	126
53. Association between change in occupational expectations and socio-economic status for all students expressing very friendly relationships with reading teachers	126
54. Association between change in occupational expectations and socio-economic status for all students expressing less friendly relations with reading teachers	127
55. Association between change in occupational expectations and socio-economic status for all students expressing very friendly relationships with arithmetic teachers	127
56. Association between change in occupational expectations and socio-economic status for all students expressing less friendly relationships with arithmetic teachers	128
57. Association between change in occupational expectations with relationship with reading teachers held constant for classes I and II students	128
58. Association between change in occupational expectations with relationships with reading teachers held constant for class III students	129
59. Association between change in occupational expectations with relationships with arithmetic teachers held constant for classes I and II students	129
60. Association between change in occupational expectations with relationships with arithmetic teachers held constant for class III students	130
61. Association between change in years of school attendance expectations and socio-economic status for all students expressing very friendly relationships with reading teachers	130
62. Association between change in school attendance expectations and socio-economic status for all students expressing less friendly relationships with reading teachers	131

63.	Association between change in years of school attendance expectations and socio-economic status for all students expressing very friendly relationships with arithmetic teachers	131
64.	Association between change in years of school attendance expectations and socio-economic status for all students expressing less friendly relationships with arithmetic teachers	132
65.	Association between change in years of school attendance expectations with relationships with reading teachers held constant for classes I and II students	132
66.	Association between change in years of school attendance expectations with reading teachers held constant for class III students	133
67.	Association between change in years of school attendance expectations with relationships with arithmetic teachers held constant for classes I and II students	133
68.	Association between change in years of school attendance expectations with relationships with arithmetic teachers held constant for class III students	134
69.	Association between change in reading grade expectations and socio-economic status for all students expressing very friendly relationships with reading teachers	134
70.	Association between change in reading and arithmetic grade expectations and socio-economic status for all students expressing very friendly relationships with reading teachers	135
71.	Association between change in reading grade expectations and socio-economic status for all students expressing less friendly relationships with reading teachers	135
72.	Association between change in reading and arithmetic grades expectations and socio-economic status for all students expressing less friendly relationships with reading teachers	136

Table	Page
73. Association between change in reading grade expectations with relationships with reading teachers held constant for classes I and II students	136
74. Association between change in reading grade expectations with relationships with reading teachers held constant for class III students . .	137
75. Association between change in reading and arithmetic grade expectations with relationships with reading teachers held constant for classes I and II students	137
76. Association between change in reading and arithmetic grade expectations with relationships with reading teachers held constant for class III students	138
77. Association between change in arithmetic grade expectations and socio-economic status for all students expressing very friendly relationships with arithmetic teachers	138
78. Association between change in reading and arithmetic grade expectations and socio-economic status for all students expressing very friendly relationships with arithmetic teachers	139
79. Association between change in arithmetic grade expectations and socio-economic status for all students expressing less friendly relationships with arithmetic teachers	139
80. Association between change in reading and arithmetic grade expectations and socio-economic status for all students expressing less friendly relationships with arithmetic teachers	140
81. Association between change in arithmetic grade expectations with relationships with arithmetic teachers held constant for classes I and II students	140
82. Association between change in arithmetic grade expectations with relationships with arithmetic teachers held constant for class III students	141

83.	Association between change in reading and arithmetic grade expectations with relationships with arithmetic teachers held constant for classes I and II students	141
84.	Association between change in reading and arithmetic grade expectations with relationships with arithmetic teachers held constant for class III students	142

CHAPTER I

INTRODUCTION

THE SOCIALIZATION PROCESS

Because most behavior has to be learned and because society has a definite interest in the behavior of its members, socialization is one of the inevitable functional problems in all societies.¹ In all societies there are formal and informal structures and processes for training or socializing individuals in the ideas, values, or norms of the group. The socialization processes have both a planned aspect and an unplanned aspect. Some of the most influential socialization occurs in an informal and unorganized manner. Among the socially structured agencies of socialization found in every society are the family groups, peer or friendship groups, work groups, and the school. Each shares an essential role in the socialization of the individual into the ways of the group.

¹In this study, socialization is referred to as the process of inducting the individual into the ways of the group.

For further discussion of this concept, see W. B. Brookover, A Sociology of Education (New York: American Book Company, 1955), pp. 4-5; and Bernard Barber, Social Stratification: A Comparative Analysis of Structure and Process (New York: Harcourt, Brace and Company, 1957), pp. 264-7 and 265-83.

The Role of the Family in the Socialization Process

In every society, the family has the first and perhaps predominant social influence on the child. It is the family group that defines the basic ideas, values, norms, and emotions that influence the individual throughout his life span. Within this context socialization is synonymous with education, when education is used in its broadest meaning.²

The ideas, values, norms, and emotions held by the social class with which the family is identified, are passed on to the child by means of child-rearing practices. These ideas, values, norms, and emotions are transmitted to the child by family members in both formal and informal situations, and by verbal and non-verbal communication.

A child learns that the process of reading is important, if members of his family group read extensively in his presence. No other communication is necessary for this value to be transmitted to the child. Similarly, an uneducated father can indicate to his son that going to college is important to the father by admiring, in the presence of his son, the son of a friend who attends college. The son of educated parents learns indirectly but explicitly that "all members of this family attend college." He then expects to attend college if he is to be like other members of the family and "belong" to the family group. Working-class parents who show interest in books

²Margaret Mead defines education as a cultural process by which the newborn infant is transformed into a full member of a specific human society. See Margaret Mead, "Our Educational Emphasis in Primitive Perspective," American Journal of Sociology, 48:633-9, 1943.

or formal education transmit their values to their children in the same manner. These values may involve a new car or entertainment. The child interacts with members of his family group; he internalizes the expectations of these "important people," and their values become his.

The family is not the absolute socializing agent for the child. It is the first socializing agent because the child has his first experience with his family. These experiences are limited primarily to the family group during his early years. During the later childhood period when the child enters school, the teacher is in the position of becoming an additional one of these "important people" in the life of the child.

The Role of the School in the Socialization Process

As already indicated, individuals other than immediate family members relate to the child in the socialization process. This occurs formally when the child leaves home for a portion of each day for the purpose of learning more about the society in which he lives. It is at this point that the school becomes an important agency of socialization. The school is one of the most important of the formally organized agencies in American society designed for the expressed purpose of socializing the child.

Any society must carry out certain functional imperatives if it is to maintain itself. One of these functional imperatives is "to train the young." When the social heritage becomes too complex and too specialized for any one adult to

know by himself, the school becomes an indispensable adjunct to the family, to supplement the training given by the family in order to train socially competent members of the society.

The school does not teach merely the ideals and skills necessary for membership in the different social classes. It also inculcates the various values, norms, and emotions appropriate for each social class. This is generally done implicitly in the public schools. A problem arises, however, when the teacher of one social class group with its values, norms, and emotions is expected to teach pupils who belong to another social class group encompassing a different set of values, norms, and emotions. In general, however, public school teachers, who are predominantly middle-class people, do perceive the different social class positions of their students when such differences exist and are willing, and often anxious, to recognize and encourage talented lower-class pupils.³

The schools, therefore, have influence in overcoming some socializing effects of the child's family group. This is especially significant since the influence of the family begins long before the child enters school. The child who has not "learned" in the family setting that it is important to read, or more importantly, that high achievement in school is valued, begins his school career with a distinct disadvantage. As a result, many lower-class children do not achieve in school and frequently drop out in later years when

³Howard S. Becker, "Social Class Variation in the Teacher-Pupil Relationship," Journal of Educational Sociology, 25: 451-65, 1952.

the academic demands become too great for their achievement level. Children from middle-class families learn at home that achievement in school is important and are therefore motivated to achieve. In addition, the child-rearing practices employed by their parents develop certain habits and routines that form a good base for the regimented program of the school. This means that training the middle-class child receives in the family situation "fits" him well into the school program.

Those lower-class students who are talented, who engage in middle-class practices atypical for their social class, are recognized and encouraged by their teachers. The public schools do train some students for social mobility, but they train the larger proportion of students to keep to the same class position as that of their parents.⁴

THEORETICAL FRAME OF REFERENCE

No research studies reported directly relate to the hypotheses tested in this study. Hypotheses formulated were, therefore, based on certain theoretical formulations about human learning.

The action theorist postulates that the group in which the individual is socialized influences his motivation to learn certain behavior. The general interactional process

⁴Bernard Barber, Social Stratification: A Comparative Analysis of Structure and Process (New York: Harcourt, Brace and Company, 1957), p. 287.

through which an individual learns to conform to group standards or behavior and hence comes to feel himself a member of a group is referred to as socialization. Through this interactional process, the child learns whatever types of behavior the society or culture provides for him to learn.⁵

In discussing the process by which the individual becomes a member of the group, Mead⁶ discussed the impact of the group on the individual. He stated that the human self arises through his ability to take the attitude of the group to which he belongs. The image that the individual has of himself is taken from the group in which he is socialized.

Several hypotheses relating to theory about learning were discussed by W. B. Brookover.⁷ These hypotheses predict that nearly all human beings learn certain expected types of behavior in every society. They also predict that the individual learns the types of behavior that he considers appropriate for himself; and, that the appropriateness of this behavior is defined for him through the internalization of the expectations of "significant others." The individual takes on the attitude of "significant others," and looks upon himself and judges his performances, his behavior, in the light of his conception of what his "significant others" see in him.

⁵W. B. Brookover, "Some Social Psychological Conception of Classroom Learning," School and Society, 87: 84-7, 1959.

⁶George H. Mead, Mind, Self and Society (Charles W. Morris, ed.; Chicago: The University of Chicago Press, 1934), p. 138.

⁷Brookover, op. cit.

Since human behavior is learned through an interaction process, and since an individual's aspirations and expectations are a part of human behavior, it is evident that aspiration and expectation behavior are learned in the same manner as are other types of behavior.

THE PURPOSE OF THE STUDY

In recent years, much concern has been expressed about the need for highly trained personnel in the various professions and vocations. Criticism has been leveled against the schools about the quality of training given students as well as the limited number of students who pursue and complete a course of study designed to prepare them for the higher occupations.

Popular critics base their charges on a lack of emphasis upon teaching in certain fields, such as science and mathematics. Little consideration has been given, however, to the educational and occupational expectations of students, the social class differences of these expectations, and the effect of the behavior of associates of the student in helping him define his educational and vocational expectations.

The home and community serve as socializing agents for the child by helping him define his expectations. Through interaction with "significant others," each individual internalizes the expectations of these "significant others" and thus defines his expectations. Since the teacher is a

representative of parents and community, she, too, helps the child define specific expectations, through the interaction process. One can expect that teachers influence the aspirations and expectations of students.

This study is designed to examine changes in the educational and occupational aspirations and expectations of grade six students and to identify some factors that influence these changes.

Sixth graders were selected for study because these students are in an "in-between" stage of development. They are beyond the fantasy stage, but their levels of expectation are not yet crystallized. These students are becoming aware of individual differences and the expectations of persons with whom they identify. Their hopes and aspirations are being influenced by some such factors.

ASSUMPTIONS AND HYPOTHESES

Assumptions

The hypotheses that were tested were based on at least four assumptions that have been implied in previous discussion. It was assumed: (1) that grade six students have educational and vocational aspirations and expectations; (2) that teachers have differential expectations of students; (3) that through interaction with teachers, students internalize teachers' expectations, and students' expectations may be changed; (4) that the closeness of the teacher-student relationship is a significant factor in mobility and stability of students' aspirations and expectations.

Hypotheses

In order to make a detailed examination of teachers as agents of changes in students' educational and occupational aspirations and expectations, a number of specific hypotheses were drawn up. The review of related research disclosed no empirical studies directly relating to the hypotheses tested in this study. The rationale for these hypotheses was based on various theoretical formulations. Statements of hypotheses tested and discussion follows:

General Hypothesis I: Teachers are most likely to be in a close relationship to their students when the socio-economic status⁸ of teachers is similar to the socio-economic status of students.

When Warner⁹ defined the social class structure, he described it as being behaviorally relevant. Persons from the same social class status embrace similar values and goals. This similarity of values and goals brings about a congruence of behavior between individuals of the same social class. When students exhibit behavior which exemplifies

⁸Socio-economic classes I, II, and III are used to designate the three operationally derived social classes utilized for analysis in this study. Class I occupies the highest status.

See page 51 for occupational categories represented by each of the three socio-economic classes.

⁹William L. Warner, American Society: A Sociological Interpretation (New York: Alfred A. Knopf, 1952,) pp. 89-90.

values that teachers support, students receive their approval because teachers reward the kinds of behavior that meet their approval. The theory of circular behavior described by Anderson¹⁰ states that behavior on the part of one individual brings about similar behavior from another individual. If the teacher approves and supports the student, the student will perceive this approval and support and will likewise approve and support the teacher. This mutual approval and support by teacher and student is the source of the closeness of the teacher-student relationship. This closeness of relationship is mediated through the socio-economic status effect. In view of these considerations, it was suggested that relationships would be in the direction stated.

General Hypothesis II: Teachers' levels of educational and occupational expectations of students will be positively related to students' perceptions of teachers' expectations.

This hypothesis predicts that teachers' level of expectation of students will vary in accordance with what teachers know about students. Factors that influence this variance of teacher expectation may be multiple, including father's occupation as well as student's behavior. The

¹⁰Harold H. Anderson, Studies of Teachers' Classroom Personalities I. Dominative and Socially Integrative Behavior of Kindergarten Teachers (California: Stanford University Press, 1945), p. 153.

hypothesis further predicts that through the interaction process, students will perceive the expectation that teachers have of them. Students may perceive teachers' expectations through direct verbal behavior on the part of the teacher or through less direct teacher behavior. Support for the belief that students perceive indirect teacher behavior was revealed to this investigator while interviewing a boy in the subsample about his perceptions of teacher expectation. The boy made this statement: "She says she wants me to go to college but it isn't sincere." When questioned about why he thought his teacher was insincere, his only explanation was: "Well, I just know it. I can feel it." This study proposes that teachers consciously and unconsciously act out their feelings toward students and that students perceive these feelings.

General Hypothesis III: Teachers' expectations of students are positively related to the observed teacher-student relationship.

The student who stated that this teacher is insincere about her expression concerning his going to college is probably experiencing some very subtle but discouraging or non-supportive behavior from the teacher. This hypothesis predicts that if a student can perceive a teacher's behavior directed toward him, this behavior can be observed by trained observers through systematic observation periods in the classroom. This hypothesis also predicts that this observed behavior directed toward students by teachers will

be positive and supportive of students if teachers have high expectations of students and will be negative and non-supportive of students if teachers have low expectations of students.

General Hypothesis IV: Changes in students' aspirations and expectations are positively associated with students' socio-economic status and teacher-student relationship.

This hypothesis is based on the supposition that the age-grade group of students selected for study is in the process of crystallizing levels of educational and occupational aspirations and expectations and that during this process, aspirations and expectations may be changed. It is further assumed that students' levels of aspirations and expectations may be changed by the expectations of significant persons and that changes occurring can be identified and measured. Two sources of influence on change in students' aspirations and expectations are being examined by this hypothesis. The first source is the socio-economic position of the student's family. The second source is the closeness of the teacher-student interpersonal relationship.

- A. When teacher-student interpersonal relationships are held constant, changes in students' aspirations and expectations will be positively associated with socio-economic status of students.

It is predicted that the socio-economic status of the

family influences students' educational and occupational aspirations and expectations. This prediction is supported by several empirical studies.¹¹ It supports the action theorist's hypothesis that the group in which the person is socialized influences his motivation.

B. When socio-economic status of students is held constant, changes in aspirations and expectations will be positively associated with the closeness of the interpersonal relationship between students and teachers.

It has been suggested earlier that through interaction with "significant others," the individual internalizes the expectations of the "significant others" and his expectations will be modified to simulate the expectations of the other person.

Teachers are capable of being "significant others" for students. An intermediary factor may exist which may alter the effect of teachers' expectations on students. This factor is the closeness of the interpersonal relationship existing between students and teachers. The supposition made here is that the teacher is an effective agent of change in students' aspirations and expectations if the student perceives the teacher as being important to him. If the teacher is not important to the student, it does not matter

¹¹ Further discussion of the influence of the family on children's aspirations and expectations is given in Chapter II of this study.

to the student what the teacher thinks or expects of him. If the student perceives the teacher as being an important person to him, the student will be influenced by the teacher's expectations. The closeness of relationship provides opportunity for the student to interact with the teacher and thus to internalize the teacher's expectations. If the expectation of the significant teacher is low, the student will internalize this and his expectations will remain low if already low, or will be lowered if higher than that of the teacher. Likewise, if the expectations of the significant teacher are high, the student's expectations will be raised or will remain high if already high. This closeness of the teacher-student relationship is a source of both social mobility and of social stability for students. The teacher is a source of upward mobility for a lower class student if the teacher has high expectations of him and if the lower-class student perceives the teacher as being a significant person to him. The teacher is a source of downward mobility for the upper-class student if the teacher has low expectations of the student and if he perceives the teacher as being significant to him. This discussion suggests the teacher as a source of motivation for the social class "deviant."¹² On the basis of the effect of the closeness of the interpersonal relationship between teachers and students on

¹²The social class "deviant" is the individual who is learning the values and norms necessary for mobility into another social class.

students' aspirations and expectations, a prediction is made that the relationship will be a direct one.

CHAPTER II

REVIEW OF RELATED RESEARCH

FAMILY INFLUENCE ON ASPIRATIONS AND EXPECTATIONS

In every society, the family is the first social influence on the child. In all societies, the families making up the different social classes train their children in different norms, ideas, and emotions by means of different child-rearing practices. Social class differences in child-rearing practices have been studied persistently and fairly scientifically in recent years.

One of the first comparative studies was made by Martha Ericson.¹ Her study consisted of long and intensive interviews about child-rearing practices with 48 middle-class mothers who had 107 children and 52 lower-class mothers who had 165 children. Ericson identified several differences in the practices followed by middle-class and lower-class mothers. She found that the middle-class child is more likely to be on a feeding time schedule. The lower-class child, on the other hand, is likely to be fed when he cries or ignored until the mother finds time to feed him. Her findings showed that fewer middle-class children are breast-fed, and the feeding

¹Martha Ericson, "Child Rearing and Social Status," American Journal of Sociology, 52: 190-2, 1946.

time is shorter than for lower-class children. The middle-class child is required to establish cleanliness habits earlier than the lower-class child, and starts bowel and bladder training earlier than the lower-class child.

There were social class differences in time in which children were expected to assist with household responsibilities. Middle-class girls begin cooking and sewing in the home earlier than lower-class girls. Middle-class girls and boys are required to be at home earlier at night, and they start going to movies at a later age than do lower-class children.

Middle-class children are expected to look forward to, and train in school for, white-collar and professional work. Ericson's interview data showed that middle-class families train their children earlier to assume responsibility for their own activities. There is greater emphasis on individual achievement, and there is closer supervision of children's activities to assure that they measure up to acceptable standards of middle-class responsibility and achievement. Ericson's study shows that socialization practices of middle-class families reflect both middle-class values and hopes for their children's educational, occupational, and social success.

Davis and Havinghurst report similar but more extensive findings on social class differences in child-rearing practices.²

²Allison Davis and Robert J. Havinghurst, Father of the Man (Boston: Houghton Mifflin Company, 1947), pp. 215-9.

Their findings are based on a sample of approximately 200 mothers, twice the size of Ericson's sample. Davis and Havingshurst's findings confirm those of Martha Ericson. In addition, they identified several specific differences that support the general differences between the classes.

They report that middle-class children are more stringently required to restrain their impulses to physical aggression than are lower-class children. The middle-class boy is expected to defend himself when attacked, but otherwise to abstain from physical aggression. The middle-class boy is expected by his parents to participate actively in all normal competitive situations. Their findings show that middle-class children are more inhibited than lower-class children in regard to aspect of sex. Middle-class children are closely supervised by parents and parent-surrogates in social situations. The middle-class mother is the more active disciplinary agent. The middle-class father, while disciplining less than lower-class fathers, spends more time with the children. Middle-class mothers expect their children, especially the boys, to go on to college, and give considerable encouragement to this end. Middle-class girls are trained to make "good" wives and mothers; and college attendance is an instrument for this purpose.

The two studies just cited were concerned with the typical differences in child-rearing practices that exist between the two classes. It should also be pointed out that these studies involved the middle and lower classes only.

Child-rearing practices in the upper classes were not studied in either case.

Macdonald, McGuire, and Havinghurst found that there were a few lower-class children participating in middle-class organizations along with middle-class children.³ Whereas middle-class children participated mainly in Scouts and the Y.M.C.A., lower-class children, on the other hand, participated mainly in the various centers and clubs established for "underprivileged" children. Middle-class children were frequently in the company of their parents. They more often read books and took music lessons, and less frequently attended the movies than did lower-class children. There were, however, those children who engaged in practices atypical for their social class. These lower-class "deviants" were learning middle-class values necessary for mobility into the middle class.

One important American value orientation is the right of the individual to improve himself and thus work his way "up." Many examples of this type of individual can be cited in the society. What is the source of motivation for this individual? Since the individual seeks the support of his social group, what then is the source of support for the lower-class child who defies the norms of his groups and behaves as the middle-class child?

Kahl's study identifies a portion of the social source

³M. Macdonald, C. McGuire, and R. J. Havinghurst, "Leisure Activities and the Socio-Economic Status of Children," American Journal of Sociology, 54: 505-19, 1949.

of the admired, lower-class "deviant."⁴ This study is a part of a larger research project on the sources of social mobility conducted by the Harvard Laboratory of Social Relations. In the large research project, 3,271 public high-school boys from the sophomore and junior years in eight different towns in the metropolitan Boston area were interviewed about their aspirations for social mobility. From this larger group, Kahl selected 24 lower-middle-class boys who had IQ scores high enough for college work but only half of whom were in the college preparatory course and were definitely planning to go to college.

Kahl conducted five-hour interviews with each boy and one-to-two-hour interviews with their parents to try to discover social differences in the family situations which helped to explain why some were and some were not planning to go to college.

His finding revealed significant differences within the social class in values and norms of the different parents. Fifteen of the families appeared to have accepted the value of "getting by." These families rarely considered the possibility of college for their children. They had only vague knowledge about what college means and the kinds of jobs it leads to. The fathers expressed satisfaction with their jobs and felt that their sons should get jobs after high school that emulate theirs.

⁴Joseph A. Kahl, "Educational and Occupational Aspirations of 'Common Man' Boys," Harvard Educational Review, 23: 186-203, 1953.

The other nine families believed in "getting ahead." They took the middle class as their reference group and were aware of the handicap their lack of education had been to them. These parents urged their children to do well in school and urged them to go to college.

Kahl's findings showed that the boys from families who believed in "getting by" generally were more bored with school and expected to have jobs like their fathers. Boys from families who believed in getting ahead, however, seemed to take school work more seriously than recreational affairs. They tended to have more specific occupational goals, worked harder in school, thought more of the future; and they believed that they could somehow manage to support themselves through college and reach the middle class. Kahl described the parental support thus:

Parents who believed in the value of "getting ahead" started to apply pressure from the beginning of the school career. They encouraged high marks, they paid attention to what was happening at school, they stressed that good performance was good for occupational success, they suggested various occupations that would be good for their sons.⁵

Of the twelve boys who were going to college, eight were from families that wanted to "get ahead" and four were from the content-to-"get by" families. Of the twelve boys who were not going to college, eleven were from families content to "get by," and only one was from a family that wanted to "get ahead."

Kahl's findings show that some children may be atypical

⁵Ibid., p. 201.

for their social class in spite of the attitudes of their parents. The question to be answered is this, what was the source of motivation for those boys who were not influenced by immediate families? This question needs additional study.

A. B. Hollingshead, in his study of Elmstown, found that children tended to name the occupation of their parents or their parents' friends as the occupation they would like to have when they are adults.⁶ In response to a question about occupational choice, 77 per cent of upper- and upper-middle-class children wanted to be business and professional people. The lower-class children's occupational choices were in sharp contrast. Forty-one per cent of them had no idea at all about their future vocation, or they listed highly romantic, dramatic, or freak occupations, such as wild animal trainer or juggler in a carnival.

Hollingshead states that:

Apparently these lower class youngsters, on the average, have adjusted their job desires to what they hope to achieve. By doing so, they have limited their horizons to the class horizon, and in the process they have unconsciously placed themselves in such a position that they will occupy in the class system the same level as their parents.⁷

Hollingshead's data, like that of Kahl's, show that some children's occupational choices are atypical of their social classes.

In four semi-industrial communities in New Jersey, ⁶

⁶ A. B. Hollingshead, Elmstown's Youth (New York: John Wiley, 1949), pp. 282-7.

⁷ Ibid., p. 287.

Stephenson studied the social mobility orientations of a thousand ninth-grade children.⁸ By means of a questionnaire, he collected data on both the mobility aspirations of the students as well as their mobility plans. This study included both what the students wished to do and what they planned to do. His findings show that the higher the social class position of the parents, the larger was the proportion of children who aspired to the high occupational position. Stephenson also found that large proportions of children whose parents were in the lower class also aspired to the high occupation position. In his lowest class, 45 per cent of the students aspired to occupations that would place them in the two highest social classes. These lower-class ninth graders differed from their higher class peers more for plans they made for occupational achievement than in their aspirations.

The lower-class children in the study wished to achieve a higher occupational position. They seemed to realize, however, that they could not muster the resources necessary to attain higher occupational positions. They, therefore, adjusted their plans to the norms of their social group. The children in the lower social classes, although wishing for a higher occupational position, tended to choose the industrial arts and general curricula and planned not to go to college. The children in the higher social classes chose the college curriculum and planned to attend college.

An intensive study of middle-class socialization was

⁸Richard M. Stephenson, "Mobility Orientation and Stratification: A Study of One Thousand Ninth Graders," (unpublished doctoral dissertation, Columbia University, 1956).

reported by Aberle and Naegele in 1952.⁹ Their study was concerned with the expectations that middle-class fathers have for their children and the subsequent evaluations that these fathers make of their children's behavior. Aberle and Naegele had a series of lengthy interviews with the fathers in more than 20 families in a middle-class Boston suburb. The families ranged from the lower-middle to the upper-middle classes. Occupation was used as the index to social position. The fathers' occupations consisted of professions, business executives, owners of large businesses, and salesmen.

Aberle and Naegele found that, without exception, these fathers wanted their sons to have a college education. The majority of the fathers planned for their daughters to attend college, also. The expectations of the fathers suggest that they consider a college education much more important for the occupational success of boys than of girls.

The fathers included in the study had a total of 56 children, 29 boys and 27 girls. The age-range was from a few months to 13 years of age. These fathers made many more statements about their boys than about their girls. The statements about the very young ones indicate the early concern that parents have for their children's future. For their sons, these fathers highly valued such behavior as success in school, responsibility and initiative, sufficient competition, good behavior, athletic participation,

⁹David F. Aberle and K. D. Naegele, "Middle-Class Fathers' Occupational Role and Attitudes Toward Children," American Journal of Orthopsychiatry, 22: 366-78, 1952.

masculinity, and were frequently concerned with the opposites of these characteristics. They were pleased if their daughters were "nice" or "sweet" or if they were attractive, affectionate, and well liked. Values and expectations that these fathers have for their children are communicated in numerous verbal and non-verbal situations by them to their children. It is in this type of environment that the fundamental socialization of these children is taking place.

Sewell, Haller, and Straus studied 4,167 high school seniors, of both sexes, in public and private high schools in Wisconsin.¹⁰ Their hypothesis that levels of educational and occupational aspirations of youth are associated with the social status of their families, when the effects of intelligence are controlled, was supported.

They concluded that the apparent effects of social status on levels of educational and occupational aspirations were not simply due to the common relationship of these variables to intelligence, although intelligence is related to both types of aspirations.

An earlier study which has implication for family influence on the aspirations of children was done with college students. This study was reported by Gould in 1941.¹¹ Gould studied 81 male, sophomore-year students. These students

¹⁰W. H. Sewell, A. O. Haller, and M. A. Straus, "Social Status and Educational and Occupational Aspirations," American Sociological Review, 22: 67-73, 1957.

¹¹Rosalind Gould, "Some Sociological Determinants of Goal Striving," Journal of Social Psychology, 13: 461-73, 1941.

were classified according to the size of the average discrepancy scores obtained on six unrelated tasks. Each student was asked to predict his performance on a particular task and then to perform the task. The discrepancy score was the difference between his prediction of his performance and his actual performance. Gould then grouped her subjects into two categories according to the average discrepancy scores obtained on the six unrelated tasks. Her low group was those students with fewer discrepancy scores, and her high group was those students with more discrepancy scores, or more errors in their predictions of performance.

Her findings show that the group with fewer discrepancy scores are from families who are in a higher economic and social position than the group with greater discrepancy scores. This finding suggests that the student from the higher economic and social position, in most instances, accurately predicts his performance on the assigned tasks. Gould administered a questionnaire to the two groups to ascertain if there were differences in vocational aspirations between the two groups. She found that the group whose families were in the higher socio-economic classes and who had fewer discrepancy scores had higher vocational aspirations for themselves than did the group whose families occupied a lower socio-economic position. Gould emphasizes the role that the status of the family plays in the goal-setting of its offsprings in this way:

The concept of the "future," then, is an expression of one's status at the "present" time.¹²

A study of Youmans, reported in 1958, examines the social backgrounds, school experiences, attitudes, characteristics, and future plans of a group of rural high school youth who expect to enter college.¹³ The data were obtained in an attitude survey of youth age 16 and 17--and their families--from three Rural Development Pilot Counties in low income farming areas in Kentucky.

In the 480 families interviewed, almost one-fourth of the youth (47 boys and 57 girls) said they planned to enter college.

The aspirations of these youth were significantly related to the socio-economic status of family. By means of a socio-economic status scale designed by Sewell,¹⁴ the total sample was divided into three social groups of equal number. Slightly over one-half of the youth who planned to go to college came from the high social status group. Approximately one-quarter came from each of the other two social status groups.

The students who planned to enter college held their high school teachers in high esteem. Nine-tenths of them

¹²Ibid., p. 468.

¹³E. Grant Youmans, "Backgrounds of Rural Youth Planning to Enter College," Journal of Educational Sociology, 32: 152-6, 1958.

¹⁴W. H. Sewell, "A Short Form of the Farm Family Socio-Economic Status Scale," Rural Sociology, 8: 161-70, 1943.

said their teachers showed a great deal of interest in them. Although one-fifth said their teachers were too easy with them, four-fifths said they were about right in strictness. Youmans reports that approximately four-fifths of the youths planning to attend college said their teachers treated them fairly, never embarrassed them greatly, and never hurt their feelings badly.

The mean IQ for the students in this study who planned to attend college was 96. The mean IQ for those not planning to attend college was 81. Four-fifths of the college aspirants said they maintained a "B" grade or higher during the last year of school. Only one-half of those not planning to attend college made such a statement. The college-aspiring youth held significantly stronger convictions about the value of formal education than did the other youth. They were asked such questions as: "Will things learned in school be helpful in later life?" "Can a person be successful without a high school education?"

The favorable attitudes toward teachers held by students who planned to attend college is reacted to by Youmans in this way:

The attitudes revealed by these youth suggest that they would be very responsive to a sympathetic instructor and that they could be capable of forming a friendly and even close relationship--something which experienced teachers say is essential to the learning process. The very satisfactory relationships these boys and girls have had with their high school teachers and with their peers, their firm convictions about the value of formal education, and their strong interest in school subjects suggest qualities which would make for very satisfying

teacher-student relationships.¹⁵

Youmans' findings show not only that the students who planned to attend college came from the relatively high social status group, but that they enjoyed pleasant relationships with their teachers as well.

PEER GROUP INFLUENCE ON ASPIRATIONS AND EXPECTATIONS

Previous research cited shows that the family is the first socializing agent for the child. As the child grows older and begins to emancipate himself from parent influence, he looks to his peers for support and approval. It is at this time that the adolescent peer group becomes an important socializing agent for the child. Among his peers, the adolescent can try out new ideas and norms without direct adult supervision. This emancipation from adults by the adolescent and its accompanying dependence on peer acceptance and approval is a necessary developmental stage in the life of the individual as he makes his transition from childhood to adulthood.

The influence of the peer group on the aspirations and expectations of youths has been the focus of recent studies.

Haller and Butterworth report findings from such a study.¹⁶ They tested the general hypothesis that interaction

¹⁵Youmans, op. cit., p. 155.

¹⁶A. O. Haller and C. E. Butterworth, "Peer Group Influences on Levels of Occupational and Educational Aspirations," (unpublished study, Michigan State University, East Lansing, Michigan, 1958).

in the peer group influences levels of occupational and educational aspirations of American adolescent boys.

Four hundred and forty-two seventeen-year old boys who were attending school in Lenawee County, Michigan, were included in the study. The hypothesis was tested in a situation in which the subjects influenced each other through direct interaction. Thus, the peer-clique (group in which members had a high degree of friendly interaction) was the focus of the study. Operationally, peer groups were defined as a pair of subjects who named each other as best friends.

The level of occupational aspiration was measured by scores on the Occupational Aspiration Scale (OAS).¹⁷ The level of educational aspiration was measured by a series of questions concerning the number of years of college or university training each subject planned to complete.

In general, the evidence in the study tended to support the hypothesis that interaction in the peer-clique influences levels of occupational and educational aspiration. There was more contrary evidence, however, regarding the level of educational aspiration than there was regarding the level of occupational aspiration.

Their findings appear to show that youth who interact with one another in peer-groups tend to develop similar levels of occupational and educational aspirations. Haller and Butterworth suggested that their findings support the

¹⁷A. O. Haller, Occupational Aspiration Scale (Michigan State University, East Lansing, Michigan, 1957).

action theorist's hypothesis that the groups in which the person is socialized influence his motivation to achieve, and that a previously unidentified socializing group is added.¹⁸

Another study which indicates the impact of peer group influence on student behavior was reported by Coleman in 1959.¹⁹ He reports of a study conducted in nine public high schools. The study was concerned with the "climate of values" which exists among the students in each school, and the effects of the different "value climates" upon achievement in school.

The schools were all located in the Midwest and included smalltown schools, suburban schools, and schools in larger cities. The range in social class, in size of school, in type of community, and in parental style of life was great in the schools studied. The school population in the selected schools ranged from 200 in the smallest to 1,900 in the largest school. The average family income ranged from \$6,000 in the smallest school to \$11,400 in the largest one. There were 4,021 boys and 4,135 girls in the total pupil population.

Some hypothetical questions were administered to the boys and girls to indicate the degree of encouragement that teenagers give to scholastic effort.

In response to a question about how friends would react to their being selected by the biology teacher as biology assistant, only 5.3 per cent of the 3,830 boys who responded

¹⁸Haller and Butterworth, op. cit.

¹⁹James Coleman, "Academic Achievement and the Structure of Competition," Harvard Educational Review, 27: 330-51, 1959.

felt that their friends would unambiguously look up to them for being the biology assistant. Fifty per cent felt that their friends would "Kid me about it, but envy me," and 42 per cent felt that their friends would react in the same manner toward their being selected as an auto shop assistant by the auto shop teacher.

Similarly, the girls were asked to react to questions regarding being selected as a biology class assistant and a sewing class assistant. Coleman reports that the girls' responses were similar to those of the boys.

Coleman compares academic achievement and interscholastic athletic achievement and suggests that group support given to interscholastic achievement motivates the individual to want to achieve. He states thus:

When the competition was between individuals, the fact that one individual's achievement lowered the position of other group members generated interference with one person's efforts by other members, though the interference was perhaps unconscious or subtle. When the competition was with groups (as with interscholastic athletics) there was support of one person's efforts by others in the group.²⁰

When the competition is between groups rather than between individuals, reinforcement occurs. Coleman suggests consideration of "scholastic fairs" and "scholastic tournaments" between schools and school exhibits that are judged. Findings by Coleman show the impact of peer-group influence on the behavior of its members.

The first group of studies cited in this review of

²⁰Ibid., p. 346.

related research was concerned with family influences or aspirations and expectations. The second group of studies were concerned with peer group influences on aspirations and expectations. One may conclude from this survey of related research that no other investigator has been directly concerned with the hypotheses of this study. In the studies cited, no consideration was given to the concept of change in aspirations and expectations and its association with students' relationships with teachers or its association with socio-economic status of students.

CHAPTER III

PROCEDURE

Since the purpose of this study was to examine changes that occurred in the aspirations¹ and expectations² of sixth grade students, it was necessary to collect certain baseline data. These data identify the socio-economic status, the educational and vocational aspiration and expectations of students, and students' expressed relationship with their reading and arithmetic teachers. These baseline data were collected in the pre-test phase of the study. The pre-test questionnaire was administered to a sample of students in September 1959. A post-test questionnaire was administered to the same students in May 1960. The post-test questionnaire was designed to elicit the status of students' educational and occupational aspirations and expectations and their expressed relationships with their teachers at the end of the school year. The difference existing between the pre- and post-tests data was the change that occurred during the interim.

A sample of sixth grade students in the Flint Public

¹The term "aspiration" is referred to in this study as the student's wish.

²The term "expectation" is referred to as the student's plan.

Schools was drawn for participating in the pre- and post-test phases of the study. In addition, a sub-sample of students was drawn for further study. A description of the sampling procedure follows.

SAMPLING PROCEDURE

The Sample

The sample frame consisted of a 30 per cent sample of the approximately 2,900 sixth grade students who were enrolled in Flint Public Schools in September 1959. The 30 per cent sample was selected by school classes; thus, the sample unit was the school classes of students.

The 35 elementary schools were classified according to socio-economic status of families in each school community. This investigator was acquainted with the student population in each of the elementary schools. In addition, annual achievement data were available for study. The investigator drove through the various communities to observe ecological conditions. School communities were classified according to socio-economic status. Colleagues who knew the school communities were also asked to make classifications. There were similar data compiled by the research office of the Flint Public Schools. These data, though limited, assisted with classification. Schools were further classified according to racial composition of students.

Socio-economic status of families and racial composition of students for each school community are identified in the following table.

TABLE 1.---Composition of student population in Flint public elementary school communities.

Schools	Socio-economic Status			Racial Composition		
	Middle	Mixed	Lower	White	Mixed	Mostly Negro
1. Civic Park	x			x		
2. Clark		x				x
3. Cody		x		x		
4. Cook	x			x		
5. Coolidge	x			x		
6. Cummings	x			x		
7. Dewey		x			x	
8. Dort		x			x	
9. Doyle			x		x	
10. Durant-Tuuri-Mott		x		x		
11. Fairview			x			x
12. Freeman	x			x		
13. Garfield	x			x		
14. Gundry			x	x		
15. Hazelton			x	x		
16. Homedale			x	x		
17. Jefferson			x			x
18. Lewis			x	x		
19. Lincoln		x			x	
20. Longfellow	x			x		
21. Martin			x		x	
22. McKinley		x		x		
23. Merrill	x			x		
24. Oak		x		x		
25. Parkland			x			x
26. Pierce	x			x		
27. Pierson			x	x		
28. Potter			x	x		
29. Roosevelt			x			x
30. Selby		x		x		
31. Stevenson		x		x		
32. Stewart		x			x	
33. Walker		x			x	
34. Washington	x			x		
35. Zimmerman	x			x		

The 35 public elementary schools were further classified into the following five category types.

TABLE 2.---Classification of Flint public elementary schools into category types.

Type	No. of Schools	Racial Composition	Socio-Economic Status
A	11	All White	Middle
B	6	All White	Middle and Lower
C	5	White and Negro	Middle and Lower
	1 ^a	Mostly Negro	Middle and Lower
D	6	All White	Lower
E	2	White and Negro	Lower
	4	Mostly Negro	Lower

^aThis school was grouped with the preceding 5 schools because the socio-economic status is similar.

There were 99 classes of sixth grade students in the 35 elementary schools. There were approximately 2,900 students enrolled in the sixth grade.³ Since the sample unit was the school classes, the schools were selected so that a representative proportion of the total number of classes in each of the category types was selected.

The following table shows the selected school, the number of classes, and the number of pupils in each of the category types of selected schools. The Flint Student Study Questionnaires 1 and 2 were administered to all sixth grade students in these elementary schools.

³Number of sixth grade students enrolled in Flint Public Schools, Flint, Michigan, on October 2, 1959.

TABLE 3.---Schools selected for sampling^a.

Type	Schools	No. of Classes	No. of Students	Totals
A	Civic Park		121	
	Freeman		91	
	Coolidge		58	271
		9		
B	Cody		83	
	Selby		94	177
		5½		
C	Dewey		89	
	Stewart		71	160
		5½		
D	Homedale		101	
	Lewis		63	164
		5		
E	Martin		94	
	Jefferson		100	194
		6		
Totals	11	31		966

^aAll classes of sixth grade students in the 11 selected schools comprised the sample.

The Sub-Sample

In addition to selection of the sample of students described in Table 3, a sub-sample of students and their teachers was selected for the purpose of studying teachers' observed behavior toward students and students' perception of teachers' expectations. The selection of this sub-sample posed a dual sampling problem in that both teachers and their students were selected according to specified criteria. Criteria for selection of teachers and students

are described below.

Criteria for selection of teachers. This sub-sample consisted of eight women teachers of reading and arithmetic subjects; who were white; married; whose backgrounds, including husbands, were of middle-class orientation; were no less than 25 years of age; had completed two or more years of classroom teaching at the elementary level; and, were considered as average or above in teaching competency. No part-time teachers were included since they were considered atypical of elementary teachers.

Since each class of students had a reading teacher and an arithmetic teacher, both teachers of the same class of students were required to meet the specified criteria.⁴ This stipulation was required because observations were made in reading and arithmetic teaching situations.

Teachers who met the specified criteria were identified. The classrooms of these teachers were then selected if there were a minimum of four middle-class boys and four lower-class boys in each classroom.

Criteria for selection of students. This sub-sample consisted of four middle- and four lower-class white male students from classrooms of the selected teachers. Restrictions on race were imposed in order to remove the

⁴This is the organizational plan for grades four, five, and six in the Flint Public Schools.

systematic error that might be introduced by this variable; and, since the error would have to be factored out, to reduce the size of the sample required. Boys who were 14 years old or older were eliminated from this phase of the study since they are atypical of sixth grade student population. Excluded in this category were those who had repeated a grade more than once, and recent immigrants from rural areas. Girls were eliminated from this phase of the study because they are not generally expected to be the main wage earners in the home.

Each reading teacher taught two groups of students each day. One group of students remained with this teacher for one-half day for reading and other language arts subjects and attended classes taught by special teachers during the other one-half day. The arithmetic teacher was one of these special teachers.⁵ This allowed each reading teacher to teach two classes of students, one class in the morning and another class in the afternoon.

Since each reading teacher taught two classes of students, it was necessary to select one of the two classes if both contained a minimum of four middle-class and four lower-class students. A coin was tossed to make selection.

After reading teachers and their classrooms were selected, the next problem was selected of four middle-class and four lower-class students in the selected classroom. A

⁵An exception to this occurred with teacher No. 3. (See Table 4.) Teacher No. 3 taught reading and arithmetic to the same group of students.

random digit table was utilized for this purpose.

The following reading and arithmetic teachers and selected students from their classes comprised the sub-sample of teachers and students. Arithmetic teachers for these classes of students were classified by the school system as special teachers. Reading teachers were referred to as homeroom teachers.

TABLE 4.---Selected sub-sample of teachers and students.

<u>Teachers^a and Students</u>					
Schools	Reading	No. of Students	Arithmetic	No. of Students	Total Students
Civic Park	No. 1	8 ^c	No. 2	8	16
Freeman	No. 3 ^b	8	No. 3	--	8
Homedale	No. 4	8	No. 5	--	8
Selby	No. 6	8	No. 7	--	8
7 Teachers				40 Students	

^aTeachers are identified by number.

^bTeacher No. 3 taught the same students for both reading and arithmetic classes. She was observed in both situations.

^cIn this class, the arithmetic teacher did not meet specifications established in the criteria. Eight additional students were selected at the Civic Park School for observation in an arithmetic class taught by a teacher who met criteria. This arithmetic teacher is identified by the No. 2.

This sample consisted of a total of seven teachers and 40 students. The teachers taught in eight teaching situations. The behavior of each teacher toward the four middle-class and four lower-class boys was observed.

INSTRUMENT DEVELOPMENT

Flint Student Study - 1 Questionnaire, The Pre-Test

A questionnaire that could be mass administered was devised to collect information about socio-economic status of each student's family, occupational and educational aspirations and expectations of students, and students' expressed relationship with reading and arithmetic teachers.⁶

Structured questions were dichotomous and multiple choice. Some open-end questions were also used since it was felt that such questions were useful for collecting information that forced answers might not provide. This questionnaire was pre-tested and revised before it was mass administered to 31 classes of students.

Flint Student Study - 2 Questionnaire, The Post-Test

The questionnaire used in the pre-test phase was revised for the post-test phase of the study. Questions about social class status of the family were omitted during this phase since both questionnaires were administered within a one-year period and it was assumed that the family retains a status position for a time after the occupation of the wage earner changes. This questionnaire repeated questions about students' occupational and educational aspirations and expectations and expressed relationship with selected teachers.

⁶ The music teacher was included in the questionnaire to spread the focus of attention from specified teachers.

This questionnaire was also mass administered to each of the 31 classes of students.

Your School Plans - Questionnaire

This questionnaire was devised to ascertain the student's perception of his teacher's expectations of him. This questionnaire elicited the student's perceptions of his reading teacher's and his arithmetic teacher's expectations of him for years of school attendance and the letter grade that the student was expected to earn in the subject taught by the teacher.⁷ This questionnaire was administered individually to each pupil drawn in the sub-sample.

About Your Pupils - Questionnaire

This questionnaire was devised to ascertain reading and arithmetic teachers' expectation of pupils in the sub-sample with respect to years of school students are expected to attend, letter grades students are expected to earn, and teachers' expressed relationship with students. This questionnaire was completed by the seven selected reading and arithmetic teachers.

Observation Checklist

This checklist contained types of teacher behavior directed toward pupils. Behavior was classified into three

⁷This questionnaire contained questions about parents', friends', and music teachers' expectations so as to spread the focus of attention from specific teachers.

23

三

22

11

12

21 22

and

53

22.

...

6

22

40

4

1

(c)

1

types: positive, neutral, and negative behavior.⁸ These observation categories were concerned with teacher behavior that was encouraging in effect, discouraging in effect, and teacher behavior that was neutral in effect toward students. In addition to the Bales source, this investigator observed a number of classroom teachers, recorded all behavior directed toward students, and classified behavior for categories.

Pre-Testing the Instruments

All instruments used in this study were pre-tested and revised before administered. Questionnaires designed for use with students were pre-tested and revised as needed. The questionnaire completed by teachers was also pre-tested and revised.

The observation checklist of teacher behavior was pre-tested and revised. This investigator observed with a second observer in two teaching situations to determine if two people could independently classify each teacher act toward students and determine degree of agreement. A code system was used so that at the end of each observation period, the first observer compared his classification of each act with those of the second observer.

After further revisions, reliability tests were made by three observers who assisted with this phase of the

⁸Behavior categories by Bales were important source materials referred to in devising the categories. See Robert F. Bales, Interaction Process Analysis (Cambridge: Adderson-Wesley Press, 1950).

100
100
100
100
100
100

100
100
100
100
100

100
100

100
100
100
100
100
100

study.⁹ They are identified as Observer A, Observer B, and Observer C. Observers A, B, and C made two reliability tests. A total of six tests were made. The lowest reliability was 79 per cent and the highest was 86 per cent. The mean reliability for the six observations was 83 per cent. Each of these observation periods was for a 40-minute duration.

COLLECTING THE DATA

Approval was granted by the Research Director of the Flint Public Schools for the data to be collected. Building principals were notified; they informed teachers of the study. Principals and teachers were very cooperative and helpful during the entire span of this study.

The Pre-Test Phase

During the last two weeks of September 1959, this investigator administered The Flint Study - 1 Questionnaire to the 31 classes of grade six students. Teachers and students both were very interested in the type of questions asked and many students asked to be informed of the results. Nine hundred and sixty-six pupils completed The Flint Student Study - 1 questionnaire.

The Observation Method

In April 1960, the three observers who assisted with

⁹The reliability is referred to as the per cent of agreement between two observers observing the same behavior simultaneously in the classroom.

2001
 2002
 2003
 2004
 2005
 2006
 2007
 2008
 2009
 2010
 2011
 2012
 2013
 2014
 2015
 2016
 2017
 2018
 2019
 2020
 2021
 2022
 2023
 2024
 2025
 2026
 2027
 2028
 2029
 2030
 2031
 2032
 2033
 2034
 2035
 2036
 2037
 2038
 2039
 2040
 2041
 2042
 2043
 2044
 2045
 2046
 2047
 2048
 2049
 2050
 2051
 2052
 2053
 2054
 2055
 2056
 2057
 2058
 2059
 2060
 2061
 2062
 2063
 2064
 2065
 2066
 2067
 2068
 2069
 2070
 2071
 2072
 2073
 2074
 2075
 2076
 2077
 2078
 2079
 2080
 2081
 2082
 2083
 2084
 2085
 2086
 2087
 2088
 2089
 2090
 2091
 2092
 2093
 2094
 2095
 2096
 2097
 2098
 2099
 2100
 2101
 2102
 2103
 2104
 2105
 2106
 2107
 2108
 2109
 2110
 2111
 2112
 2113
 2114
 2115
 2116
 2117
 2118
 2119
 2120
 2121
 2122
 2123
 2124
 2125
 2126
 2127
 2128
 2129
 2130
 2131
 2132
 2133
 2134
 2135
 2136
 2137
 2138
 2139
 2140
 2141
 2142
 2143
 2144
 2145
 2146
 2147
 2148
 2149
 2150
 2151
 2152
 2153
 2154
 2155
 2156
 2157
 2158
 2159
 2160
 2161
 2162
 2163
 2164
 2165
 2166
 2167
 2168
 2169
 2170
 2171
 2172
 2173
 2174
 2175
 2176
 2177
 2178
 2179
 2180
 2181
 2182
 2183
 2184
 2185
 2186
 2187
 2188
 2189
 2190
 2191
 2192
 2193
 2194
 2195
 2196
 2197
 2198
 2199
 2200
 2201
 2202
 2203
 2204
 2205
 2206
 2207
 2208
 2209
 2210
 2211
 2212
 2213
 2214
 2215
 2216
 2217
 2218
 2219
 2220
 2221
 2222
 2223
 2224
 2225
 2226
 2227
 2228
 2229
 2230
 2231
 2232
 2233
 2234
 2235
 2236
 2237
 2238
 2239
 2240
 2241
 2242
 2243
 2244
 2245
 2246
 2247
 2248
 2249
 2250
 2251
 2252
 2253
 2254
 2255
 2256
 2257
 2258
 2259
 2260
 2261
 2262
 2263
 2264
 2265
 2266
 2267
 2268
 2269
 2270
 2271
 2272
 2273
 2274
 2275
 2276
 2277
 2278
 2279
 2280
 2281
 2282
 2283
 2284
 2285
 2286
 2287
 2288
 2289
 2290
 2291
 2292
 2293
 2294
 2295
 2296
 2297
 2298
 2299
 2300
 2301
 2302
 2303
 2304
 2305
 2306
 2307
 2308
 2309
 2310
 2311
 2312
 2313
 2314
 2315
 2316
 2317
 2318
 2319
 2320
 2321
 2322
 2323
 2324
 2325
 2326
 2327
 2328
 2329
 2330
 2331
 2332
 2333
 2334
 2335
 2336
 2337
 2338
 2339
 2340
 2341
 2342
 2343
 2344
 2345
 2346
 2347
 2348
 2349
 2350
 2351
 2352
 2353
 2354
 2355
 2356
 2357
 2358
 2359
 2360
 2361
 2362
 2363
 2364
 2365
 2366
 2367
 2368
 2369
 2370
 2371
 2372
 2373
 2374
 2375
 2376
 2377
 2378
 2379
 2380
 2381
 2382
 2383
 2384
 2385
 2386
 2387
 2388
 2389
 2390
 2391
 2392
 2393
 2394
 2395
 2396
 2397
 2398
 2399
 2400
 2401
 2402
 2403
 2404
 2405
 2406
 2407
 2408
 2409
 2410
 2411
 2412
 2413
 2414
 2415
 2416
 2417
 2418
 2419
 2420
 2421
 2422
 2423
 2424
 2425
 2426
 2427
 2428
 2429
 2430
 2431
 2432
 2433
 2434
 2435
 2436
 2437
 2438
 2439
 2440
 2441
 2442
 2443
 2444
 2445
 2446
 2447
 2448
 2449
 2450
 2451
 2452
 2453
 2454
 2455

1000
1000
1000
1000

0100
0200
0300
0400
0500
0600
0700
0800
0900
1000

this phase of the study observed the seven selected teachers' behavior toward the eight selected students in the eight teaching situations. The observations occurred during six scheduled periods of 40 minutes each. Each teacher and selected students were observed for a total of 240 minutes. Observations were made on April 8, 11, 22, 25, 29, and May 2, 1960. Each observer made use of a spatial seating chart to identify the eight selected boys in each of the classrooms.

Teachers were told that students were being observed but to avoid a situation of over-sensitivity, selected students were not identified for teachers, nor were the observational categories disclosed. In all cases, teachers and students were very cooperative and helpful.

Three observation patterns were arranged so that each observer observed for two periods in a classroom before going to the next classroom. The observers' classroom observations were, therefore, randomized. Three observation patterns were established for the three observers. Observer A made two observations in a classroom before going to another classroom to observe. Observers B and C made two observations in the same classroom. Each of the three observers observed each teacher equal amounts of time. After each observer completed the two scheduled observations in a pattern, he then made two observations in the next pattern (see Table 5).

12

13
14
15
16

17

18

19

TABLE 5.---Observation schedule arranged to randomize classroom observations.

Observation Patterns	April 8	April 11	April 22	April 25	April 29	May 2
I	Observer A	Observer A	Observer B	Observer B	Observer C	Observer C
II	Observer B	Observer B	Observer C	Observer C	Observer A	Observer A
III	Observer C	Observer C	Observer A	Observer A	Observer B	Observer B

An observation time schedule was developed for each observer for each day that observations were scheduled. An example of the observation time schedule for one day is given in Table 6.

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

TABLE 6.---Observation time schedule for the three observers.

Teachers ^a	Teaching Situations	Time Schedule	Schools ^b
Pattern I			
No. 3	Reading	9:00 - 9:40	No. 5
No. 2	Arithmetic	12:45 - 1:30	No. 1
No. 1	Reading	2:00 - 2:40	No. 1
Observer A			
Pattern II			
No. 3	Arithmetic	9:40 - 10:20	No. 5
No. 6	Reading	1:15 - 1:55	No. 10
Observer B			
Pattern III			
No. 7	Arithmetic	8:45 - 9:30	No. 10
No. 4	Reading	12:45 - 1:30	No. 6
No. 5	Arithmetic	2:00 - 2:30 ^c	No. 6
Observer C			

^aEach teacher in the sub-sample was assigned a code number.

^bEach school was assigned a code number.

^cTwo additional observations were made in this teaching situation so that these students were observed for a total of 240 minutes.

The Student Interviews

In May 1960, each of the 40 selected boys comprising the sub-sample was interviewed individually by this investigator. They completed the questionnaire designed to ascertain their perceptions of their reading and arithmetic teachers' expectations of them. All students were cooperative and answered all questions. Most of them talked freely when asked why they made a particular response to a question. A small number of boys appeared tense when confronted with

the question about teachers' expectation of the number of years they will attend school.

The Teacher Questionnaire

Each teacher in the sub-sample completed a questionnaire about her expectations of eight selected students in her class in regard to grade expected in school, years of school attendance, prediction of the occupational status each student will attain in adult life,¹⁰ and the teacher's expressed relationship toward each student.

The Post-Test Phase

In May 1960, the Flint Student Study - 2 was administered to all classes of students who completed the Flint Student Study - 1. Information from this questionnaire was coded to ascertain changes in students' aspirations and expectations. A total of 850 students completed both the pre- and post-test.¹¹

CLASSIFYING THE DATA

Classifying Students in the Sample by Socio-Economic Status; Occupational Goals

Of the 961 boys and girls who completed the pre-test

¹⁰A. B. Hollingshead's seven occupational categories were used for this phase of the study. Each teacher was given a copy of the categories with sample occupations for each. (See: A. B. Hollingshead, Two Factor Index of Social Position, New Haven: Yale University, 1957.)

¹¹Students who had transferred during the school year were not available for the post-test.

questionnaire, sufficient data were obtained from 947 students about occupation of family wage earner to classify these 947 students by this single factor. A large proportion of these students did not know the last year of school the wage earner attended. Since sufficient data on education were not available, August B. Hollingshead's Two Factor Index to Social Position could be utilized for classifying students into socio-economic classes. The single factor of occupation is the index to social position used in this study.

Classifying Students' Occupational Expectations

The occupational scale of A. B. Hollingshead's, Two Factor Index to Social Position, was used to classify students into the three socio-economic classes.¹² The seven-point occupational scale is listed below.

The Occupational Scale

1. Higher executives of larger concerns, proprietors, and major professional.
2. Business managers, proprietors of medium-sized businesses, and lesser professional.
3. Administrative personnel, owners of small businesses, and minor professional.
4. Clerical and sales workers, technicians, and owners of little businesses (value under \$6,000).
5. Skilled manual employees.
6. Machine operators and semi-skilled employees.

¹²Hollingshead, op. cit.

7. Unskilled employees.

8. Housewives.¹³

Three socio-economic classes are designated throughout this study. Class I represents occupations 1, 2, and 3; class II represents occupation 4; and class III represents occupations 5, 6, and 7 on the preceding occupational scale. Students in the sample were classified according to father's occupation.

A preliminary examination of data collected from boys in the sub-sample showed that selected boys from class III families were perceived by their teachers as having high occupational and educational potentials. These same boys were receiving encouraging and supportive behavior from teachers. Boys in the sub-sample were, therefore, classified into socio-economic classes according to teachers' perceptions of occupational status boys will attain. This made possible the evaluation of the association between teacher expectation and student perception, and teacher expectation and teacher-student relationship.

Classifying Students' Years of School Attendance Expectations

Hollingshead's¹⁴ educational scale was used to classify student's educational plans. The seven-point educational scale and descriptions follow.

¹³This classification was added because of necessity. By assigning this category at the end of all occupational classifications, this writer does not intend to imply that it requires less skill.

¹⁴Hollingshead, op. cit.

21

22

23

24

25

26

27

The Educational Scale

1. Graduate Professional Training. Persons who have completed a recognized professional course leading to graduate degree.
2. Standard College or University Graduation. All persons who completed a four-year college or university course were assigned this position.
3. Partial College Training. Individuals who completed one year but not a full college course were assigned this category.
4. High School Graduates. Graduates from private school, trade, or parochial schools were assigned the same value.
5. Partial High School. Individuals who completed the tenth or eleventh grade, but did not complete high school were assigned this score.
6. Junior High School. Individuals who completed the ninth grade were assigned this position.
7. Less Than Seven Years of School. Individuals who have not completed the seventh grade were given this score, irrespective of the amount of education received.

Classifying Grade Expectations

In all instances in this study, students and teachers were asked to indicate the alphabet letter grade they expected would be earned in selected school subjects. This investigator translated letter grades into a numerical value scale. The numerical scale is as follows:

The Grade Expectation Scale

- | | |
|----|---|
| A. | 1 |
| B. | 2 |
| C. | 3 |
| D. | 4 |
| E. | 5 |

Students were asked to circle the letter grade they expected to earn. The problem of the minus and the plus was, therefore, eliminated.

Classifying Teacher-Student Expressed Relationships

Teacher-student expressed relationships were classified into the following five-point scale:

The Teacher-Student Expressed Relationship Scale

1. Very friendly
2. Friendly
3. Neither friendly nor unfriendly
4. Unfriendly
5. Very unfriendly

Determining Direction of Change in Aspirations and Expectations

Change in aspiration and expectation was determined by comparing pre-test response with post-test response to ascertain if student's level of aspiration and expectation had changed or remained the same. If a student's aspiration or expectation was in the same classification for both tests, his aspiration or expectation was considered the "same." If, however, the student's post-test aspiration or expectation was higher than the pre-test classification, the direction of change was considered "up." The direction of change was "down" if the student's post-test aspiration or expectation was lower than the pre-test classification. Only vertical mobility of aspirations and expectations was considered for analysis purposes since change in status was

21
22
23
24
25

26
27
28
29
30
31

32
33
34
35
36

37
38
39
40
41

the dependent variable. Change was computed for occupational aspirations and expectations, years of school attendance aspirations and expectations, and alphabet letter grade expectations for reading and arithmetic for all boys and girls in the sample.

STATISTICAL TECHNIQUES

In order to determine the nature of association between socio-economic status, and the following independent variables: (1) teacher-student closeness of relationship, (2) teachers' observed behavior toward selected students, and (3) change in students' aspirations and expectations, the chi square test was employed. Calculations for the chi square were made according to procedures outlined by Fisher.¹⁵

Tests of the significance of the difference between means were used to determine the significance of the difference between mean scores for students' perceptions of teachers' expectations; and teachers' expectations for years of school attendance, for grades, and for teacher-student expressed relationships toward each other.¹⁶

In this study a probability was considered significant at the 10 per cent level for analysis of pre-test and post-test data collected to ascertain change in aspirations and expectations. These data were collected within a school

¹⁵N. M. Downie and R. W. Heath, Basic Statistics Methods (New York: Harper and Brothers, 1959), pp. 147-57.

¹⁶Ibid., pp. 131-6.

Q. 10

Q. 11

Q. 12

Q. 13

Q. 14

Q. 15

Q. 16

calendar year so that the teacher variable was controlled. This makes evident that any change computed occurred within a nine-month period. Since any change computed was collected within a short period, a lower level of significance is accepted.

In presentation of findings unless otherwise indicated, frequently used qualifying adjectives will be utilized to describe certain probability ranges.

The range descriptions and qualifying adjectives are:

- .05 < P < .10 - moderately significant
- .01 < P < .05 - highly significant
- .001 < P < .01 - extremely significant

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832

CHAPTER IV

PRESENTATION OF FINDINGS

In Chapter I several hypotheses concerning change in students' occupational and educational aspirations and expectations, teacher expectation and student perception, and the closeness of the teacher-student relationship were set forth. These hypotheses are now being examined in light of the findings of the study.

To facilitate the analysis, the presentation of results is organized into five general areas. These areas are: (1) teacher-student closeness of relationship and its association with socio-economic status, (2) teachers' expectations and students' perceptions of teachers' expectations, (3) observed teacher-student relationship and its association with teacher expectation, (4) socio-economic status and change in students' aspirations and expectations, and (5) teacher-student interpersonal relationship and change in students' expectations.

Findings relating to change in aspirations and expectations were collected from all boys and girls in the sample. Findings relating to relationship between teachers and students and between teacher expectation and pupil perception were collected from the seven teachers and 40 boys who comprise the sub-sample.

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

Questionnaires, interview schedules, and observation form utilized to collect data are contained in Appendix B of this thesis.

TEACHER-STUDENT CLOSENESS OF RELATIONSHIP

Data presented in this section tests the hypothesis that teachers are most likely to be in closer relationship to their students when the socio-economic status of teachers is similar to the socio-economic status of students. These data were collected from the seven teachers and the 40 boys in the sub-sample. These data are analyzed in terms of three designated socio-economic classes for students.

Relationships with Reading and Arithmetic Teachers

Data presented in Table 7 reveal extremely significant relationships exist between students' expressed relationships toward their reading and arithmetic teachers and reading and arithmetic teachers' expressed relationships toward students. Table 8 shows the number of cases in which teachers' and students' expressed relationships, are lower or equal to each other. An examination of these data shows that more teachers expressed lower relationship toward students than students did toward teachers. Further examination of Table 8 shows that teachers' expressed relationships toward class III students were equal to and in most cases lower than the expressed relationships of these students toward teachers. In other words, teachers said they liked their students less than students said they liked

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

teachers. Teachers said they liked class III students less than classes I and II students.

Relationships with Reading Teachers

Data presented in Table 9 show no significant differences exist between students' expressed relationships toward reading teachers and reading teachers' expressed relationships toward students.

Relationships with Arithmetic Teachers

Findings presented in Table 10 show no significant differences exist between relationships expressed by students and their arithmetic teachers toward each other.

Further examination of Tables 9 and 10 shows a direct relationship exists between teachers' expectation of students' socio-economic status and the significance of the relationship that exists between teachers and students. The higher the socio-economic status of students, the greater is the relationship that exists between teachers and students. A minor exception occurs for class II students shown in Table 9.

These findings support the hypothesis that teachers are most likely to be in significant relationship with their students when the socio-economic status of teachers is similar to the expected status of students.

11

11
11
11

11
11
11
11
11
11

TABLE 7.---Relationship between reading and arithmetic teachers' expressed relationships toward students and students' expressed relationships^a toward teachers.^b

Students' Responses	Teachers' Responses					Totals
	1	2	3	4	5	
1	11	17	1	--	1	30
2	5	10	5	3	1	24
3	--	1	5	3	--	9
4	--	--	1	--	--	1
Totals	16	28	12	6	2	64
$\chi^2 = 23.1105$ 6 d.f. P .001						

^aA five-point scale was used to classify teachers' and students' expressed relationships toward each other. Point 1 represents the closest relationship.

^bIn computation of the chi square test, the last two columns and last two rows were combined.

TABLE 8.---A comparison of reading and arithmetic teachers' expressed relationships toward students and students' expressed relationship toward teachers.

Socio-Economic Classes ^a	Teachers' and Students' <u>Expressed Relationships Toward Each Other</u>			
	Teacher Lower ^b	Same	Pupil Lower ^c	Totals
I	9	14	5	28
II	7	3	1	11
III	16	9	0	25
Totals	32	26	6	64

^aTeachers designed occupational categories they expected students to attain. The socio-economic classes of students were teachers' expectations.

^bNumber of cases in which teacher expectation is lower than student perception of teacher expectation.

^cNumber of cases in which student perception of teacher expectation is lower than teacher expectation.

22

3. 2. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839

SECRET

TABLE 9.---A comparison of students' expressed relationships toward reading teachers and reading teachers' expressed relationships^a toward students.

| Socio-Economic
Classes ^b | Mean Score | | Significance of
Differences | |
|--|--|--|--------------------------------|-------------------------------|
| | Students'
Expressed
Relation-
ships | Teachers'
Expressed
Relation-
ships | t | Proba-
bility ^c |
| I | 1.4730 | 1.5789 | .5872 | N.S. |
| II | 1.2500 | 1.7500 | .8960 | N.S. |
| III | 1.2220 | 1.7777 | 1.196 | N.S. |

^aA five-point scale was used to classify teachers' and students' expressed relationships toward each other. Point 1 represents the closest relationship.

^bTeachers designated occupational categories they expected students to attain. The socio-economic classes of students were teachers' expectations.

^cProbability of .05 or less was accepted as indicating a significant difference..

TABLE 10.---A comparison of students' expressed relationships toward arithmetic teachers and arithmetic teachers' expressed relationships^a toward students.

| Socio-Economic
Classes ^b | Mean Score | | Significance of
Differences | |
|--|--|--|--------------------------------|-------------------------------|
| | Students'
Expressed
Relation-
ships | Teachers'
Expressed
Relation-
ships | t | Proba-
bility ^c |
| I | 1.5555 | 1.6666 | .459 | N.S. |
| II | 1.4285 | 2.0000 | 1.5496 | N.S. |
| III | 2.7500 | 2.6250 | .3753 | N.S. |

^aA five-point scale was used to classify teachers and students' expressed relationships toward each other. Point 1 represents the closest relationship.

^bTeachers designated occupational categories they expected students to attain. The socio-economic classes of students were teachers' expectations.

^cProbability of .05 or less was accepted as indicating a significant difference..

872

873

874

875

876

877

878

879

880

881

882

883

884

885

886

887

888

889

890

891

892

893

894

TEACHERS' EXPECTATIONS AND STUDENTS' PERCEPTIONS
OF TEACHERS' EXPECTATIONS

Data presented in this section were collected from the seven teachers and 40 boys in the sub-sample. These data test the hypothesis that teachers' levels of educational and occupational expectations of students will be positively related to students' perceptions of teachers' expectations.

It should be noted here that students were not asked to estimate teacher expectation in regard to occupational status students will attain. This question was omitted because it was felt that the problem of making such a prediction lacked immediacy for this age student. An attempt was made to avoid asking questions of students that they might interpret as being unfair to them. When pre-testing the interview schedule, it was obvious that students showed no hesitation about answering questions in regard to teachers' expectations for grades and years of school attendance. When asked about teachers' occupational expectations, they invariably said: "I don't know," and displayed a "How do you expect me to know that?" attitude.

Teachers expressed no concerns about their abilities to predict occupational and educational goals for students. One teacher explained to this writer that Bob⁴ had excellent potential but that she rated him below John because he does not have the same chance in life that John has because,

⁴Names referred to are fictitious.

"John's father has a very important job and has been recently promoted to an even higher position." She further explained, "Although John does not have quite the potential that Bob has, his father's position will help and Bob does not have this kind of support from home." This teacher asked if it were all right to make predictions in this manner. This investigator told her to utilize any information that she had for making predictions.

Grades Students Will Earn

Alphabet letter grades designated by students and teachers were translated into a five-point numerical scale (see page 52). A grade of A is represented by a numerical value of one (1), an E grade is represented by numerical value of five (5).

Reading and arithmetic grades. Data presented in Table 11 show highly significant associations exist between reading and arithmetic teachers' expectations and students' perceptions of teachers' expectations for grades students will earn in school.

Findings presented in Table 12 show the number of instances in which reading and arithmetic teachers' expectations for grades in school are equal to or lower than are students' perceptions. A cursory examination of this table revealed that teachers' expectations for classes II and III students were equal to and in most instances lower than were

students' perceptions of teachers' expectation. This finding did not show for class I students. The number of instances in which teacher expectation for class I students was lower than student perception was the same for teachers and students.

Reading Grades. Table 13 shows no significant differences exist between reading teachers' expectations and students' perceptions of reading teachers' expectations for reading grades they will earn in reading. Further examination of Table 13 shows direct relationships exist between teachers' expectations and socio-economic status of students. The lower the socio-economic status of students, the lower are teachers' expectations for students and the lower are students' perceptions of their teachers' expectations. These findings show that reading teachers' expectations of the grades their students will earn in school are directly related to the expected socio-economic status of students and that the respective socio-economic classes are perceiving their teachers' differential expectations.

Arithmetic Grades. Table 14 includes a comparison of arithmetic teachers' expectation of grades students will earn in arithmetic and students' perceptions of arithmetic teachers' expectations. No significant differences exist between teachers' expectations and class I students' perceptions of arithmetic teachers' expectations. Significant associations do exist for classes II and III students.

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

Arithmetic teachers' expectations are much lower than these students perceive them to be. Data presented in this table also show direct relationships exist between students' perceptions and teachers' expectations, and between teachers' expectations and socio-economic status of students. The lower the socio-economic status of students, the lower are teachers' expectations for grades students will earn and the lower are students' perceptions of their teachers' expectations. These data show that arithmetic teachers' expectation of grades their students will earn are related to the expected socio-economic status of students. Students in the respective socio-economic classes are perceiving these teachers' differential expectations.

Since items tested show that teachers have differential levels of expectations of students and that in most cases students are accurately perceiving teachers' expectations, support is given to the hypothesis that predicted this association.

TABLE 11.---Relationship between reading and arithmetic teachers' expectations and students' perceptions of expectations for grades students will earn in school.^a

| Students' Perceptions | Teachers' Expectations | | | | | Totals |
|-----------------------|------------------------|----|----|----|----|--------|
| | 1 | 2 | 3 | 4 | 5 | |
| 1 | 7 | 9 | -- | -- | -- | 16 |
| 2 | 4 | 10 | 10 | 4 | 3 | 31 |
| 3 | -- | 2 | 7 | 7 | 1 | 17 |
| Totals | 11 | 21 | 17 | 11 | 4 | 64 |

| | | |
|-------------------|--------|--------|
| $\chi^2 = 28.564$ | 6 d.f. | P .001 |
|-------------------|--------|--------|

^aIn computation of the chi square test, the last two columns were combined.

TABLE 12.---A comparison of reading and arithmetic teachers' expectations of students and students' perceptions of teachers' expectations for grades students will earn in school.

| Socio-Economic Classes ^a | Teachers' Expectations | | Students' Perceptions | |
|-------------------------------------|----------------------------|------|----------------------------|--------|
| | Teacher Lower ^b | Same | Student Lower ^c | Totals |
| I | 6 | 16 | 6 | 28 |
| II | 8 | 3 | 0 | 11 |
| III | 19 | 6 | 0 | 25 |
| Totals | 33 | 25 | 6 | 64 |

^aTeachers designated occupational categories they expected students to attain. The socio-economic classes of students were teachers' expectations.

^bNumber of cases in which teacher expectation was lower than student perception of teacher expectation.

^cNumber of cases in which student perception of teacher expectation was lower than teacher expectation.

TABLE 13.---A comparison of students' perceptions of reading teachers' expectations for grades^a students will earn in school.

| Socio-Economic
Classes ^b | Mean Scores | | Significance of
Differences | |
|--|-------------------------|-------------------------------------|--------------------------------|-------------------------------|
| | Students'
Perception | Reading
Teachers'
Expectation | t | Proba-
bility ^c |
| I | 1.7368 | 1.6842 | .2446 | N.S. |
| II | 2.2250 | 3.2500 | 1.5073 | N.S. |
| III | 2.5555 | 3.7777 | 3.199 | N.S. |

^aAlphabet letter grades were translated into a five-point scale. Point 1 is the highest.

^bTeachers designated occupational categories they expected students to attain. The socio-economic class of students were teachers' expectations.

^cProbability of .05 or less was accepted as indicating a significant difference..

100

100

100

100

100

100

100

100

100

100

100

100

100

100

TABLE 14.---A comparison of students' perceptions of arithmetic teachers' expectations for grades^a students will earn in school.

| Socio-Economic
Classes ^b | Mean Scores | | Significance of
Differences | |
|--|-------------------------|-------------------------|--------------------------------|-------------------------------|
| | Students'
Perception | Teachers
Expectation | t | Proba-
bility ^c |
| I | 1.4444 | 1.6666 | 1.296 | N.S. |
| II | 1.5714 | 2.2857 | 2.046 | .05 |
| III | 2.5000 | 3.6250 | 5.087 | .01 |

^aAlphabet letter grades were translated into a five-point scale. Point 1 is the highest.

^bTeachers designated occupational categories they expected students to attain. The socio-economic classes of students were teachers' expectations.

^cProbability of .05 or less was accepted as indicating a significant difference.

Years of School Attendance

The seven-point educational scale used to classify data concerning years of school attendance (see page 52) shows that a number 1 classification refers to graduate professional training; a number 2 classification designates standard college or university training; and number 7 classification designates less than seven years of school.

Reading and arithmetic teachers' expectations and students' perceptions. Data presented in Table 15 show extremely significant relationships exist between reading and arithmetic teachers' expectations for the number of years students will

20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1

attend school. Table 16 shows the number of instances in which teachers' expectations are equal to or lower than students' perceptions. This table reveals that teachers' expectations are lower than or are equal to students' perception for all students except those in class I.

Reading teachers' expectations and students' perceptions. In Table 17 are mean scores for reading teachers' expectations and students' perceptions for years of school attendance. An analysis of these data show that no significant differences exist between teachers' expectations and students' perceptions for the three socio-economic classes of students. These findings show that students are perceiving their teachers' expectations for years students will attend school.

Arithmetic teachers' expectations and students perceptions. An examination of data presented in Table 18 shows no significant differences exist between arithmetic teachers' expectations and students' perceptions for classes I and II students. An exception occurs for class III students. This finding shows that class III students are not accurately perceiving their arithmetic teachers' expectations of them. These teachers expect considerably less of class III students than class III students perceive that arithmetic teachers expect. Further examination of Table 18 shows that arithmetic teachers' expectations of number of years these students will attend school are directly related to the expected socio-

economic status of students. Students in the respective socio-economic classes are perceiving these teachers' differential expectations.

Examination of Tables 13, 14, 17, and 18 shows that reading and arithmetic teachers' expectations for number of years students will attend school and reading and arithmetic grades students will earn in school are directly related to the expected socio-economic status of students. The higher the expected socio-economic status of students, the higher the teachers' expectations for number of years students will attend school and for grades students will earn in school in the coming years.

Several tests were made to determine significance of differences that exist between teachers' expectations and students' perceptions of teachers' expectations (see Tables 13, 14, 17, and 18). Nine of the twelve tests showed no significant differences existed.

In the three instances in which significant differences between expectations and perceptions were found, two cases involved class III students and one case involved class II students. In all instances, arithmetic teachers were involved. This finding suggests that differences that occurred relate to socio-economic status of students and to arithmetic teachers.

TABLE 15.---Relationship between reading and arithmetic teachers' expectations and students' perception of expectations for years of school attendance.^a

| Students' Perceptions | Teachers Expectations | | | | | Totals |
|-------------------------------------|-----------------------|----|----|----|----|--------|
| | 1 | 2 | 3 | 4 | 5 | |
| 1 | 7 | 8 | -- | -- | -- | 15 |
| 2 | 5 | 11 | 10 | 4 | 2 | 32 |
| 3 | -- | 1 | 7 | 8 | 1 | 17 |
| Totals | 12 | 20 | 17 | 12 | 3 | 64 |
| $\chi^2 = 33.63$ 6 d.f. P .001 | | | | | | |

^aIn the computation of the chi square, the last two columns were combined.

TABLE 16.---A comparison of reading and arithmetic teachers' expectations and students' perception of teachers' expectations for years of school attendance.

| Socio-economic Classes ^a | Teachers' Expectations | | Students' Perception | |
|-------------------------------------|-------------------------------|------|--------------------------------|--------|
| | Teacher ^b
Lower | Same | Students ^c
Lower | Totals |
| I | 5 | 17 | 6 | 28 |
| II | 8 | 3 | 0 | 11 |
| III | 19 | 6 | 0 | 25 |
| Totals | 32 | 26 | 6 | 64 |

^aTeachers designated occupational categories they expected students to attain. The socio-economic classes of students were teachers' expectations.

^bNumber of cases in which teacher expectation was lower than student perception of teacher expectation.

^cNumber of cases in which pupil perception of teacher expectation was lower than teacher expectation.

TABLE 17.---A comparison of students' perceptions of reading teachers' expectations and reading teachers' expectations for years of school attendance.^a

| Socio-economic
Classes ^b | Mean Scores | | Significance of
Differences | |
|--|-------------------------|------------------------|--------------------------------|---------------------------------|
| | Students'
Perception | Teacher
Expectation | t | Proba-
bibility ^c |
| I | 3.263 | 2.053 | 1.323 | N.S. |
| II | 3.000 | 3.500 | .522 | N.S. |
| III | 4.000 | 4.444 | .784 | N.S. |

^aYears of school attendance were classified on a seven-point scale. Point 1 is the highest.

^bTeachers designated occupational categories they expected students to attain. The socio-economic classes of students were teachers' expectations.

^cProbability of .05 or less was accepted as indicating a significant difference.

TABLE 18.---A comparison of students' perceptions of arithmetic teachers' expectations and arithmetic teachers' expectations for years of school attendance.^a

| Socio-economic
Classes ^b | Mean Scores | | Significance of
Differences | |
|--|-------------------------|--------------------------|--------------------------------|-------------------------------|
| | Students'
Perception | Teachers'
Expectation | t | Proba-
bility ^c |
| I | 1.444 | 1.666 | .916 | N.S. |
| II | 1.571 | 2.285 | 1.249 | N.S. |
| III | 2.500 | 3.625 | 3.008 | .01 |

^aYears of school attendance were classified on a seven-point scale. Point 1 is the highest.

^bTeachers designated occupational categories they expected students to attain. The socio-economic classes of students were teachers' expectations.

^cProbability of .05 or less was accepted as indicating a significant difference.

OBSERVED TEACHER-STUDENT RELATIONSHIPS

Data presented in this section tests the hypothesis that teachers' expectations of students are positively related to the observed teacher-student relationship. These data were collected from the seven teachers and 40 boys in the sub-sample.

The unit of teacher behavior is defined as any act directed toward a student that was positive, neutral, or negative in effect. Trained observers utilized a checklist⁵

⁵See Appendix B for the observation checklist used in this phase of the study.

containing teacher-behavior categories that were: (1) positive and supportive, (2) neutral, and (3) negative and non-supportive. Observation data were collected and analyzed according to the three socio-economic classes of students designated by teachers.

Reading Teachers' Observed Behavior

Data presented in Table 19 make evident extremely significant associations exist between reading teachers' behavior toward students when the expected socio-economic status of students is held constant. Further examination of data presented in this table shows direct relationship exists between reading teachers' positive behavior directed toward students and teachers' expectation of students' socio-economic status. The higher the expected socio-economic status of students, the more positive and supportive is reading teachers' behavior toward students. These findings support the hypothesis that reading teachers' expectations of students are positively related to the observed teacher-student relationship. Reading teachers are more positive toward students if reading teachers have high expectations of students.

Arithmetic Teachers' Observed Behavior

Data presented in Table 20 show extremely significant associations exist between arithmetic teachers' behavior toward students when the expected socio-economic status of

students is held constant. This table also shows direct relationship exists between arithmetic teachers' positive behavior directed toward students and teachers' expectation of students' socio-economic status. The higher the socio-economic status of students, the greater is the proportion of positive teacher behavior acts directed toward the three classes of students. An exception occurs for class II students.⁶

The hypothesis that teachers' expectations of students are positively related to the observed teacher-student relationship is supported.

TABLE 19.---Reading teachers' observed behavior toward students.

| Socio-Economic
Classes ^a | Behavior of Teacher | | | |
|--|---------------------|---------|----------|--------|
| | Positive | Neutral | Negative | Totals |
| I | 238 | 173 | 58 | 469 |
| II | 45 | 17 | 16 | 78 |
| III | 75 | 60 | 61 | 196 |
| Totals | 358 | 250 | 135 | 743 |
| <hr/> | | | | |
| $\chi^2 = 37.9417$ | 4 d.f. | | P .001 | |

^aTeachers designated occupational category they expected students to attain. The socio-economic classes of students were teachers' expectations.

⁶An examination of the raw data showed that one boy received 48 of the 100 negative teacher acts directed toward class II students. See Table 20.

TABLE 20.---Arithmetic teachers' observed behavior toward students.

| Socio-economic
Classes ^a | Behavior of Teachers | | | Totals |
|--|----------------------|---------|----------|--------|
| | Positive | Neutral | Negative | |
| I | 46 | 38 | 17 | 101 |
| II | 75 | 71 | 100 | 246 |
| III | 161 | 169 | 119 | 449 |
| Totals | 282 | 278 | 236 | 796 |
| $\chi^2 = 25.5203$ | | | | |
| 4 d.f. | | | | |
| P .001 | | | | |

^a Teachers designated occupational category they expected students to attain. The socio-economic classes of students were teachers' expectations.

SOCIO-ECONOMIC STATUS AND CHANGE IN STUDENTS'

ASPIRATIONS AND EXPECTATIONS

Data presented in this section test the hypothesis that when teacher-student interpersonal relationships are held constant, change in students' aspirations and expectations will be positively associated with socio-economic status of students. These data were collected from the 850 boys and girls in the sample who completed questionnaires in both the pre-test and post-test phases of the study.

Occupational Aspiration Change

During the pre- and post-test phases of this study, all students in the sample listed the jobs they would "most like" to have if they were free to choose any job. Changes

in job aspirations that occurred between the pre- and post-test period are presented below.

Change for students in the sample. According to findings presented in Table 21, no associations exist between socio-economic status and change in occupational aspirations for all students in the sample. Data presented in Table 21 make evident that no significant associations exist between socio-economic status and change in occupational aspirations for boys in the sample. Data presented in Table 21 show no significant associations exist between change in occupational aspirations for girls and socio-economic status.

The preceding test items show no association exist between change in occupational aspiration and socio-economic status of students.

Occupational Expectation Change

During the pre- and post-test phases of this study, all students in the sample listed the jobs they "expect" they will get when they grow up. Changes in expectations that occurred between the pre- and post-test phases of the study are presented below.

Change for students in the sample. An examination of Table 21 shows no significant associations exist between socio-economic status and change in occupational expectations for all students in the sample. Findings presented in Table 21 show moderately significant associations exist between

100

40
41

2020

22

23

22

53

322

33

۱۱۳

44

342

EX.

30.

22

٦٥

44

02

25.

6

;

;

4

22

socio-economic status and change in occupational expectations for boys in the sample. As can be seen in Table 21, no significant relationships exist between socio-economic status and change in occupational expectations for girls in the sample. Low positive but not quite significant associations do occur for girls, however.

Tests for items concerning occupational change show greater associations exist for occupational expectation change than for occupational aspirations change. Low positive but not quite significant associations exist between change in occupational expectations and socio-economic status for all students and for girls in the sample. Moderately significant associations exist between change in occupational expectations and socio-economic status for boys in the sample.

Support is given to the hypothesis that change in boys' occupational expectations is associated with socio-economic status. The higher the socio-economic status of boys, the greater the probability that occupational expectations will be raised and the lower the socio-economic status of boys, the greater the probability that occupational expectations will be lowered, is supported.

Findings which show that change in girls' occupational expectations is at a low positive but not quite significant level and change for boys is at a moderately significant level indicate that since boys are expected to be family wage earners, they are more oriented toward occupational goals than are girls. Since data collected from girls were

included in data analyzed for all students, one can assume that this factor influenced the fact that no associations were disclosed for all students in the sample.

Pre- and post-data from which occupational change was computed were collected within a nine-month period. The low positive and moderately significant associations which occurred between change for boys and girls and socio-economic status occurred within this short period. This finding suggests that associations might be greater for boys and girls if the time-span between the two tests were greater.

Findings which show low positive and moderately significant associations existing for expectation change but not existing for aspiration change suggest that students may be more realistic about their expectations than they are about their aspirations. These findings indicate that lower-class students scaled down their occupational expectations to the norms of their social group, but they did not lower their aspirations to the same degree.

Years of School Attendance Aspiration Change

All students in the sample listed the number of years they "would like" to attend school if they were free to go as far as they wanted to. This information was ascertained during both the pre- and post-tests. Changes in aspirations that occurred between the pre- and post-test period are presented below.

Change for students in the sample. According to data

presented in Table 22, no significant associations exist between socio-economic status and change in the number of years students "would like" to attend school. An examination of data presented in Table 22 shows no significant associations exist for change in the number of years boys "would like" to attend school when socio-economic status is held constant. Findings presented in Table 22 show moderately significant associations exist between change in the number of years girls "would like" to attend school and socio-economic status of girls. Data reported in Table 40, Appendix A, indicate the direction of girls' aspiration change. An examination of these data show that larger proportions of class III girls' aspirations were either raised or remained the same.

Years of School Attendance Expectation Change

Boys and girls in the sample listed the number of years they were "pretty sure" they will attend school. These findings are reported below.

Change for students in the sample. According to data presented in Table 22, no significant associations exist between socio-economic status and change in the number of years all students were "pretty sure" they will attend school. The proportion of students from the three socio-economic classes who raised and lowered their expectation was fairly equated (see Table 41, Appendix A). From Table 22, it can be seen that no significant association exists between

socio-economic status and change in the number of years boys were "pretty sure" they will attend school. Data presented in Table 42, Appendix A, show that proportions who raised or lowered expectation are almost the same for the three classes of boys. Data presented in Table 22 show low positive but not quite significant associations exist for change in the number of years girls said they were "pretty sure" they will attend school. Detailed data shown in Table 43, Appendix A, indicate that the largest proportion of class I girls who changed their expectations, lowered them. Proportions of girls who raised or lowered expectations are approximately equal for classes II and III girls.

Since five out of six items tested do not show associations, it cannot be said that change in years of school attendance expectations and aspirations is directly related to the socio-economic status of students. Moderate and low positive but not quite significant associations were found for girls' expectations and aspirations. The direction of change was an inverse one, however. The higher the socio-economic status of girls, the greater was the change in the downwards direction. (See Tables 40 and 43, Appendix A.)

Grade Expectation Change

All boys and girls in the sample indicated the alphabet letter grade⁹ they expected to earn in reading and

⁹Students indicated letter grades expected for science and social studies, also. These subjects were added so as to spread the focus of attention from reading and arithmetic subjects and teachers of these subjects.

2010

2010

2010

the

2010

2010

2010

2010

2010

2010

2010

2010

2010

2010

2010

2010

2010

2010

2010

2010

2010

2010

2010

2010

2010

2010

2010

2010

2010

arithmetic in the coming years. Students were not asked to indicate the letter grades they "would like" to earn. Data collected from this phase of the study are presented below.

Reading and arithmetic grade change for students in the sample. According to data presented in Table 23, extremely significant associations exist between socio-economic status and change in reading and arithmetic grades students expect to earn. Data shown in Table 44, Appendix A, show that the direction of change is skewed in the downwards direction. Thirty-four per cent of class III students lowered their grade expectations. Twenty per cent of class I students and 22 per cent of class II students lowered their grade expectations. The direction of change was a direct one. The lower the socio-economic status of students, the greater was the percentage of students who lowered grade expectations.

Findings given in Table 23 show highly significant associations exist between socio-economic status and change in reading and arithmetic grades boys expect to earn. The direction of change is direct. The lower the socio-economic status of boys, the greater the proportion who lowered their grade expectations (see Table 45, Appendix A).

A brief look at Table 23 will show that associations between socio-economic status and change in reading and arithmetic grade expectations are extremely significant for girls in the sample. Detailed data shown in Table 46, Appendix A, indicate that a larger proportion of classes I and

III girls lowered their grade expectations.

Reading grade expectations for students in the sample.

An examination of Table 23 shows no associations exist between socio-economic status and change in reading grades all students expect to earn in school. An examination of the direction of change indicates that the greater proportion of students from the three respective classes changed their reading grade expectations in the upwards direction (see Table 47, Appendix A).

According to Table 23, there are no significant associations between socio-economic status and change in reading grade expectations for boys in the sample. Detailed data shown in Table 48, Appendix A, indicate that the greater proportion of classes I, II, and III raised their reading grade expectations.

Low positive but not quite significant associations exist between socio-economic status and change in girls' reading grade expectations. According to Table 49, Appendix A, the direction of change was upwards. Larger proportions of girls in the three respective socio-economic classes raised their reading grade expectations.

Arithmetic grade change for students in the sample.

An examination of data presented in Table 23 shows highly significant associations exist between socio-economic status and change in arithmetic grade expectations for all students in the sample. Greater proportions of classes I and II students lowered their arithmetic grade expectations than did

class III students (see Table 50, Appendix A).

Results given in Table 23 show no associations exist between socio-economic status and change in arithmetic grade expectations for boys in the sample. Examination of detailed data shown in Table 51, Appendix A, indicate that greater proportions of classes I and II boys lowered grade expectations than did class III boys.

According to results given in Table 23, extremely significant associations exist between socio-economic status and change in girls' arithmetic grade expectations. Larger proportions of classes I and III girls who changed grade expectations, raised them. This trend was reversed for class II girls (see Table 52, Appendix A).

Since tests show that grade change is related to socio-economic status of students and years of school attendance change is not related to socio-economic status, the assumption is made that grades expected are a greater index to educational goals than are years of school attendance for sixth grade students. Support was given this assumption that grades are of more immediate concern for students when the 40 boys who comprised the sub-sample were interviewed by this investigator. When boys were asked why they do not expect to attend college, or why they do not expect to graduate from high school, typical responses were, "Because I don't do well in reading," or "I always have trouble with arithmetic." Reading and arithmetic were the only subjects mentioned by students in relationship to this problem.

A comparison of test items concerning reading grade expectations with items concerning arithmetic grade expectations shows greater associations for arithmetic grades than for reading grades.

Since five of the six items tested that involved arithmetic show significant associations between socio-economic status of students and grade change, the hypothesis that arithmetic grade expectations are positively associated with socio-economic status of students is supported.

A comparison of grade change expectations for boys and girls suggests that girls are more highly oriented toward grade achievement than are boys. Data presented in Table 21 indicate, however, that boys are more highly oriented toward occupational goals than are girls.

Data presented in Table 22 indicate that years of school attendance expectations lacked immediacy for both boys and girls at this time.

TABLE 21.---Summary of associations between socio-economic status and change in occupational aspirations and expectations.^a

| Change in | Students in the Sample | | | | | |
|---------------------------|------------------------|-------------|----------|-------------|----------|-------------|
| | All Students | | Boys | | Girls | |
| | χ^2 | Probability | χ^2 | Probability | χ^2 | Probability |
| Occupational Aspirations | 1.85 | .70+ | 4.56 | .30+ | 4.43 | .30+ |
| Occupational Expectations | 5.26 | .20+ | 8.66 | .05+ | 6.02 | .10+ |

^aDetailed data shown in Tables 32, 33, 34, 35, 36, 37, Appendix A.

TABLE 22.---Summary of associations between socio-economic status and change in years of school attendance aspirations and expectations.^a

| Change in | Students in the Sample | | | | | |
|--|------------------------|------------------|----------|------------------|----------|------------------|
| | All Students | | Boys | | Girls | |
| | χ^2 | Proba-
bility | χ^2 | Proba-
bility | χ^2 | Proba-
bility |
| Years of
School
Attendance
Aspirations | 1.71 | .70+ | .67 | .10+ | 8.90 | .05+ |
| Years of
School
Attendance
Expectations | 2.14 | .70+ | .67 | .95+ | 7.73 | .10+ |

^aDetailed data shown in Tables 38, 39, 40, 41, 42, 43, Appendix A.

TABLE 23.---Summary of associations between socio-economic status and change in grade expectations.^a

| Change in | Students in the Sample | | | | | |
|---|------------------------|------------------|----------|------------------|----------|------------------|
| | All Students | | Boys | | Girls | |
| | χ^2 | Proba-
bility | χ^2 | Proba-
bility | χ^2 | Proba-
bility |
| Reading and
Arithmetic
Expectations ^{bc} | 22.21 | .001 | 10.31 | .02+ | 15.77 | .001 |
| Reading Grade
Expectations | 3.93 | .30+ | 4.96 | .20+ | 7.61 | .10+ |
| Arithmetic
Grade
Expectations | 12.50 | .01+ | 5.52 | .20+ | 15.93 | .001 |

^aDetailed data shown in Tables 44, 45, 46, 47, 48, 49, 50, 51, 52, Appendix A.

^bAn average was taken for reading and arithmetic grades expected by students.

^cGrade aspiration was not ascertained. Students were asked only what grades they expect to earn.

INTERPERSONAL RELATIONSHIPS AND CHANGE IN STUDENTS' EXPECTATIONS

Data presented in the previous section concerned aspiration and expectation change and its association with socio-economic status of students. Findings showed significant associations for change in students' expectations but no significant associations were disclosed for aspiration change. Data presented in this section test the hypothesis that when socio-economic status is held constant, change in students' expectations will be positively associated with the

closeness of the teacher-student interpersonal relationship. These data were further analyzed among classes I and II¹⁰ students and among class III students. Since data presented in the previous section disclosed no significant associations for aspiration change, the decision was made to omit further analysis of these data.

All students in the sample indicated how they felt toward reading and arithmetic teachers. Their responses from the post-test phase of the study were used for analysis purposes. Student responses about relationship with teachers were translated into a five-point scale. "Very friendly" is the highest; "very unfriendly" is the lowest.

Occupational Expectation Change and Its Association with Relationships with Reading Teachers

Students expressing very friendly¹¹ relationships.

According to data presented in Table 24, low positive but not quite significant associations exist between change in occupational expectations and socio-economic status among students who expressed very friendly relationships with reading teachers. According to detailed data (see Table 53, Appendix A) large proportions of classes I and II students raised their expectations. Large proportions of class III students both raised and lowered expectations. These findings suggest that if the teacher is in close relationship

¹⁰Data for classes I and II students were combined when analyzed for this phase of the study.

¹¹These data represent point 1 on the expressed relationship scale (see page 53).

with students, students will raise or lower expectations in accordance with teacher expectation.

Students expressing less friendly¹² relationships.

An analysis of data presented in Table 24 shows no association exists between change in occupational expectations and socio-economic status among students expressing less friendly relationships with reading teachers.

Change for classes I and II, and for class III students.

Occupational expectation change was examined for all students in socio-economic classes I, II, and III who expressed very friendly and less friendly relationships with reading teachers. An examination of data presented in Table 25 shows that no associations exist between change in occupational expectations and relationship with reading teachers among either classes I and II students or class III students. Detailed data presented in Tables 57 and 58, Appendix A, show that large proportions of students who expressed very friendly relationships with reading teachers, raised their occupational expectations. Seventy-one per cent of classes I and II students who changed their occupational expectations, raised them.

Occupational Expectation Change and Its Association with Relationships with Arithmetic Teachers

Students expressing very friendly relationships. Findings

¹² These data represent points 2 through 5 on the expressed relationship scale (see page 53). This division was made because of the small number of students who expressed less friendly relationships with teachers.

presented in Table 24 show no associations exist between change in occupational expectations among students expressing very friendly relationships with arithmetic teachers.

All students expressing less friendly relationships.

A glance at findings presented in Table 24 shows that no associations exist between change in occupational expectations and socio-economic status among students expressing less friendly relationships with arithmetic teachers.

Change for classes I and II, and for class III students. Data shown in Table 25 indicate low positive but not quite significant associations exist between occupational expectation change and relationship with arithmetic teachers for both classes I and II students, and class III students. An examination of detailed data shows that among classes I and II, and class III students expressing less friendly relationships with teachers, the numbers who moved up and down are approximately equal (see Tables 59 and 60, Appendix A). A further examination of change for classes I and II, and III students who expressed very friendly relationships with arithmetic teachers shows that large proportions of these students raised their occupational expectations. Seventy-one per cent of classes I and II students, expressing very friendly relationships with arithmetic teachers, who changed their expectations raised them. Fifty-nine per cent of class III students, expressing very friendly relationships with arithmetic teachers, who changed their expectations

raised them. Similar trends occur for students expressing very friendly relationships with reading teachers (see Tables 57, 58, Appendix A).

It should be noted here that more positive though not quite significant associations exist for those students who expressed very friendly relationships with both reading and arithmetic teachers (see Table 24). Tables 57 and 59, Appendix A, show that larger proportions of class I students raised their expectations regardless of expressed relationships with reading and arithmetic teachers. This is an interesting finding which indicates that higher-class students raise their expectations if they are or are not in significant relationship with reading and arithmetic teachers. Data from the preceding designated tables also indicate that a larger proportion of lower-class students lowers their expectations if in significant relationship with teachers. The implication here is quite clear: lower-class students who are perceiving low teacher expectations must not develop close relationships with teachers if they are to raise their expectations. The closeness of relationship provides opportunity for students to internalize teacher expectation and be influenced by it.

Since all items tested showed no significant associations existed between change in occupational expectations and the students' closeness of relationships with reading and arithmetic teachers, it can be said that the hypothesis

that predicted direction is not supported.

Years of School Attendance Expectation Change and Its Association with Relationships with Reading Teachers

Students expressing very friendly relationships. As shown in Table 26, no significant association exists between years of school attendance expectation change and socio-economic status for students who expressed very friendly relationships with reading teachers.

Students expressing less friendly relationships. Findings presented in Table 26 show no significant associations exist for years of school attendance expectation change and socio-economic status for those students who expressed less friendly relationships with reading teachers.

Change for classes I and II, and for class III students. Data presented in Table 27 show no significant association exists between change in years in school attendance expectation and relationship with reading teachers among students occupying class I and II positions. Low positive but not quite significant associations exist between change in expectation and relationships with reading teachers among class III students.

Years of School Attendance Expectation Change and Its Association with Relationships with Arithmetic Teachers

Students expressing very friendly relationships. Findings presented in Table 26 show no associations between change in years of school attendance expectation for students who

expressed very friendly relationships with arithmetic teachers.

Students expressing less friendly relationships. As shown in Table 26, no associations exist between change in years of school attendance expectation for students who expressed less friendly relationships with arithmetic teachers.

Change for classes I and II, and for class III students. No significant associations are shown between change in years of school attendance expectation and relationships with arithmetic teachers among classes I and II students as revealed by Table 27.

Moderately significant associations are found between change in years of school attendance expectation and relationships with arithmetic teachers among class III students, according to data presented in Table 27.

A look at Table 27 shows that low positive but not quite significant associations and moderately significant associations exist between change in years of school attendance expectation and relationships with reading and arithmetic teachers among class III students. Detailed data (see Tables 66 and 68, Appendix A) show that larger proportions of class III students expressing very friendly relationships with reading and arithmetic teachers raised their expectations; and larger portions of class III students expressing less friendly relations with reading and arithmetic teachers lowered their expectations.

Since the four items tested show no associations exist

between change in years of school attendance expectations, for all students, and relationships with reading and arithmetic teachers, it can be said that the hypothesis that stated that change is related to relationship with teachers is not given support.

Another dimension is added to the picture when change is related to relationship with teachers and socio-economic status classes are held constant. Low positive but not quite significant and moderately significant associations exist among class III students (see Table 27).

Grade Expectation Change and Its Association with Relationships with Reading Teachers

All students in the sample indicated the grades they expect to earn in reading and arithmetic subjects in the coming years in school. Reading grade expectations and an average of reading and arithmetic grade expectation changes are presented in association with relationships with reading teachers. Arithmetic grades and an average of reading and arithmetic grades students indicated they expected to earn are presented in association with relationships with arithmetic teachers.

Students expressing very friendly relationships. An examination of data presented in Table 28 shows no associations exist between change in reading grade expectations and socio-economic status of students who expressed very friendly relationships with reading teachers. Detailed data (see Table 69, Appendix A) show that a large proportion of

class III students raised their reading grade expectations.

When reading and arithmetic grades were averaged and change was computed for those students who expressed very friendly relationships with reading teachers, a low positive but not quite significant association is shown. Data presented in Table 28 reveal this finding.

Students expressing less friendly relationships. According to findings presented in Table 28, no associations exist between change in reading grade expectations and socio-economic status of students who expressed less friendly relationships with reading teachers.

Highly significant associations exist, however, between change in reading and arithmetic grade expectations and socio-economic status among all students expressing less friendly relationships with reading teachers.

Change for classes I and II, and for class III students. Findings reported in Table 29 show no associations exist between grade change and relationship with reading teachers among classes I and II students, and among class III students. An examination of the direction of change (see Tables 74 and 76, Appendix A) shows that class III students who expressed very friendly relationships with reading teachers are likely to change in upwards or downwards directions. The upward direction occurs when reading grades are taken alone (see Tables 74 and 76, Appendix A). The downward direction occurs when reading and arithmetic grades are averaged (see Table 76, Appendix A).

Items tested show no support for socio-economic status as a factor in change in students' reading grade expectations. Support is shown, however, when an average is taken for reading and arithmetic grades. The assumption is made that it is the arithmetic factor that contributes to differences found.

Grade Expectation Change and Its Association with Relationships with Arithmetic Teachers

Students expressing very friendly relationships. As can be seen from Table 30, moderately significant associations exist between change in arithmetic grade expectations and socio-economic status among students expressing very friendly relationships with arithmetic teachers. Detailed data located in Appendix A (see Table 77) show that large proportions of class I and II students who changed their grade expectations, lowered them. Proportions of class III students who lowered and raised expectations are almost equal.

Low positive but not quite significant associations exist between change in grade expectations and socio-economic status when an average is taken for reading and arithmetic grade expectations (see Table 30). The presence of the reading grade may contribute to the lower significance level revealed by this test.

Students expressing less friendly relationships. According to data presented in Table 30, no significant associations exist between change in arithmetic grade expectations and socio-economic status among students expressing less friendly relationships with arithmetic teachers. Proportions

of students who changed in upwards or downwards directions are equal for the three social classes except in the case of class III students (see Table 79, Appendix A). A slightly larger proportion of these students raised their expectations. This trend did not show for class III students who expressed very friendly relationships with arithmetic teachers (see Table 78). This finding supports a previously stated assumption that teachers' expectations have a lesser impact on lower-class students if teachers are in a less significant relationship with these students. If students do not like the teacher, they are less likely to be influenced by her.

Change for classes I and II, and for class III students.

According to results shown in Table 31, no significant associations exist between change in arithmetic grade expectations and relationship with arithmetic teachers among classes I and II students.

Moderately significant and highly significant associations exist between change in arithmetic grade expectations, and relationship with arithmetic teachers among class III students.

When results for reading grade change are compared with arithmetic grade change, one finds that the more significant associations occur primarily with arithmetic grade change.

TABLE 24.---Summary of associations between socio-economic status and change in occupational expectations^a with relationship with teachers held constant.

| <u>Occupational Expectation Change for All Students</u> | | | | |
|---|-----------------|-------------|--------------------|-------------|
| Relationship
with Teachers | Reading Teacher | | Arithmetic Teacher | |
| | χ^2 | Probability | χ^2 | Probability |
| Very Friendly ^b | 6.90 | .10+ | 5.12 | .20+ |
| Less Friendly ^c | 1.79 | .70+ | 2.17 | .70+ |

^aDetailed data shown in Tables 53, 54, 55, 56, Appendix A.

^bThese data represent point 1 on expressed relationship scale.

^cThese data represent points 2 through 5 on expressed relationship scale.

TABLE 25.---Summary of associations between change in occupational expectations and relationships with teachers with socio-economic status held constant.^a

| Teachers | Classes I and II
Students ^b | | Class III
Students | |
|---------------------|---|-------------|-----------------------|-------------|
| | χ^2 | Probability | χ^2 | Probability |
| Reading Teachers | 2.2393 | .30+ | 1.4034 | .30+ |
| Arithmetic Teachers | 3.4007 | .10+ | 3.6569 | .10+ |

^aDetailed data shown in Tables 57, 58, 59, 60, Appendix A.

^bData for classes I and II students were combined.

TABLE 26.---Summary of association between socio-economic status and change in years of school attendance expectations with relationship with teachers held constant.^a

| <u>School Attendance Expectation Change for All Students</u> | | | | |
|--|------------------|-------------|---------------------|-------------|
| Relationship
with
Teachers | Reading Teachers | | Arithmetic Teachers | |
| | χ^2 | Probability | χ^2 | Probability |
| Very Friendly ^b | 3.90 | .30+ | 4.40 | .30+ |
| Less Friendly ^c | .66 | .95+ | 1.06 | .80+ |

^aDetailed data shown in Tables 61, 62, 63, 64, Appendix A.

^bThese data represent point 1 on expressed relationship scale.

^cThese data represent points 2 through 5 on expressed relationship scale.

TABLE 27.---Summary of Associations between change in years of school attendance expectations and relationships with teachers with socio-economic status held constant.^a

| Teachers | Classes I and II
Students ^b | | Class III
Students | |
|-----------------------|---|-------------|-----------------------|-------------|
| | χ^2 | Probability | χ^2 | Probability |
| Reading
Teacher | .8049 | .50+ | 4.0485 | .10+ |
| Arithmetic
Teacher | 1.2946 | .50+ | 5.1691 | .05+ |

^aDetailed data shown in Tables 65, 66, 67, 68, Appendix A.

^bData for classes I and II students were combined.

TABLE 28.---Summary of associations between socio-economic status and change in grade expectations with relationship with reading teachers held constant.^a

| Grade Change in | Relationships with Reading Teachers | | | |
|-------------------------------------|-------------------------------------|-------------|----------------------------|-------------|
| | Very Friendly ^c | | Less Friendly ^d | |
| | χ^2 | Probability | χ^2 | Probability |
| Reading | 4.80 | .30+ | 4.05 | .30+ |
| Reading and Arithmetic ^b | 7.16 | .10+ | 12.49 | .01+ |

^aDetailed data shown in Tables 69, 70, 71, 72, Appendix A.

^bAn average was taken for reading and arithmetic grades expected by students.

^cThese data represent point 1 on expressed relationship scale.

^dThese data represent points 2 through 5 on expressed relationship scale.

TABLE 29.---Summary of associations between change in grade expectations and relationships with reading teachers with socio-economic status held constant.

| Grade Change in | Socio-Economic Status of Students | | | |
|-------------------------------------|-----------------------------------|-------------|-----------|-------------|
| | Classes I and II ^b | | Class III | |
| | χ^2 | Probability | χ^2 | Probability |
| Reading | .5631 | .70+ | 2.2240 | .30+ |
| Arithmetic and Reading ^c | 1.6287 | .30+ | .4593 | .70+ |

^aDetailed data presented in Tables 73, 74, 75, 76, Appendix A.

^bData for classes I and II students were combined.

^cAn average was taken for reading and arithmetic grades expected by students.

TABLE 30.---Summary of associations between socio-economic status and change in grade expectations with relationships with arithmetic teachers held constant.^a

| Grade Change in | Relationships with Arithmetic Teachers | | | |
|-------------------------------------|--|-------------|---------------|-------------|
| | Very Friendly | | Less Friendly | |
| | χ^2 | Probability | χ^2 | Probability |
| Arithmetic | 8.02 | .05+ | 5.57 | .30+ |
| Reading and Arithmetic ^b | 7.30 | .10+ | 17.28 | .001 |

^aDetailed data presented in Tables 77, 78, 79, 80, Appendix A.

^bAn average was taken for reading and arithmetic grades expected by students.

TABLE 31.---Summary of associations between change in grade expectations and relationships with arithmetic teachers with socio-economic status held constant.^a

| Grade Change in | Socio-Economic Status of Students | | | |
|-------------------------------------|-----------------------------------|-------------|-----------|-------------|
| | Classes I and II | | Class III | |
| | χ^2 | Probability | χ^2 | Probability |
| Arithmetic | 2.3541 | .30+ | 4.9766 | .05+ |
| Reading and Arithmetic ^b | 1.9277 | .30+ | 6.6014 | .02+ |

^aDetailed data presented in Tables 81, 82, 83, 84, Appendix A.

^bAn average was computed for reading and arithmetic grades students expect to earn.

CHAPTER V

SUMMARY AND CONCLUSIONS

In this study the investigator undertook to ascertain some factors that relate to change in occupational and educational aspirations and expectations of grade six students. The hypotheses formulated were concerned with: (1) expected socio-economic status and teacher-student expressed relationships, (2) students' perceptions and teachers' expectations, (3) teachers' expectations and observed teacher-student relationships, (4) socio-economic status and change in occupational and educational aspirations and expectations, and (5) the closeness of the expressed teacher-student relationship and change in occupational and educational expectations.

Interview schedules were formulated to obtain information from a sub-sample of 40 boys and their seven teachers concerning teachers' expectations, students' perceptions, and expressed relationships. A checklist of items relating to teacher behavior was developed to observe teacher-student relationship to determine if teachers were positive and encouraging, or negative and discouraging toward selected students; and to determine if observed teachers' behavior was related to teachers' expectations of students. Two questionnaires were developed and administered to a sample of

students in pre- and post-test situations to note changes that occurred in students' aspirations and expectations. Eight hundred and fifty boys and girls comprised the sample of students. All data were collected from sixth grade students in the Flint Public Schools during the 1959-1960 school year.

Several indicators were used to classify data for analysis purposes. Indicators used were: (1) A. B. Hollingshead's occupational and educational scales for classifying students into socio-economic status classes, for classifying students' occupational goals, and for classifying years of school students expect to attend, (2) two scales devised by the investigator to classify students' grade expectations and teachers' and students' expressed relationships, and (3) an observation checklist developed by the investigator to evaluate observed teacher-student relationships.

Significant associations were found to exist between: (1) expected socio-economic status of student and teacher-student expressed relationships, (2) students' perceptions and teachers' expectations, and (3) teachers' expected socio-economic status of student and the observed teacher-student relationships. Associations between socio-economic status and change in occupational and educational aspirations and expectations were not as clear-cut. Some significant and some low positive but not quite significant associations were disclosed. Associations between the expressed closeness of the teacher-student relationships and change in occupational

and educational expectations disclosed significant associations for some students.

Teachers in this study are more likely to have close relationships with their students when the teachers' socio-economic status is similar to that expected for students. This phase of the study showed that the closeness of the teacher-student expressed relationship is directly related to the socio-economic status teachers expect students to attain. If a teacher has high occupational expectations for a student, that teacher and student are more likely to express very friendly relationships toward each other.

Highly significant associations were found between teachers' expectations regarding the number of years students will attend school, alphabet letter grades students will attain in school, and students' perceptions of these teachers' expectations. These findings show that teachers' levels of expectations vary among students and that most students are accurately perceiving their teachers' expectations. Teachers' expectations regarding grades students will earn and years they will attend school are directly related to teachers' expected socio-economic status of students. The higher the teacher's expectation of the occupational status a student will attain, the higher is the teacher's expectation for grades students will earn and years students will attend school.

Significant associations were found between teacher expectation of students and observed teacher-student relationship. This phase of the study showed that teachers' observed

behavior toward students was directly related to their expected status of students. The higher occupational status the teacher anticipates a student will attain, the more positive and encouraging is her behavior toward the student. In other words, teachers are more positive and encouraging toward students if they hold high occupational expectations for them. Teachers are more negative and discouraging toward students if they hold low occupational expectations for them. These findings show that although there are several children in the same classroom with the same teacher, some students are living in different social-psychological environments from other students.

In general, change in students' occupational and educational aspirations was not related to socio-economic status. An exception to this occurred for change in girls' aspirations regarding years of school attendance where moderately significant associations were found. Since only one of six tests concerning aspiration change showed significant associations, the hypothesis that predicted direction for aspiration change was not supported.

Some associations were found between students socio-economic status and change in occupational expectations. Low positive but not quite significant associations were found to exist between change in girls' occupational expectations and socio-economic status. Lower-class boys tended to lower their occupational expectations during the sixth grade school year. These findings suggest that boys are more oriented

toward occupational goals than are girls. The hypothesized association between occupational expectation change and socio-economic status was supported for boys.

No significant associations were found between change in expectations regarding years of school attendance and socio-economic status. A near significant association among the girls, however, suggests that girls may be slightly more oriented toward years of school attendance goals than are boys at this age level.

Highly significant associations were found between arithmetic grade expectation change and socio-economic status of students. Five of the six tests made concerning arithmetic grade change showed highly and extremely significant associations existing. Similar associations were shown between socio-economic status and change in combined reading and arithmetic grade expectations. Significant associations were not found, however, between change in reading grade expectations alone, and socio-economic status. It is therefore clear that change in arithmetic grade expectation is associated with the socio-economic status of students.

Since significant associations were not found between socio-economic status and change in aspirations but some associations were found between expectation change and socio-economic status, the suggestion is made that students' more realistic expectations are more likely to be influenced by socio-economic status than their "wishes." Lower-class boys' "wishes" remained the same during the year, but their actual occupational goals were sometimes reduced. This

finding suggests that lower-class boys seemed to be realizing that they cannot muster the resources necessary to attain higher occupational positions. They, therefore, were adjusting their occupational expectations toward the norms of their social group.

Tests were made to determine if associations existed between the closeness of the expressed teacher-student relationship and the following variables: (1) change in occupational expectations, (2) change in years of school attendance expectations, and (3) change in grade expectations. Tests concerning aspiration changes were omitted from this phase of the study since data concerning aspiration change from an earlier phase of the study showed no significant associations.

Significant associations did not exist between the degree of friendliness and occupational expectation change. Some low positive but not quite significant associations were found for change in occupational expectations among classes I, II students,¹ and among class III students and relationship with arithmetic teachers.

No significant associations were found to exist between years of school attendance expectation change and the degree of friendliness with teachers. Moderately significant associations were found between years of school attendance expectation and relationship with arithmetic teachers among class III students. Low positive but not quite significant associations were also found between grade change and

¹Data for students in classes I and II were combined when analyzed for this phase of the study.

relationship with reading teachers among class III students.

No significant associations were found to exist regarding reading grade expectation change and the degree of friendliness with reading teachers.

Moderately significant associations were found to exist between arithmetic grade change among students expressing very friendly relationships with arithmetic teachers. Significant findings were also disclosed between arithmetic grade change and relationship with arithmetic teachers among class III students. Direction of change for arithmetic grade expectations was not consistent when analyzed for students. A larger proportion of class I boys lowered their arithmetic grade expectations and a larger proportion of class III boys raised them. A reverse relationship was found to exist for girls. Large proportions of class III students who expressed less friendly relationships with arithmetic teachers raised their arithmetic grade expectations. This finding, though unexpected, suggests that class III students who are less friendly with arithmetic teachers are less affected by these teachers' expectations. This finding also suggests that if the class III student's teacher has a low expectation of him, he is in a more favorable position if he does not have a close relationship with that teacher.

The previous findings suggest that teachers' expectations have greater effect on lower-class students' expectations than on middle-class students' expectations. Teachers, therefore, are more important to lower-class students than they are to middle-class students in regards to educational goals. The

suggestion is made that this situation exists because the teacher, in most instances, is the only professional or higher status person with whom lower-class students have direct contacts. Lower-class students, therefore, value teachers' estimations of their abilities and potential more highly because these students see the teacher as the only person with first-hand information who knows them well. Middle-class students have direct contacts with a number of people from professional or higher status occupations, including, of course, their parents. These students do not see the teacher as sole authority regarding their abilities and potential and will not value her opinion as highly. They will not, therefore, be as highly influenced by teachers as will lower-class students.

If the teacher has high expectations of a lower-class student, the student may be influenced by these expectations and may raise his educational and occupational goals. If the teacher has low expectations of a lower-class student, the student may likewise be influenced by these expectations and may lower his educational and occupational goals. The teacher is a source of social mobility and social stability for lower-class students. The closeness of the relationship appears to be the mediating factor. These findings suggest that teachers reinforce the educational and occupational goals that middle-class students already have. These findings also suggest that in cases where the teacher has a lower expectation of the middle-class student than the student has of himself, the teacher's expectation will be in competition

with expectations of the student's family and family friends; and, that the individual who is most important to the middle-class student will have greater influence on him.

Data collected from the sub-sample of teachers and students showed that teachers had high occupational and educational expectations of some lower-class boys. These boys were observed to be well groomed and displayed dependable and polite personal characteristics. Their teachers were observed to be positive and encouraging toward them. Results from this study suggest the teacher as a source of motivation for the social class "deviant."²

Data to compute change in aspirations and expectations were collected within a nine-month period. This makes evident that any change computed occurred within a short period of time. Low positive but not quite significant associations that were found to exist may well become significant as students mature. It is recommended, therefore, that follow-up study be made with these students for the purpose of identifying additional change that may occur and to assess factors influencing change.

Results from this study suggest that students' occupational and educational expectations are changing as students are becoming aware of individual differences and the expectations of person with whom they identify. These findings suggest the teacher as a source of influence for some

²The social class "deviant" is the individual who is learning the values and norms necessary for mobility into another social class.

students.

Implications for Further Study

The findings from this study indicate that further study is needed to answer questions raised. Since data to compute change in aspirations and expectations were collected within a nine-month period, this writer suggests that follow-up study of students included in the sample be undertaken to ascertain whether additional changes in aspirations and expectations have occurred. It is also suggested that in addition to ascertaining further changes that may have occurred, investigation be undertaken to identify additional factors, other than those studied at this time, which may influence the direction of change in students' aspirations and expectations. Other members of the family and peer-group members could be investigated as sources of influence.

This writer suggests that data for the 40 boys in the sub-sample be further analyzed to determine if their occupational and educational aspirations and expectations changed during the period studied and to determine if changes found are related to teacher behavior observed during the observation phase of the study. Findings from this study have implications for investigation in a related area. It is suggested that study be undertaken to investigate whether associations exist between teachers' behavior toward students and students' achievement in school subjects.

LITERATURE CITED

- Aberle, David F., and K. D. Naegele. "Middle-class Fathers' Occupational Role and Attitude Toward Children," American Journal of Orthopsychiatry, 22: 366-78, 1952.
- Anderson, Harold H. Studies of Teachers' Classroom Personalities I, Dominative and Socially Integrative Behavior of Kindergarten Teachers. California: Stanford University Press, 1945.
- Bales, Robert F. Interaction Process Analysis: A Method for the Study of Small Groups. Cambridge, Mass: L. Addison-Wesley Publishing Company, 1950.
- Barber, Bernard. Social Stratification: A Comparative Analysis of Structure and Process. New York: Harcourt, Brace and Company, 1957.
- Becker, Howard S. "Social Class Variation in the Teacher-Pupil Relationship," Journal of Educational Sociology, 25: 451-65, 1952.
- Brookover, Wilbur B. A Sociology of Education. New York: American Book Company, 1955.
- Coleman, James. "Academic Achievement and the Structure of Competition," Harvard Educational Review, 27: 330-51, 1959.
- Davis, Allison, and Robert J. Havighurst. Father of the Man. Boston: Houghton Mifflin Company, 1947.
- Downie, N. M., and R. W. Heath. Basic Statistics Methods. New York: Harper and Brothers, 1959.
- Ericson, Martha. "Child Rearing and Social Status," American Journal of Sociology, 52: 190-2, 1946.
- Gould, Rosalind. "Some Sociological Determinants of Goal Striving," Journal of Social Psychology, 13: 461-73, 1941.
- Haller, A. O. Occupational Aspiration Scale. East Lansing: Michigan State University, 1957.
- _____, and C. E. Butterworth. "Peer Group Influences on Levels of Occupational and Educational Aspirations." Unpublished Study, Michigan State University, East Lansing, Michigan, 1958.

- Hollingshead, A. B. Elmtown's Youth: The Impact of Social Classes on Adolescents. New York: John Wiley and Sons, 1949.
- _____. Two Factor Index of Social Position. New Haven: Yale University, 1957.
- Kahl, Joseph A. "Educational and Occupational Aspirations of 'Common Man' Boys," Harvard Educational Review, 23: 186-203, 1953.
- Macdonald, M., C. McGuire, and R. J. Havighurst, "Leisure Activities and the Socio-Economic Status of Children," American Journal of Sociology, 54: 505-19, 1949.
- Mead, George H. Mind, Self and Society. (Charles W. Morris, ed.) Chicago: The University of Chicago Press, 1934.
- Mead, Margaret. "Our Educational Emphasis in Primitive Perspective," American Journal of Sociology, 48: 633-9, 1943.
- Sewell, W. H. "A Short Form of the Farm Family Socio-Economic Status Scale," Rural Sociology, 8: 161-70, 1943.
- _____, A. O. Haller, and M. A. Straus, "Social Status and Educational and Occupational Aspirations," American Sociological Review, 22: 67-73, 1957.
- Stephenson, Richard M. "Mobility Orientation and Stratification: A Study of One Thousand Ninth Graders." Unpublished Doctoral Dissertation, Columbia University, 1956.
- Warner, William L. American Society: A Sociological Interpretation. New York: Alfred A. Knopf, 1952.
- Youmans, E. Grant. "Backgrounds of Rural Youth Planning to Enter College," Journal of Educational Sociology, 32: 152-6, 1958.

APPENDIX A

TABLES REFERRED TO BUT NOT
INCLUDED IN TEXT

TABLE 32.---Association between change in all students' occupational aspirations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 34 | 36 | 13 | 83 |
| II | 29 | 38 | 19 | 86 |
| III | 225 | 286 | 131 | 642 |
| Totals | 288 | 360 | 163 | 811 |
| $\chi^2 = 1.8480$ 4 d.f. .70 < P < .80 | | | | |

TABLE 33.---Association between change in boys' occupational aspirations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 23 | 19 | 6 | 48 |
| II | 18 | 23 | 5 | 46 |
| III | 122 | 128 | 63 | 313 |
| Totals | 163 | 170 | 74 | 407 |
| $\chi^2 = 4.5565$ 4 d.f. .30 < P < .50 | | | | |

TABLE 34.---Association between change in girls' occupational aspirations and socio-economic classes.

| Socio-economic
Classes | Direction of Change | | | Totals |
|--|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 11 | 17 | 7 | 35 |
| II | 11 | 15 | 14 | 40 |
| III | 103 | 158 | 68 | 329 |
| Totals | 125 | 190 | 89 | 404 |
| $\chi^2 = 4.4259$ 4 d.f. $.30 < P < .50$ | | | | |

TABLE 35.---Association between change in all students' occupational expectations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|--|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 38 | 31 | 13 | 82 |
| II | 32 | 28 | 21 | 81 |
| III | 231 | 221 | 168 | 620 |
| Totals | 301 | 280 | 202 | 783 |
| $\chi^2 = 5.2605$ 4 d.f. $.20 < P < .30$ | | | | |

TABLE 36.---Association between change in boys' occupational expectations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 22 | 16 | 8 | 46 |
| II | 15 | 19 | 9 | 43 |
| III | 108 | 89 | 99 | 296 |
| Totals | 145 | 124 | 116 | 385 |
| $\chi^2 = 8.6553$ 4 d.f. .05 < P < .10 | | | | |

TABLE 37.---Association between change in girls' occupational expectations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 16 | 15 | 5 | 36 |
| II | 17 | 9 | 12 | 38 |
| III | 123 | 132 | 69 | 324 |
| Totals | 156 | 156 | 86 | 398 |
| $\chi^2 = 6.0180$ 4 d.f. .10 < P < .20 | | | | |

TABLE 38.---Association between change in all students' years of school attendance aspirations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---------------------------|---------------------|-----------------|------------|------------|
| | Up | Same | Down | |
| I | 24 | 40 | 21 | 85 |
| II | 29 | 41 | 16 | 86 |
| III | <u>223</u> | <u>293</u> | <u>143</u> | <u>659</u> |
| Totals | 276 | 374 | 180 | 830 |
| <hr/> | | | | |
| $\chi^2 = 1.7095$ | 4 d.f. | $.70 < P < .80$ | | |

Table 39.---Association between change in boys' years of school attendance aspirations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---------------------------|---------------------|-----------------|-----------|------------|
| | Up | Same | Down | |
| I | 19 | 19 | 11 | 49 |
| II | 13 | 28 | 5 | 46 |
| III | <u>109</u> | <u>142</u> | <u>74</u> | <u>325</u> |
| Totals | 141 | 189 | 90 | 420 |
| <hr/> | | | | |
| $\chi^2 = 65914$ | 4 d.f. | $.10 < P < .20$ | | |

TABLE 40.---Association between change in girls' years of school attendance aspirations and socio-economic classes.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 5 | 21 | 10 | 36 |
| II | 16 | 13 | 11 | 40 |
| III | 114 | 151 | 69 | 334 |
| Totals | 135 | 185 | 90 | 410 |
| $\chi^2 = 8.8952$ 4 d.f. .05 < P < .10 | | | | |

TABLE 41.---Association between change in all students' years of school attendance expectations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 19 | 38 | 29 | 85 |
| II | 24 | 39 | 23 | 86 |
| III | 167 | 316 | 176 | 659 |
| Totals | 210 | 393 | 228 | 831 |
| $\chi^2 = 2.1390$ 4 d.f. .70 < P < .80 | | | | |

TABLE 42.---Association between change in boys' years of school expectations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|--|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 13 | 20 | 17 | 50 |
| II | 11 | 22 | 13 | 46 |
| III | 84 | 142 | 99 | 325 |
| Totals | 108 | 184 | 129 | 421 |
| $\chi^2 = .6698$ 4 d.f. .95 < P < .98 | | | | |

TABLE 43.---Association between change in girls' years of school attendance expectations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 6 | 18 | 12 | 36 |
| II | 13 | 17 | 10 | 40 |
| III | 83 | 74 | 77 | 234 |
| Totals | 102 | 109 | 99 | 310 |
| $\chi^2 = 7.7349$ 4 d.f. .10 < P < .20 | | | | |

TABLE 44.---Association between change in all students' reading and arithmetic grade^a expectations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---------------------------------------|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 15 | 53 | 17 | 85 |
| II | 26 | 41 | 19 | 86 |
| III | 181 | 256 | 231 | 668 |
| Totals | 222 | 350 | 267 | 839 |
| $\chi^2 = 22.2069$ 4 d.f. P .001 | | | | |

^aAn average was taken for reading and arithmetic grades students expect to earn.

TABLE 45.---Association between change in boys' reading and arithmetic grade^a expectations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|--|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 17 | 29 | 8 | 54 |
| II | 16 | 17 | 13 | 46 |
| III | 98 | 120 | 116 | 334 |
| Totals | 131 | 166 | 137 | 434 |
| $\chi^2 = 10.3124$ 4 d.f. .02 < P < .05 | | | | |

^aAn average was taken for reading and arithmetic grades students expect to earn.

TABLE 46.---Association between change in girls' reading and arithmetic grade^a expectations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---------------------------------------|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 3 | 24 | 9 | 36 |
| II | 10 | 24 | 6 | 40 |
| III | 83 | 136 | 115 | 334 |
| Totals | 96 | 184 | 130 | 410 |
| $\chi^2 = 15.7728$ 4 d.f. P .001 | | | | |

^aAn average was taken for reading and arithmetic grades students expect to earn.

TABLE 47.---Association between change in all students' reading grade expectation and socio-economic status.

| Socio-economic
Class | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 21 | 53 | 11 | 85 |
| II | 24 | 48 | 14 | 86 |
| III | 200 | 339 | 119 | 658 |
| Totals | 245 | 440 | 144 | 829 |
| $\chi^2 = 3.9261$ 4 d.f. .30 < P < .50 | | | | |

TABLE 48.---Association between change in boys' reading grade expectations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 11 | 30 | 8 | 49 |
| II | 18 | 18 | 10 | 46 |
| III | 102 | 157 | 65 | 324 |
| Totals | 131 | 205 | 83 | 419 |
| $\chi^2 = 4.9916$ 4 d.f. .20 < P < .30 | | | | |

TABLE 49.---Association between change in girls' reading grade expectations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 10 | 23 | 3 | 36 |
| II | 6 | 30 | 4 | 40 |
| III | 98 | 182 | 54 | 334 |
| Totals | 114 | 235 | 61 | 410 |
| $\chi^2 = 7.6107$ 4 d.f. .10 < P < .20 | | | | |

TABLE 50.---Association between change in all students' arithmetic grade expectations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 14 | 53 | 18 | 85 |
| II | 11 | 49 | 26 | 86 |
| III | 174 | 331 | 153 | 658 |
| Totals | 199 | 433 | 197 | 829 |
| $\chi^2 = 12.4969$ 4 d.f. $.01 < P < .02$ | | | | |

TABLE 51.---Association between change in boys' arithmetic grade expectations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|--|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 8 | 25 | 16 | 49 |
| II | 7 | 26 | 13 | 46 |
| III | 86 | 162 | 76 | 324 |
| Totals | 101 | 213 | 105 | 419 |
| $\chi^2 = 5.5214$ 4 d.f. $.20 < P < .30$ | | | | |

TABLE 52.---Association between change in girls' arithmetic grade expectations and socio-economic status.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---------------------------------------|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 6 | 28 | 2 | 36 |
| II | 4 | 23 | 13 | 40 |
| III | 88 | 169 | 77 | 334 |
| Totals | 98 | 220 | 92 | 410 |
| $\chi^2 = 15.9268$ 4 d.f. P .001 | | | | |

TABLE 53.---Association between change in occupational expectations and socio-economic status for all students expressing very friendly relationships with reading teachers.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 21 | 19 | 4 | 44 |
| II | 21 | 16 | 13 | 50 |
| III | 146 | 136 | 103 | 385 |
| Totals | 188 | 171 | 120 | 479 |
| $\chi^2 = 6.90$ 4 d.f. .10 < P < .20 | | | | |

TABLE 54.---Association between change in occupational expectations and socio-economic status for all students expressing less friendly relationships with reading teachers.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 17 | 12 | 9 | 38 |
| II | 11 | 12 | 11 | 34 |
| III | 85 | 85 | 76 | 246 |
| Totals | 113 | 109 | 96 | 318 |
| $\chi^2 = 1.79$ 4 d.f. .70 < P < .80 | | | | |

TABLE 55.---Association between change in occupational expectations and socio-economic status for all students expressing very friendly relationships with arithmetic teachers.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 29 | 21 | 8 | 58 |
| II | 27 | 21 | 15 | 63 |
| III | 152 | 140 | 104 | 396 |
| Totals | 208 | 182 | 127 | 517 |
| $\chi^2 = 5.12$ 4 d.f. .20 < P < .30 | | | | |

TABLE 56.---Association between change in occupational expectations and socio-economic status for all students expressing less friendly relationships with arithmetic teachers.

| Socio-economic
Classes | Direction of Change | | | Totals |
|--|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 9 | 10 | 5 | 24 |
| II | 5 | 7 | 8 | 20 |
| III | 75 | 81 | 76 | 232 |
| Totals | 89 | 98 | 89 | 276 |
| $\chi^2 = 2.17$ 4 d.f. $.70 < P < .80$ | | | | |

TABLE 57.---Association between change in occupational expectations with relationships with reading teachers held constant for classes I and II students.

| Relationships
with
Reading Teachers | Classes I and II Students | | | Totals |
|---|---------------------------|------|------|--------|
| | Up | Same | Down | |
| Very Friendly | 42 | 35 | 17 | 94 |
| Less Friendly | 28 | 24 | 20 | 72 |
| Totals | 70 | 59 | 37 | 166 |
| $\chi^2 = 2.2393$ 2 d.f. $.30 < P < .50$ | | | | |

TABLE 58.---Association between change in occupational expectations with relationships with reading teachers held constant for class III students.

| Relationships
with Reading
Teachers | Class III Students | | | Totals |
|---|--------------------|------|------|--------|
| | Up | Same | Down | |
| Very Friendly | 146 | 136 | 103 | 385 |
| Less Friendly | 85 | 85 | 76 | 246 |
| Totals | 231 | 221 | 179 | 631 |
| $\chi^2 = 1.4034$ 2 d.f. .30 < P < .50 | | | | |

TABLE 59.---Association between change in occupational expectations with relationships with arithmetic teachers held constant for classes I and II students.

| Relationships
with
Arithmetic
Teachers | Classes I and II Students | | | Totals |
|---|---------------------------|------|------|--------|
| | Up | Same | Down | |
| Very Friendly | 56 | 42 | 23 | 121 |
| Less Friendly | 14 | 17 | 13 | 44 |
| Totals | 70 | 59 | 36 | 165 |
| $\chi^2 = 3.4007$ 2 d.f. .10 < P < .20 | | | | |

TABLE 60.---Association between change in occupational expectations with relationships with arithmetic teachers held constant for class III students.

| Relationships
with
Arithmetic
Teachers | Class III Students | | | |
|---|--------------------|------|------|--------|
| | Up | Same | Down | Totals |
| Very Friendly | 152 | 140 | 104 | 396 |
| Less Friendly | 75 | 81 | 76 | 232 |
| Totals | 227 | 221 | 180 | 628 |
| $\chi^2 = 3.6569$ 2 d.f. .10 < P < .20 | | | | |

TABLE 61.---Association between change in years of school attendance expectations and socio-economic status for all students expressing very friendly relationships with reading teachers.

| Socio-economic
Classes | Direction of Change | | | |
|---|---------------------|------|------|--------|
| | Up | Same | Down | Totals |
| I | 8 | 23 | 16 | 47 |
| II | 15 | 24 | 12 | 51 |
| III | 105 | 198 | 94 | 397 |
| Totals | 128 | 245 | 122 | 495 |
| $\chi^2 = 3.90$ 4 d.f. .30 < P < .50 | | | | |

TABLE 62.---Association between change in school attendance expectations and socio-economic status for all students expressing less friendly relationships with reading teachers.

| Socio-economic
Classes | Direction of Change | | | Totals |
|--|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 11 | 15 | 12 | 38 |
| II | 9 | 15 | 11 | 35 |
| III | 62 | 118 | 80 | 260 |
| Totals | 82 | 148 | 103 | 333 |
| $\chi^2 = .66$ 4 d.f. .95 < P < .98 | | | | |

TABLE 63.---Association between change in years of school attendance expectations and socio-economic status for all students expressing very friendly relationships with arithmetic teachers.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 14 | 26 | 21 | 61 |
| II | 19 | 27 | 18 | 64 |
| III | 110 | 206 | 97 | 413 |
| Totals | 143 | 259 | 136 | 538 |
| $\chi^2 = 4.40$ 4 d.f. .30 < P < .50 | | | | |

TABLE 64.---Association between change in years of school attendance expectations and socio-economic status for all students expressing less friendly relationships with arithmetic teachers.

| Socio-economic
Classes | Direction of Change | | | Totals |
|--|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 5 | 12 | 7 | 24 |
| II | 5 | 12 | 5 | 22 |
| III | 57 | 110 | 77 | 244 |
| Totals | 67 | 134 | 89 | 290 |
| $\chi^2 = 1.06$ 4 d.f. $.80 < P < .90$ | | | | |

TABLE 65.---Association between change in years of school attendance expectations with relationships with reading teachers held constant for classes I and II students.

| Relationships
with
Reading Teachers | Classes I and II Students | | | Totals |
|---|---------------------------|------|------|--------|
| | Up | Same | Down | |
| Very Friendly | 23 | 47 | 28 | 98 |
| Less Friendly | 20 | 30 | 23 | 73 |
| Totals | 43 | 77 | 51 | 171 |
| $\chi^2 = .8049$ 2 d.f. $.50 < P < .70$ | | | | |

TABLE 66.---Association between change in years of school attendance expectations with relationships with reading teachers held constant for class III students.

| Relationships
with
Reading Teachers | Class III Students | | | Totals |
|---|--------------------|------|------|--------|
| | Up | Same | Down | |
| Very Friendly | 105 | 198 | 94 | 397 |
| Less Friendly | 62 | 118 | 80 | 260 |
| Totals | 167 | 316 | 174 | 657 |
| $\chi^2 = 4.0485$ 2 d.f. .10 < P < .20 | | | | |

TABLE 67.---Association between change in years of school attendance expectations with relationships with arithmetic teachers held constant for classes I and II students.

| Relationships
with
Arithmetic
Teachers | Classes I and II Students | | | Totals |
|---|---------------------------|------|------|--------|
| | Up | Same | Down | |
| Very Friendly | 19 | 53 | 39 | 111 |
| Less Friendly | 10 | 24 | 12 | 46 |
| Totals | 29 | 77 | 51 | 157 |
| $\chi^2 = 1.2946$ 2 d.f. .50 < P < .70 | | | | |

TABLE 68.---Association between change in years of school attendance expectations with relationships with arithmetic teachers held constant for class III students.

| Relationships
with
Arithmetic
Teachers | Class III Students | | | |
|---|--------------------|------|------|--------|
| | Up | Same | Down | Totals |
| Very Friendly | 110 | 206 | 97 | 413 |
| Less Friendly | 57 | 110 | 77 | 244 |
| Totals | 167 | 316 | 174 | 657 |
| $\chi^2 = 5.1691$ 2 d.f. .05 < P < .10 | | | | |

TABLE 69.---Association between change in reading grade expectations and socio-economic status for all students expressing very friendly relationships with reading teachers.

| Socio-economic
Classes | Direction of Change | | | |
|---|---------------------|------|------|--------|
| | Up | Same | Down | Totals |
| I | 10 | 31 | 6 | 47 |
| II | 15 | 26 | 10 | 51 |
| III | 118 | 213 | 66 | 397 |
| Totals | 143 | 270 | 82 | 495 |
| $\chi^2 = 4.80$ 4 d.f. .30 < P < .50 | | | | |

TABLE 70.---Association between change in reading and arithmetic grade^a expectations and socio-economic status for all students expressing very friendly relationships with reading teachers.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 11 | 26 | 10 | 47 |
| II | 16 | 25 | 10 | 51 |
| III | 99 | 166 | 132 | 397 |
| Totals | 126 | 217 | 152 | 495 |
| $\chi^2 = 7.16$ 4 d.f. .10 < P < .10 | | | | |

^aAn average was taken for reading and arithmetic grades students expect to earn.

TABLE 71.---Association between change in reading grade expectations and socio-economic status for all students expressing less friendly relationships with reading teachers.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 11 | 22 | 5 | 38 |
| II | 9 | 22 | 4 | 35 |
| III | 82 | 126 | 53 | 261 |
| Totals | 102 | 170 | 62 | 334 |
| $\chi^2 = 4.05$ 4 d.f. .30 < P < .50 | | | | |

TABLE 72.---Association between change in reading and arithmetic grade^a expectations and socio-economic status for all students expressing less friendly relationships with reading teachers.

| Socio-economic
Classes | Direction of Change | | | Totals |
|--|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 4 | 27 | 7 | 38 |
| II | 10 | 16 | 9 | 35 |
| III | 82 | 90 | 89 | 261 |
| Totals | 96 | 133 | 105 | 334 |
| $\chi^2 = 12.49$ 4 d.f. .01 < P < .02 | | | | |

^aAn average was taken for reading and arithmetic grades students expect to earn.

TABLE 73.---Association between change in reading grade expectations with relationships with reading teachers held constant for classes I and II students.

| Relationships
with
Reading Teachers | Classes I and II Students | | | Totals |
|--|---------------------------|------|------|--------|
| | Up | Same | Down | |
| Very Friendly | 25 | 57 | 16 | 98 |
| Less Friendly | 20 | 44 | 9 | 73 |
| Totals | 45 | 101 | 25 | 171 |
| $\chi^2 = .5631$ 2 d.f. .70 < P < .80 | | | | |

TABLE 74.---Association between change in reading grade expectations with relationships with reading teachers held constant for class III students.

| Relationships
with
Reading Teachers | Class III Students | | | Totals |
|---|--------------------|------|------|--------|
| | Up | Same | Down | |
| Very Friendly | 118 | 213 | 66 | 397 |
| Less Friendly | 82 | 126 | 53 | 261 |
| Totals | 200 | 339 | 119 | 658 |
| $\chi^2 = 2.2240$ 2 d.f. .30 < P < .50 | | | | |

TABLE 75.---Association between change in reading and arithmetic grade^a expectations with relationships with reading teachers held constant for classes I and II students.

| Relationships
with
Reading Teachers | Classes I and II Students | | | Totals |
|---|---------------------------|------|------|--------|
| | Up | Same | Down | |
| Very Friendly | 27 | 51 | 20 | 98 |
| Less Friendly | 14 | 43 | 16 | 73 |
| Totals | 41 | 94 | 36 | 171 |
| $\chi^2 = 1.6278$ 2 d.f. .30 < P < .50 | | | | |

^aAn average was taken for reading and arithmetic grades students expect to earn.

TABLE 76.---Association between change in reading and arithmetic grade^a expectations with relationships with reading teachers held constant for class III students.

| Relationships
with
Reading Teachers | Class III Students | | | Totals |
|---|--------------------|------|------|--------|
| | Up | Same | Down | |
| Very Friendly | 99 | 166 | 132 | 397 |
| Less Friendly | 82 | 90 | 89 | 261 |
| Totals | 181 | 256 | 221 | 658 |
| $\chi^2 = .4593$ 2 d.f. $.70 < P < .80$ | | | | |

^aAn average was taken for reading and arithmetic grades students expect to earn.

TABLE 77.---Association between change in arithmetic grade expectations and socio-economic status for all students expressing very friendly relationships with arithmetic teachers.

| Socio-economic
Classes | Direction of Change | | | Totals |
|--|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 10 | 37 | 14 | 61 |
| II | 7 | 35 | 22 | 64 |
| III | 97 | 216 | 100 | 413 |
| Totals | 114 | 288 | 136 | 538 |
| $\chi^2 = 8.02$ 4 d.f. $.05 < P < .10$ | | | | |

TABLE 78.---Association between changes in reading and arithmetic grade^a expectations and socio-economic status for all students expressing very friendly relationships with arithmetic teachers.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 13 | 36 | 12 | 61 |
| II | 20 | 29 | 15 | 64 |
| III | 112 | 175 | 126 | 413 |
| Totals | 145 | 240 | 153 | 538 |
| $\chi^2 = 7.30$ 4 d.f. .10 < P < .20 | | | | |

^aAn average was taken for reading and arithmetic grades students expect to earn.

TABLE 79.---Association between change in arithmetic grade expectations and socio-economic status for all students expressing less friendly relationships with arithmetic teachers.

| Socio-economic
Classes | Direction of Change | | | Totals |
|---|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 4 | 16 | 4 | 24 |
| II | 4 | 14 | 4 | 22 |
| III | 77 | 115 | 53 | 245 |
| Totals | 85 | 145 | 61 | 291 |
| $\chi^2 = 5.57$ 4 d.f. .20 < P < .30 | | | | |

TABLE 80.---Association between change in reading and arithmetic grade^a expectations and socio-economic status for all students expressing less friendly relationships with arithmetic teachers.

| Socio-economic
Classes | Direction of Change | | | Totals |
|-------------------------------------|---------------------|------|------|--------|
| | Up | Same | Down | |
| I | 2 | 17 | 5 | 24 |
| II | 6 | 12 | 4 | 22 |
| III | 69 | 81 | 95 | 245 |
| Totals | 77 | 110 | 104 | 291 |
| $\chi^2 = 17.28$ 4 d.f. P .001 | | | | |

^aAn average was taken for reading and arithmetic grades students expect to earn.

TABLE 81.---Association between change in arithmetic grade expectations with relationships with arithmetic teachers held constant for classes I and II students.

| Relationships
with
Arithmetic
Teachers | Classes I and II Students | | | Totals |
|---|---------------------------|------|------|--------|
| | Up | Same | Down | |
| Very Friendly | 17 | 72 | 36 | 125 |
| Less Friendly | 8 | 30 | 8 | 46 |
| Totals | 25 | 102 | 44 | 171 |
| $\chi^2 = 2.3541$ 2 d.f. .30 < P < .50 | | | | |

TABLE 82.---Association between change in arithmetic grade expectations with relationships with arithmetic teachers held constant for class III students.

| Relationships
with
Arithmetic
Teachers | Class III Students | | | |
|---|--------------------|------|------|--------|
| | Up | Same | Down | Totals |
| Very Friendly | 97 | 216 | 100 | 413 |
| Less Friendly | 77 | 115 | 53 | 245 |
| Totals | 174 | 331 | 153 | 658 |
| $\chi^2 = 4.9766$ 2 d.f. $.05 < P < .10$ | | | | |

TABLE 83.---Association between change in reading and arithmetic grade^a expectations with relationships with arithmetic teachers held constant for classes I and II students.

| Relationships
with
Arithmetic
Teachers | Classes I and II Students | | | |
|---|---------------------------|------|------|--------|
| | Up | Same | Down | Totals |
| Very Friendly | 33 | 65 | 27 | 125 |
| Less Friendly | 8 | 29 | 9 | 46 |
| Totals | 41 | 94 | 36 | 171 |
| $\chi^2 = 1.9277$ 2 d.f. $.30 < P < .50$ | | | | |

^aAn average was taken for reading and arithmetic grades students expect to earn.

TABLE 84.---Association between change in reading and arithmetic grade^a expectations with relationships with arithmetic teachers held constant for class III students.

| Relationships
with
Arithmetic
Teachers | Class III Students | | | |
|---|--------------------|------|------|--------|
| | Up | Same | Down | Totals |
| Very Friendly | 112 | 175 | 126 | 413 |
| Less Friendly | 69 | 81 | 95 | 245 |
| Totals | 181 | 256 | 221 | 658 |
| $\chi^2 = 6.6014$ 2 d.f. .02 < P < .05 | | | | |

^aAn average was taken for reading and arithmetic grades students expect to earn.

APPENDIX B

QUESTIONNAIRES AND INSTRUCTIONS FOR THEIR ADMINISTRATION

NAME _____ H. R. TEACHER _____
SCHOOL _____
DATE _____

FLINT STUDENT STUDY - 1

We are interested in what young people like you THINK ABOUT THEMSELVES and WHAT KINDS OF PLANS they have for the future. After each question is read, then write the answer. The information that you give will be treated confidentially, our interest being in how students in general answer these questions, rather than in how particular students answer them. We hope, therefore, that you will answer the following questions in as frank a manner as possible.

WHO ARE YOU

1. ARE YOU A GIRL OR A BOY?

(Circle one below)

Girl

Boy

2. HOW OLD ARE YOU? _____ YEARS AND _____ MONTHS.

3. ARE YOUR PARENTS LIVING?

(Circle one below)

Both

Mother Only

Father Only

Neither

4. IF BOTH PARENTS ARE LIVING, ARE THEY

(Circle one below)

Living Together

Separated

Divorced

5. IF SEPARATED OR DIVORCED, HOW LONG? _____

6. WHO IS THE MAIN WAGE EARNER IN YOUR HOUSE?

(Circle one below)

Father

Mother

7. WRITE A FEW LINES DESCRIBING THE KIND OF WORK YOUR FATHER

(OR MOTHER) DOES AT HIS JOB. _____

8. IS HE SELF-EMPLOYED?

(Circle one below)

Yes

No

(If answer to question 8 above is yes, then answer 9 and 10, below)

9. DOES HE HAVE ANY EMPLOYEES WORKING FOR HIM?

(Circle one below)

Yes

No

10. IF YES, HOW MANY?

(Circle one below)

(a) 1 - 10

(c) 25 - 50

(e) 100 - 500

(b) 10 - 25

(d) 50 - 100

(f) 500 - 1000

(If answer to question 8 above is no, then answer 11, 12 and 13, below)

11. WHAT IS THE NAME OF THE ORGANIZATION FOR WHICH HE WORKS?

12. DO ANY PEOPLE WORK UNDER HIS SUPERVISION?

(Circle one below)

Yes

No

13. IF YES, HOW MANY?

(Circle one below)

(a) 1 - 10

(c) 25 - 50

(e) 100 - 500

(b) 10 - 25

(d) 50 - 100

(f) 500 - 1000

14. HOW LONG HAS YOUR FATHER BEEN IN THIS LINE OF WORK?

15. IF LESS THAN TWO YEARS, WHAT WAS HIS OCCUPATION BEFORE
THAT TIME? _____

16. WHAT WAS THE LAST YEAR OF SCHOOL YOUR FATHER COMPLETED?

(Circle one below)

Grammar School: 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8

High School: 9 - 10 - 11 - 12

College: 1 - 2 - 3 - 4

Graduate Work: _____

17. WHAT WAS THE LAST YEAR OF SCHOOL YOUR MOTHER COMPLETED?

(Circle one below)

Grammar School: 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8

High School: 9 - 10 - 11 - 12

College: 1 - 2 - 3 - 4

Graduate Work: _____

WHAT YOU WANT TO DO

18. IF YOU WERE FREE TO CHOOSE ANY JOB, WHAT WOULD YOU MOST
LIKE TO DO WHEN YOU GROW UP? _____

19. SOMETIMES WHAT WE WOULD LIKE TO DO IS NOT THE SAME AS
WHAT WE EXPECT TO DO. WHAT JOB WOULD YOU LIKE THAT YOU
ARE PRETTY SURE YOU WILL GET? _____

20. HOW CERTAIN ARE YOU ABOUT YOUR JOB PLANS?

(Circle one below)

Very Certain

Fairly Certain

Not Certain

21. IF YOU WERE FREE TO GO AS FAR AS YOU WANT TO IN SCHOOL,
HOW FAR IN SCHOOL WOULD YOU LIKE TO GO?

(Circle one below)

Junior High: 7 - 8 - 9

Senior High: 10 - 11 - 12

College: 1 - 2 - 3 - 4

Graduate Work: _____

22. SOMETIMES WHAT WE WOULD LIKE TO DO ISN'T THE SAME AS
WHAT WE EXPECT TO DO. HOW FAR IN SCHOOL ARE YOU PRETTY
SURE YOU WILL GO?

(Circle one below)

Junior High: 7 - 8 - 9

Senior High: 10 - 11 - 12

College: 1 - 2 - 3 - 4

Graduate Work: _____

23. HOW CERTAIN ARE YOU ABOUT YOUR SCHOOL PLANS

(Circle one below)

Very Certain

Fairly Certain

Not Certain

24. AS YOU THINK OF YOUR SCHOOL WORK IN THE NEXT FEW YEARS,
WHAT KIND OF GRADES DO YOU EXPECT THAT YOU WILL GET?

(Circle one below)

In Social Studies? A, B, C, D, E

In Arithmetic? A, B, C, D, E

In Science? A, B, C, D, E

In Reading? A, B, C, D, E

YOU AND YOUR TEACHER

Now we are interested in what young people think of their teachers. Circle the statements that tell how you feel about your teachers.

25. CIRCLE THE ONE BELOW THAT TELLS HOW YOU FEEL TOWARD YOUR MUSIC TEACHER.

- a. Very friendly
- b. Friendly
- c. Neither friendly nor unfriendly
- d. Unfriendly
- e. Very unfriendly

26. CIRCLE THE ONE BELOW THAT TELLS HOW YOU FEEL TOWARD YOUR READING TEACHER.

- a. Very friendly
- b. Friendly
- c. Neither friendly nor unfriendly
- d. Unfriendly
- e. Very unfriendly

27. NOW, CIRCLE THE ONE BELOW THAT TELLS HOW YOU FEEL TOWARD YOUR ARITHMETIC TEACHER.

- a. Very friendly
- b. Friendly
- c. Neither friendly nor unfriendly
- d. Unfriendly
- e. Very unfriendly

Directions for Administering

FLINT STUDENT STUDY - 1

This questionnaire is designed to be mass administered to a class of students. Since elementary students' readability varies, students will be paced as follows: Each item will be read aloud by administrator, time will be allowed for all students to write in response before next item is read.

Directions

1. Explain to students that they have been selected to participate in a study and that they are to answer some questions. Give them the privilege of asking any questions about this study.
2. Pass out Flint Student Study - 1 questionnaires and direct each student to write in desired information on face sheet. CHECK THIS.
3. Read introduction on face sheet. Explain that each question will be read to them, and they are not to write in responses until after the question is read.
4. Begin with item 1.
5. After question 6 is completed, say to students:
"If you have a step-father, step-mother, or guardian other than your parents with whom you have been residing for at least five years, answer the following questions as if they were your (biological) own parents."
6. After question 9 is completed, have all students put

pencils on desks. Ask students who circled YES to take pencils and complete questions 10 and 11. These students will put pencils down. The students who circled NO for question 9 take pencils and complete items 12, 13, and 14.

7. After question 24 is completed, tell students that there are 3 more items to be completed. Tell them that we want to get some ideas about how students in general feel about teachers.

Explain that since they have several subjects, three teachers were selected at random in order to save time. The subjects were arranged in alphabetical order (use chalkboard if desired). Arithmetic, music, and reading subjects were selected because arithmetic is at the beginning, music comes toward the middle, and reading toward the end of the alphabet list.

8. While collecting questionnaires, put ethnic identification on last line on face sheet if group is mixed, otherwise, this should be done later.

Note: Walk around room to see that students circle only one item where choices are given.

Give particular attention to questions:

3, 4, 5, 10, 11, 14, 17, 18, 22, and 23.

Question 25 gives one choice in each subject area.

NAME _____ H. R. TEACHER _____
SCHOOL _____
DATE _____

FLINT STUDENT STUDY - 2

A school year has almost passed since you completed a questionnaire about your plans for the future. For various reasons, some boys and girls change their plans from time to time, others do not. For this reason we would like to know what your plans are at the present time. After each question is read, then write in the answer. The information that you give will be treated confidentially. We hope, therefore, that you will answer the following questions in as frank a manner as possible.

A. HAVE YOU TRANSFERRED TO THIS SCHOOL SINCE SEPTEMBER, 1959?

(Circle one below)

Yes

No

B. IF YES, WHAT SCHOOL WERE YOU ATTENDING IN SEPTEMBER?

WHAT YOU WANT TO DO

1. IF YOU WERE FREE TO CHOOSE ANY JOB, WHAT WOULD YOU MOST LIKE TO DO WHEN YOU GROW UP? _____

2. SOMETIMES WHAT WE WOULD LIKE TO DO IS NOT THE SAME AS WHAT WE EXPECT TO DO. WHAT JOB WOULD YOU LIKE THAT YOU ARE PRETTY SURE YOU WILL GET? _____

3. HOW CERTAIN ARE YOU ABOUT YOUR JOB PLANS?

(Circle one below)

Very Certain

Fairly Certain

Not Certain

4. IF YOU WERE FREE TO GO AS FAR AS YOU WANT TO IN SCHOOL,
HOW FAR IN SCHOOL WOULD YOU LIKE TO GO?

(Circle one below)

Junior High: 7 - 8 - 9

Senior High: 10 - 11 - 12

College: 1 - 2 - 3 - 4

Graduate Work: _____

5. SOMETIMES WHAT WE WOULD LIKE TO DO IS NOT THE SAME AS WHAT
WE EXPECT TO DO. HOW FAR IN SCHOOL ARE YOU PRETTY SURE
YOU WILL GO?

(Circle one below)

Junior High: 7 - 8 - 9

Senior High: 10 - 11 - 12

College: 1 - 2 - 3 - 4

Graduate Work: _____

6. HOW CERTAIN ARE YOU ABOUT YOUR SCHOOL PLANS?

(Circle one below)

Very Certain

Fairly Certain

Not Certain

7. AS YOU THINK OF YOUR SCHOOL WORK IN THE NEXT FEW YEARS,
WHAT KIND OF GRADES DO YOU EXPECT THAT YOU WILL GET?

(Circle one for each subject)

In Social Studies? A, B, C, D, E

In Arithmetic? A, B, C, D, E

In Science? A, B, C, D, E

In Reading? A, B, C, D, E

YOU AND YOUR TEACHER

Now we are interested in what young people think of their teachers. Circle the statements that tell how you feel about your teachers.

8. CIRCLE THE ONE BELOW THAT TELLS HOW YOU FEEL TOWARD YOUR MUSIC TEACHER.

- a. Very friendly
- b. Friendly
- c. Neither friendly nor unfriendly
- d. Unfriendly
- e. Very unfriendly

9. CIRCLE THE ONE BELOW THAT TELLS HOW YOU FEEL TOWARD YOUR READING TEACHER.

- a. Very friendly
- b. Friendly
- c. Neither friendly nor unfriendly
- d. Unfriendly
- e. Very unfriendly

10. NOW, CIRCLE THE ONE BELOW THAT TELLS HOW YOU FEEL TOWARD YOUR ARITHMETIC TEACHER.

- a. Very friendly
- b. Friendly
- c. Neither friendly nor unfriendly
- d. Unfriendly
- e. Very unfriendly

Directions for Administering

FLINT STUDENT STUDY - 2

This questionnaire is designed to be mass administered to a class of students. Since elementary students' readability varies, students will be paced as follows: each item will be read aloud by administrator, time will be allowed for all students to write in response before next item is read.

DIRECTIONS:

1. Explain to students that they are to complete a questionnaire similar to the one completed in the fall.
2. Pass out Flint Student Study - 2 questionnaires and direct each student to write in desired information on face sheet. CHECK THIS.
3. Read introduction on face sheet of questionnaire. Encourage student to ask questions. They may ask in particular why questionnaire is being repeated. If this happens, simply reiterate explanation given in introduction.
4. After question A is completed, ask all students to put pencils on desk. Direct students who circled YES to take pencils and complete question B.
5. Check to see that students circle only one number for questions 4 and 5.
6. Check to see that students circle one letter grade in each subject area for question 7.
7. After question 7 is completed, tell students that there are 3 additional items to be completed. Explain to them that we want to get some ideas about how students in general feel about teachers. Say to them, "Since you have several teachers, three were selected to save time. All of the subjects that you take were arranged in alphabetical order. Arithmetic was chosen because it comes at the beginning of the list, music was selected because it comes in the middle, and reading was selected because it comes toward the end of the list."

YOUR SCHOOL PLANS

1. Circle the ones below that tell how your mother thinks you will do in each school subject during the coming years.

(Circle one for each subject)

| | | | | | |
|----------------|---|---|---|---|---|
| Social Studies | A | B | C | D | E |
| Arithmetic | A | B | C | D | E |
| Science | A | B | C | D | E |
| Reading | A | B | C | D | E |

2. Circle the ones below that tell how your father thinks you will do in each school subject during the coming years.

(Circle one for each subject)

| | | | | | |
|----------------|---|---|---|---|---|
| Social Studies | A | B | C | D | E |
| Arithmetic | A | B | C | D | E |
| Science | A | B | C | D | E |
| Reading | A | B | C | D | E |

3. Circle the one below that tells how far in school your mother thinks you will go.

(Circle one)

| | |
|----------------|---------------|
| Junior High: | 7 - 8 - 9 |
| Senior High: | 10 - 11 - 12 |
| College: | 1 - 2 - 3 - 4 |
| Graduate Work: | _____ |

4. Circle the one below that tells how far in school your father thinks you will go.

(Circle one)

| | |
|----------------|---------------|
| Junior High: | 7 - 8 - 9 |
| Senior High: | 10 - 11 - 12 |
| College: | 1 - 2 - 3 - 4 |
| Graduate Work: | _____ |

5. Circle the ones below that tell how your teachers think you will do in each school subject during the coming years.

(Circle one for each subject)

| | | | | | |
|----------------|---|---|---|---|---|
| Social Studies | A | B | C | D | E |
| Arithmetic | A | B | C | D | E |
| Science | A | B | C | D | E |
| Reading | A | B | C | D | E |

6. Circle the one below that tells how far in school your reading teacher thinks you will go.

(Circle one)

| | |
|----------------|---------------|
| Junior High: | 7 - 8 - 9 |
| Senior High: | 10 - 11 - 12 |
| College: | 1 - 2 - 3 - 4 |
| Graduate Work: | _____ |

7. Circle the one below that tells how far in school your arithmetic teacher thinks you will go.

(Circle one)

| | |
|----------------|---------------|
| Junior High: | 7 - 8 - 9 |
| Senior High: | 10 - 11 - 12 |
| College: | 1 - 2 - 3 - 4 |
| Graduate Work: | _____ |

8. Circle the ones below that tell how your friends think you will do in each school subject during the coming years.

(Circle one for each subject)

| | | | | | |
|----------------|---|---|---|---|---|
| Social Studies | A | B | C | D | E |
| Arithmetic | A | B | C | D | E |
| Science | A | B | C | D | E |
| Reading | A | B | C | D | E |

Directions for Administering

YOUR SCHOOL PLANS

The information below entitled "Interview Information" is discussed with the interviewee, not read to him. The interviewer is to establish rapport with the interviewee and involve him in conversation as much as possible.

After the interviewee is given the questionnaire, he completes it independently if possible. The interviewer should appear disinterested but remain in the room in case there are questions. Only clarification help is given.

INTERVIEW INFORMATION

Introduction

" _____, I have been talking to teachers, and I know that they have certain ideas and thoughts about their students. They have ideas about what kind of a student each one will be -- which ones will be good students, which ones will find the work hard to do. They have ideas about how far in school their children will be able to go. For instance, they think about whether a child will go through high school or a few years in a college."

"Children have ideas about the other students in the class, don't they? _____ All of us have ideas about other people, don't we? _____ You can name the ones you think are the good students in your class and you can name the ones you think are having trouble in reading, in arithmetic, in spelling, can't you? _____."

"Now _____, I have some questions that I want you to help me with. This is what I want you to do. Read this (paper) and check the ones that answer the questions best for you. Answer them as thoughtfully and carefully as possible. As far as we are concerned, there are no RIGHT or WRONG answers.

ABOUT YOUR PUPILS

A Questionnaire

Introduction

The educational and vocational goals that your students attain will probably be influenced by many factors. Some students are more able than others; some work harder at a task than others; and, some of them will be motivated, by family members and others, to attain higher goals, and others will not.

Attached is a checklist for selected students in your class. These eight students were randomly selected for this phase of the study. You know, of course, that there are no RIGHT or WRONG answers to these kinds of questions. Please complete all items on the check list as best you can. Give your BEST OPINION about each one.

NAME OF PUPIL _____

1. AS YOU THINK OF _____ SCHOOL WORK IN THE NEXT FEW YEARS, WHAT KIND OF A STUDENT DO YOU EXPECT THAT HE WILL BE?

(Circle for subject you teach)

In Social Studies: A B C D E

In Reading: A B C D E

In Science: A B C D E

In Arithmetic: A B C D E

2. HOW FAR IN SCHOOL DO YOU THINK HE WILL GO?

(Circle one below)

Junior High: 7 - 8 - 9

Senior High: 10 - 11 - 12

College: 1 - 2 - 3 - 4

(Check)

Graduate Work: _____

3. AS YOU THINK OF _____ CONSIDERING ABILITY, INITIATIVE, INTEREST IN SCHOOL, ETC., PLEASE INDICATE THE OCCUPATIONAL CATEGORY TO WHICH YOU THINK HE WILL BELONG.

Our interest is in the category and not in particular occupation; so, please write in the category numbers only in the space provided below. A list of Occupational Categories is attached.

(Write in category number below)

CATEGORY NUMBER _____

4. BECAUSE ATTITUDES OF STUDENTS DIFFER, DIFFERENT STUDENTS RELATE IN DIFFERENT WAYS TO THEIR TEACHERS. AS BEST YOU CAN, CIRCLE THE STATEMENT BELOW THAT BEST DESCRIBES THE RELATIONSHIP THAT TEACHERS HAVE WITH THIS STUDENT.

- a. Very friendly.
- b. Friendly
- c. Neither friendly nor unfriendly
- d. Unfriendly
- e. Very unfriendly

Directions for Administering

ABOUT YOUR PUPILS

The name of each student is typed on each questionnaire. A questionnaire for each of the eight students and one list of occupational categories (Hollingshead's Occupational Scale) is given to each reading teacher and each arithmetic teacher.

Directions to Teachers

Tell each teacher that she is to complete a short questionnaire for eight boys in her classroom. Explain to her that these boys were randomly selected for this phase of the study and that this method is used to expedite time for us.

- Question 1. Ask teacher to complete items for subjects taught by her.
- Question 2. No directive for this question.
- Question 3. Explain to teacher that the occupations listed on the Occupational Scale are grouped into categories and that the category number and not a particular occupation should be recorded on the questionnaire.
- Question 4. Explain to the teacher that her opinion is needed in completing this question. Say to her that other teachers are completing similar questionnaires and each is doing this independently.

OCCUPATIONAL CATEGORIES

Listed below are seven occupational categories. Since it is difficult to list all jobs in each category, only a sample of jobs that belongs to each category is included.

Category I. Higher Executives, Proprietors of Large Con-
cerns, and Major Professions.

Bank Presidents, Vice Presidents
Judges
Research Directors
Contractors
Dentists
Lawyers
Teachers, University, College
Postmaster
Personnel Managers

Category II. Business Managers, Proprietors of Medium Sized
Businesses, and Lesser Professions.

Branch Managers
Production Managers
Executive Assistants
Internal Revenue Agents
Police Chief
Real Estate Brokers
Store Owners
Chiropractors
Librarians

Category III. Administrative Personnel, Small Independent
Businesses, and Minor Professions.

Store Managers (chain)
Purchasing Agents
Insurance Agents
Credit Managers
Section Heads, Federal, State, and Local
Government Offices
Managers, Department Stores
Advertising Clerks
Reporters, Newspaper
Car Dealer

Category IV. Clerical and Sales Workers, Technicians,
and Owners of Little Businesses.

Bookkeepers
Bank Clerks and Tellers
Factory Supervisors
Sales Clerks
Dental Technicians
Inspectors, Weights, Sanitary Inspectors,
R. R., Factory
Safety Supervisors
Owner of Tailor Shop
Shipping Clerks

Category V. Skilled Manual Employees.

Auto Body Repairers
Cabinet Makers
Chefs
Electricians
Locksmiths
Painters
Piano Tuner
Policemen, city
Radio, T. V., Maintenance

Category VI. Machine Operators and Semi-Skilled Employees.

Assembly Line Workers
Delivery Men
Meat Cutters and Packers
Solderers, Factory
Taxi Drivers
Welders, Machine
Coin Machine Fillers
Roofers
Sprayers, Paint

Category VII. Unskilled Employees.

Attendants, Parking Lots
Grave Diggers
Janitors, Sweepers
Laundry Workers
Dairy Workers
Car Washers
Freight Handlers
Laborers, Construction
Unskilled Factory Workers

OBSERVATION FORM

SCHOOL: _____ GRADE: _____ OBSERVER: _____ DATE: _____
 TEACHER: _____ ACTIVITY: _____ OBSV. BEGINS: _____ OBSV. END: _____

NAMES OF STUDENTS

| CATEGORIES | | | | | | | | | | GRO I |
|------------|-----------|-------------------------------|--|--|--|--|--|--|--|-------|
| CONTENT | VERBAL | 1. PRAISING | | | | | | | | |
| | | 2. AGREEING | | | | | | | | |
| | | 3. NEUTRAL
RESPONSE | | | | | | | | |
| | | 4. DISAGREEING | | | | | | | | |
| | | 5. DEGRADING | | | | | | | | |
| BEHAVIOR | NONVERBAL | 6. NONVERBAL + | | | | | | | | |
| | | 7. NONVERBAL - | | | | | | | | |
| | | 8. NO RESPONSE | | | | | | | | |
| | VERBAL | 9. REWARD | | | | | | | | |
| | | 10. DISCIPLINE | | | | | | | | |
| SPECIAL | NONVERBAL | 11. NONVERBAL + | | | | | | | | |
| | | 12. NONVERBAL - | | | | | | | | |
| | | 13. NO RESPONSE | | | | | | | | |
| | | 14. PUTTING OFF
a. + | | | | | | | | |
| | | b. 0 | | | | | | | | |
| | | c. - | | | | | | | | |
| | | 15. CHECKING UP | | | | | | | | |
| | | 16. SUPPLIES
PRONUNCIATION | | | | | | | | |

DIRECTIONS FOR OBSERVERS

1. Observations of teacher behavior will be recorded for the eight selected individuals only.
2. At the end of each observation period indicate your general reaction to the way the teacher responds to the group as a whole. Under the "group" column, indicate the frequency with which she responds in each category.

e.g. Under "degrading" indicate whether the teacher has responded in this way (a) Very often; (b) frequently; (c) seldom; (d) never.

In addition, record on the back of the observation form illustrations, special occurrences, etc. which you feel may be of special interest to the investigator.

3. Please read carefully the definitions attached to "checking up," "putting off," and "supplies pronunciation." These are highly specific behaviors and should not be tallied unless they conform closely to the definitions given.
4. Record in the nonverbal categories only when there is no verbal response. Otherwise record your impression of the total impact of the simultaneous verbal and nonverbal behavior.
5. Do not be misled by the examples. The content of the sentences spoken should not necessarily be identified with a specific category. The same words may possibly be said in a positive, neutral, or negative way.

Note carefully that all responses of the teacher to the ideas and behavior of the student are to be recorded. Failure to respond is considered a response for our purposes and is entered under the category of "no response." "No response" is given in both the behavioral and content areas.

Observation Categories

THE OBSERVED TEACHER-STUDENT RELATIONSHIP

The Unit of Observation

In this study the unit of observation is defined as any act, either verbal or nonverbal, on the part of a teacher which is directed to a student.

THE CATEGORIES

There are four types of teacher behavior categories which are distinguished. It is assumed that, in general, the teacher's response is directed toward the student in regards to the content being considered or toward the behavior of the student. If both dimensions appear simultaneously, a double classification is made.. Verbal and nonverbal behavior are distinguished in both the content and the behavior categories. In the pre-test phase of category designations, two basic types of teacher responses, behavior involving content and behavior relating to the way in which the student was acting, appeared to be basic. A third category type for special behavior was designated. The fourth category type was needed since it was assumed that all teacher acts could be observed and classified. The fourth category is described as residual. A description of the four category types are given below..

I. Content Categories

These categories include all verbal and nonverbal teacher responses to statements, ideas, and opinions of students. This

is, in effect, evaluation of intellectual content.

Category 1. Praising

Includes all verbal acts which have the effect of praising, encouraging, enhancing the statements, opinions, or ideas of the student.

Examples: "That's fine."
"You've made an important point there."

Category 2. Agreeing

Includes all verbal acts which show agreement with the statements, opinions, or ideas of the student.

Examples: "Yes, that's true."
"I feel the same way you do."

Category 3. Neutral Response

Includes all verbal responses of the teacher which fail to make an evaluation of the statements, opinions, ideas of the student.

Examples: "All right." (Not showing agreement)
"Okay, next." (Not showing agreement)

Category 4. Disagreeing

Includes all verbal acts which show disagreement with the statements, opinions, or ideas of the student.

Examples: (Correcting an error made by a pupil.)
"I don't think so."

Category 5. Degrading

Includes all verbal acts which have the effect of degrading, discouraging, belittling, the statements, opinions, or ideas of the student.

Examples: (Sarcasm or ridicule)
"That wasn't a very bright answer."

Category 6. Nonverbal Positive

Includes all nonverbal behavior that shows positive

evaluation of the statements, opinions, or ideas of the student.

Examples: Nodding, smiling, laughing with

Category 7. Nonverbal Negative

Includes all nonverbal behavior that shows negative evaluation of the statements, opinions, or ideas of the student.

Examples: Shaking head, frowning, laughing at

Category 8. No Response

Includes all nonverbal behavior that shows failure to respond with affect to statements, opinions, or ideas of the student. This is a category of no response. Note that failure to respond affectively on the verbal dimension is put in category 3.

Examples: Blank look
Changing subject without comment or expression.

II. Behavior Categories

These categories include teacher responses directed toward the behavior of the student rather than to his ideas. These categories include both verbal and nonverbal responses.

Category 9. Reward

Includes verbal acts that indicate approval of the behavior of the student.

Examples: "That was very nice of you."
"Because you did such a nice job, you can . . ."

Category 10. Discipline

Includes all verbal acts that indicate disapproval with the behavior of the student.

Examples: "Pay attention!"
"You've been so noisy that you'll have to . . ."

Category 11. Nonverbal Positive

Includes all nonverbal behavior that shows approval of the behavior of the student.

Examples: Smiling, patting on back
Beaming, or appearing to be charmed

Category 12. Nonverbal Negative

Includes all nonverbal behavior that shows disapproval of the behavior of the student.

Examples: Insolent glance or stare
Shaking student

III. Special Behavior Categories

These categories include specific behavior acts that imply usurpation of students' initiative and self-esteem.

Specific descriptions are given below. .

Category 13. Putting Off

This category of behavior is specifically defined as occurring when the teacher indicates that the student's request or comment cannot be dealt with at the time the student introduces it.

Examples: "Let's skip that for the moment."
Neutral

"Let's not go over that again."
Negative

Category 14. Checking Up

This includes all acts in which the student's judgment is validated by the teacher. The teacher does not accept without questioning.

Examples: Student asks to sharpen pencil and teacher checks point to see if needed.

Student desires to go to booktable and teacher checks to see if other work is completed.

Category 15. Supplies Pronunciation

This category of behavior is specifically defined as occurring when the student is reading and comes to a word he cannot pronounce. The teacher provides the pronunciation without waiting for or urging the child to attempt the pronunciation himself.

IV. Residual Category

This observation category will not be tallied, although it is conceptually present. It includes kinds of statements by the teacher which are neutral in effect as representing information; explanation; asking questions; and, procedure comments. If affect accompanies any of these kinds of statements, they will be classified elsewhere. It should be noted here that all teacher responses to student behavior, be it positive, negative, or neutral, will be classified under behavior categories.

ROOM USE ONLY

~~OCT 1 1963~~

ROOM USE ONLY

~~MAY 11 1963~~

~~MAY 11 1963~~

~~NOV 21 1963~~

pd

~~NOV 9 1963~~

~~JUN 5 1964~~

~~JUN 24 1964~~

~~MAY 22 1963~~

~~DEC 1 1963~~

~~DEC 1 1963~~
of the first...

~~OCT 1 1963~~

~~OCT 15 1963~~

at

~~MAR 28 1968~~

~~OCT 28 1963~~

~~NOV 18 1963~~

~~NOV 30 1964~~

~~OCT 30 1963~~

MICHIGAN STATE UNIVERSITY LIBRARIES



3 1293 03175 0148