

THE EXPECTATION PATTERN:  
AN ANALYSIS OF ELEMENTARY SCHOOL SOCIAL  
ENVIRONMENTS

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This is to certify that the

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A handwritten signature in cursive script that reads "Milton Brookover".

Major professor

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## ABSTRACT

### THE EXPECTATION PATTERN: AN ANALYSIS OF ELEMENTARY SCHOOL SOCIAL ENVIRONMENTS

By

Richard J. Gigliotti

This dissertation is oriented to the question of what variables and processes are associated with achievement in elementary schools. In order to better assess the presence and operation of the selected variables and processes, the racial composition, the socioeconomic status, and the geographical locale of the schools were controlled. Schools were matched on these three factors, while purposively differentiating them on achievement. Given this procedure, it was then possible to assess the operation of other factors in the school, while minimizing the effect of the control variables.

The variables and processes selected for investigation were actual evaluations and expectations for performance of students held by teachers and principals; students' perception of parents', teachers', and principals' expectations; educational aspirations of students; importance of the student role; sense of control; teacher press for educational achievement of students; teacher job satisfaction; grouping practices;

press for competition; community stability; and parental support for school.

Data were collected from over 1,300 fourth, fifth, and sixth grade students enrolled in ten predominately white elementary schools in the state of Michigan. There were five pairs of schools in the study, each pair representing a different socioeconomic level. The analytical techniques employed were of two basic types: (1) a test of association between variables, using the Pearson product-moment correlation; and (2) a t-test of difference between the high and low achieving schools matched on S.E.S.

The major findings in the study support the high positive association between actual evaluations and expectations; between actual expectations and the perception of them by students; and between perceived expectations and academic performance. Similarly, these factors meaningfully differentiated high and low achieving schools matched on S.E.S. Additional findings demonstrate the importance of sense of control as it is empirically associated with expectations and achievement, and as it differentiates the schools. There is some evidence that parental support for the schools and also stability of the community is related to student achievement.

All of the variables incorporated in this study were used in the attempt to differentiate schools. Many of them were empirically related to each other when the deductive theory which was developed suggested a relationship. Those

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variables which did not differentiate high and low achieving schools matched on S.E.S. were the importance of the student role (as reported by students) and teacher job satisfaction.

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## TABLE OF CONTENTS

	Page
LIST OF TABLES . . . . .	vi
 Chapter	
I. THE PROBLEM . . . . .	1
An Historical Perspective . . . . .	1
Relationship of S.E.S. and Performance. . . . .	3
Problem to Be Explored. . . . .	5
Significance of the Research. . . . .	10
 II. RESEARCH DESIGN AND METHODS . . . . .	 13
Introduction. . . . .	13
Research Design . . . . .	15
Introduction. . . . .	15
Presentation of Design. . . . .	16
S.E.S. Index. . . . .	18
Achievement Index . . . . .	23
Racial Composition. . . . .	24
Discussion of Sample Population . . . . .	24
Research Instruments. . . . .	25
Development and Pretest . . . . .	25
Pilot Study . . . . .	26
Definition and Operationalizing of Variables. . . . .	28
Data Collection . . . . .	34
 III. LITERATURE, PROPOSITIONS, AND THEORY. . . . .	 36
Introduction. . . . .	36
Foundation of Theory and Basic Propositions . . . . .	38
Effect Propositions . . . . .	44
Source Propositions . . . . .	57
 IV. ANALYSIS OF RESULTS . . . . .	 73
Introduction. . . . .	73
Analysis of Basic Propositions. . . . .	76
Analysis of Effect Propositions . . . . .	92
Analysis of Source Propositions . . . . .	112

	Page
V. STRUCTURAL EFFECTS. . . . .	129
VI. CONCLUSIONS . . . . .	144
Substantive Contributions of This Study . . .	144
Theoretical and Methodological Contributions.	148
Implications and Prospectus for Further Research. . . . .	151
BIBLIOGRAPHY. . . . .	153
APPENDIX. . . . .	159

## LIST OF TABLES

Table	Page
1. Classification of Schools for Sample Selection. . . . .	17
2. Vital Information on Sample Schools. . . . .	19
3. Parent Income, P.T.A. Membership, Pupil Turnover, and Mean Achievement Scores. . . . .	70
4. Correlations of Mean Teacher Evaluations and Expectations for Students. . . . .	76
5. Correlations of Mean Teacher Expectations and Mean Perceived Teacher Expectations. . . . .	76
6. Correlations of Principal Evaluations and Expectations for Students. . . . .	79
7. Correlations of Principal Expectations and Mean Perceived Principal Expectations. . . . .	79
8. Correlations of Achievement and Perceived Expectations . . . . .	82
9. Difference Between High and Low Achieving Schools on Mean Teacher Evaluations and Expectations for Students. . . . .	84
10. Difference between High and Low Achieving Schools on Mean Principal Evaluations and Expectations for Students. . . . .	86
11. Difference Between High and Low Achieving Schools on Mean Teacher Expectations and Perceived Teacher Expectations . . . . .	87
12. Difference Between High and Low Achieving Schools on Mean Principal Expectations and Mean Perceived Principal Expectations. . . . .	89
13. Difference Between High and Low Achieving Schools on Mean Achievement, and Mean Perceived Teacher, Principal, and Parental Expectations . . . . .	90

Table	Page
14. Correlations of Mean Perceived Expectations and Mean Academic Aspirations. . . . .	93
15. Difference Between High and Low Achieving Schools on Mean Aspiration Level and Mean Perceived Principal, Teacher, and Parental Expectations. . . . .	94
16. Correlation of Achievement and Mean Importance of the Self-Identity (Role) of Student . . . . .	95
17. Difference Between High and Low Achieving Schools on Mean Achievement and Mean Importance of the Self-Identity of Student . . . . .	96
18. Correlations Between Mean Perceived Expectations and Mean Importance of the Self-Identity (Role) of Student . . . . .	99
19. Difference Between High and Low Achieving Schools on Mean Perceived Expectations and Mean Importance of the Self-Identity of Student. . . . .	100
20. Correlation Between Achievement and Mean Sense of Control . . . . .	102
21. Difference Between Higher and Lower Achieving Schools on Mean Achievement and Mean Sense of Control . . . . .	103
22. Correlations Between Mean Perceived Expectations and Mean Sense of Control. . . . .	105
23. Correlation Between Mean Teacher Expectations and Mean Teacher Press for Educational Achievement. . . . .	108
24. Difference Between Higher and Lower Achieving Schools on Mean Teacher Expectations and Mean Teacher Press for Educational Achievement. . . . .	108
25. Correlations Between Mean Teacher Job Satisfaction and Achievement of Students . . . . .	110
26. Difference Between Higher and Lower Achieving Schools on Achievement and Mean Teacher Job Satisfaction . . . . .	110

Table	Page
27. Correlation Between Mean Teacher Job Satisfaction and Stability of the School's Teachers. . . . .	112
28. Grouping Rates in Higher and Lower Achieving Schools by Per Cent of Classrooms Grouped and Ungrouped. . . . .	116
29. Correlation Between Mean Press for Competition and Mean School Achievement. . . . .	117
30. Difference Between Higher and Lower Achieving Schools on Mean Press for Competition. . . . .	117
31. Correlations Between Community Stability and Mean Community Support of the School . . . . .	119
32. Correlations Between Mean Community Support for the School and Student Achievement . . . . .	121
33. Correlation Between Community Stability and Student Achievement. . . . .	121
34. Correlations Between Mean Community Support for the School and Mean Students' Perceived Expectations . . . . .	124
35. Correlations Between Community Stability and Perceived Academic Expectations. . . . .	126
36. Differentiation of Higher and Lower Achieving Schools on Community Stability and Mean Support. . . . .	128
37. Aspirations and Sense of Control by Individual Perceived Teacher Expectation Level and School Mean Perceived Teacher Expectation Level. . . . .	135
38. Aspirations and Sense of Control by Individual Perceived Parental Expectation Level and School Mean Perceived Parental Expectation Level. . . . .	138
39. Perceived Expectations, Aspirations, and Sense of Control by Individual S.E.S. Level and School Mean Achievement Level. . . . .	140

## CHAPTER I

### THE PROBLEM

The intention of this study is to assess some of the reasons why certain elementary schools exhibit high levels of academic performance of their students and other elementary schools exhibit lower levels of academic performance of their students. The ultimate question is that of what variables and processes are directly influencing the academic performance of children, and how do certain school and community social environment factors influence the effect of these variables and processes.

#### An Historical Perspective

The disparity in quality of academic performance among United States elementary schools has been noted for years. Indeed, the debate as to who should be educated and what type of education different "types" of people should have dates back to the immediate post-revolutionary period in the United States, when the question of a common public education was first seriously raised in this country (Butts and Cremin, 1953). In the early nineteenth century the debate was intensified by two major considerations, that of the increased flow of European immigrants and the consequent need to

formally instill "patriotism," but more significantly by the belief that only through equality of educational opportunity could the possibility of "hardened class lines" and the growth of "class cleavage" be minimized (Butts and Cremin, 1953).

By the time of the Civil War, the ideal of a common system of education for all was well entrenched in the thinking of educators and in the laws of the various states. The South, of course, evolved after the Civil War a separate system of education for blacks and whites, which was justified by the "separate but equal" principle and upheld by the U. S. Supreme Court in the Plessy-Ferguson decision of 1896.

As the practice of a universal common education in this country developed and was evaluated, it was observed that the desired goals were not being realized to the extent that was hoped for. There were vast differences among racial, ethnic, and economic groups in terms of which groups utilized the system most, and also in terms of the quality of education which the members of the various social groups were receiving. At this point a consideration of why these differences exist began to emerge.

Among the most obvious discrepancies were the physical quality of the schools in various districts and states and the economic adequacy of members of various groups to pursue education. Programs were developed by federal and state governments to provide scholarships for students, regardless of social background. Efforts were concentrated on the improvement of physical facilities. The belief was,

and to a large extent still is, that money would ultimately correct the problem of equal educational opportunity. The assertion is that given a decent physical plant, adequate number of teachers, sufficient quantity of books and supplies, and adequate facilities such as library, cafeteria, gymnasium, then equal educational opportunity would exist, and the quality of educational performance would increase. Most certainly our schools are not all equal with respect to the above-mentioned factors. Indeed many schools, particularly in the lower socioeconomic areas, do not even reach a minimum level of consensually defined adequacy. Yet, the question in recent years has become one of whether these physical or economically manipulable factors are the true "causative" variables yielding unequal educational opportunity and poor academic performance. Indeed, the question can be raised as to whether these variables are even important in any way other than as a symbol of inferiority in other more important dimensions.

#### Relationship of S.E.S. and Performance

Recent research, most notably the work of James Coleman (Equality of Educational Opportunity), has explored this question in depth. Coleman's research indicates that the poorer sections of the United States do indeed provide the least resources for education and that the academic performance is generally low in these areas. A major question in approaching the problem analytically is that of how much

educational disadvantage results from school factors, from community factors, and from the child's family.

Using the student's score on a verbal ability test as a measure of achievement, Coleman assessed the amount of variance in achievement of students that could be accounted for by differences between schools and the amount of variance that is attributed to within school factors. He assessed this by calculating the average score of students within schools and comparing across schools. It was discovered that between school differences in achievement account for only 10 to 30 per cent of variance in achievement of sixth graders and 5 to 31 per cent of variance in individual achievement for twelfth graders (considering all racial and dominant ethnic groups). For white students only, between school differences in individual achievement account for approximately 10.5 per cent of the variance at the sixth grade and 9 per cent at the twelfth grade. Thus, most of the variation in achievement can not be accounted for by differences between schools, since most of it lies within the school. Despite the wide range of diversity in school facilities, curriculum, and teachers, approximately 90 per cent of the variation in achievement for whites is variation occurring within the same student body. Coleman's conclusion consequently is that variations in school quality (as quality has been traditionally defined) are not highly related to variations in achievement of pupils.

This, of course, suggests that our attempts to eliminate inequality of educational opportunity and raise achievement by improving facilities, materials, curriculum, and other physical school characteristics may be an unnecessary and inadequate solution to the problem. What, then, should be the avenue of approach? Coleman's evidence suggests that much of the difference in performance of pupils results from family-to-family differences. Assessing family factors, it was found by Coleman that parental education and the economic level of the family show the greatest relationship to achievement for both whites and blacks at the elementary level, with parental education being of significantly greater importance. It appears, then, that the socioeconomic status of the child and his family would be most highly related to the child's performance in school, and not physical or traditionally manipulable school factors. Given this fact, within any one school the children of high S.E.S. should generally be performing at a higher level than the children of low S.E.S. Similarly, as a rule, if one school has a higher mean level of S.E.S. than does another school, then the former school should have a higher mean level of performance than does the latter school.

#### Problem to Be Explored

Discovering that there is a high positive relationship between S.E.S. and achievement independent of school physical or curricular differences opens up several new channels of

exploration in the quest for understanding why certain children and certain schools as a whole demonstrate higher levels of achievement. Given this relationship, one possible assumption is that differential qualitative socialization occurs at different S.E.S. levels. In a deeper consideration it might be assumed that certain behavioral and cognitive factors are developed in the higher S.E.S. levels, which provide a better basis for meeting the demands or requirements of the formal school situation. Coleman's findings would suggest that certain processes and conditions exist in the higher S.E.S. families which do not exist in the lower S.E.S. families, and that it is these processes and conditions which influence or possibly determine the child's performance level in school. If this assumption is valid, then the immediate task is one of ascertaining what these processes and conditions are. Once these processes and conditions are isolated, then the longer range task becomes one of ascertaining why and how they emerge as they do at the higher S.E.S. levels as a rule, and do not emerge at the lower S.E.S. levels as a rule. Is it necessary that these "success" factors operate only for higher S.E.S. children and not for lower S.E.S. children? If we could isolate these factors and then compare schools which are similar in S.E.S. composition but differ significantly in performance, we could gain insight not only into the question of whether these factors are importantly related to achievement, but also whether they can emerge and operate independent of S.E.S.

Human beings, however, do not operate in a vacuum. Those processes and factors which emerge as a consequence of the child's family interactions cannot and do not operate in a direct one-to-one relationship to determine a child's academic performance in school. This relationship is mediated and modified by the social circumstances or situations in which the child operates. Given this fact, we must ascertain what those factors are in the school setting which support or hinder high academic performance for the students in the school. It has been suggested that much of the performance differences which do exist between schools in various S.E.S. strata are a result of normative climate differences in the school. The hypothesis is that the various normative climates have components which either support or hinder high academic performance for the children who operate within the climate. In a comprehensive study of sociocultural environments by McDill, Meyers, and Rigsby (Sources of Educational Climates in High Schools) it was found that high schools with very high proportions of middle class students generally have high academic norms and high academic achievement, whereas schools composed of very high proportions of lower class students have low academic norms and low achievement. At this point we are actually no closer to a resolution of the question because the high academic norms may simply be an effect of and not a facilitator of high overall achievement, and conversely for low academic norms. The question ultimately becomes one of whether the various components of the

school setting are important in supporting or hindering high academic performance. Are there normative and organizational variables within the school setting which influence a child's performance above and beyond the influence of his family?

To this point we have raised the question of what are the important family and school factors which influence a child's academic performance. A third and final situational consideration would have to be that of the community in which the family and school are located. Are there any community factors which exist that may direct and limit the emergence and maintenance of those family and school variables which are found to influence high academic performance? If so, what are these factors and how do they operate?

Extending the problem further, if indeed we find that there are factors in each of the three settings, i.e., family, school, and community, which have an effect upon the performance level of the children individually and the school overall, then the question remains of the interaction of all these factors in producing a particular level of performance. How do these factors operate together and independently to produce a particular performance effect for individual children and for the whole school? What combinations of these variables maximize the condition for high performance and conversely, what combinations minimize the condition for high performance?

Retracing our thought somewhat, if indeed high academic performance is a result of certain specifiable processes and conditions, then wherever we find these processes and conditions operating and existing, there should be high academic achievement there also. In other words, if these are the true factors influencing high achievement, then they should be present wherever high achievement is found, regardless of the S.E.S. level of the family or the school. The next logical question, then, is why these processes and conditions exist at the higher S.E.S. levels as a rule and not at the lower S.E.S. levels. What are the constraints which exist to hinder the emergence of these factors at the lower S.E.S. levels, and conversely, what are the circumstances which exist to facilitate the emergence of these factors at the higher S.E.S. levels?

In summary, the questions to be explored in this study are as follows: What are some of the more important processes and conditions which facilitate high academic performance? What effect do certain school and community factors have on these processes and conditions? What are these important normative and organizational school and community factors? Do those processes and conditions which produce or hinder high achievement operate similarly at all S.E.S. levels? What are the constraints which exist to generally hinder the emergence of these processes and conditions at the lower S.E.S. levels, and what are the circumstances which exist to facilitate the emergence of these factors at

the higher S.E.S. levels? Finally, although Coleman has provided evidence that most of the variance in achievement is accounted for by within school differences and not by between school differences, is it not possible that the factors which produce large achievement differences within schools are the same factors which produce differences between schools? This is ultimately the question with which we are interested. Coleman suggests that such tangible factors as facilities are unimportant. Rather, he cites attitudinal variables as being the crucial factors affecting achievement. Therefore, schools which demonstrate a higher level of these variables, and which have incorporated them into their normative system, should demonstrate higher levels of achievement. It is this question which will be tested directly.

#### Significance of the Research

This study has both important theoretical and substantive or applied significance. Its theoretical importance can be found in the attempt to test several basic propositions derived from the rapidly developing and important theory of expectations. In addition, however, the attempt is made to expand this theory by specifying logically and analytically the impact of expectations on a number of important intervening and dependent variables. Also, in the same logical and analytical context, certain conditions under

which the emergence and maintenance of high expectations would occur are specified.

The final theoretical importance lies in the attempt to logically interrelate in a deductive axiomatic system, the factors and supporting conditions which produce a high achieving student and a high achieving student body. In this endeavor, the claim is not and will not be made that we have exhausted or incorporated all the possible explanatory variables for achievement. Rather, the claim is made that given this holistic axiomatic approach to the question of explaining achievement in school, we can better assess the total operation of the academic social system, and consequently have a stronger basis for introducing new axioms into the system at a later point in time, and also for eliminating other axioms which are not contributing to the explanation. Finally, such a formulation allows us to derive unanticipated theorems which may add to the explanatory power of the theory.

In the substantive or applied contributions of this study it is necessary to consider the implications of meaningful results on the manipulation of school, community, and family social climates so as to improve academic performance. If we can successfully isolate some of the major processes and conditions which affect high achievement in elementary schools, then we are one step further in our knowledge of what to and what not to concentrate on in improving low achieving schools. If we can answer or at least approach an

1

answer to the question of what circumstances facilitate or constrain the emergence of these major processes and conditions, then we know where to begin our improvement attempts, and where our future research investigations should be concentrated.

## CHAPTER II

### RESEARCH DESIGN AND METHODS

#### Introduction

One of the major problems existing for field researchers in the area of education is the nonexistence and unavailability of uniform data on S.E.S. and achievement of schools. Without such available data the task of even approaching some degree of control over major variables is immense, if not impossible. McDill and his colleagues (Sources of Educational Climates in High Schools) were faced with a similar difficulty in their original research design. Their plan was to obtain national uniform data on I.Q., socioeconomic background, and achievement. They assumed that if they could control the input factors of I.Q. and S.E.S., and vary achievement scores for the schools, then they would have a more adequate basis for investigating the impact of the educational and social climates of the schools on achievement. Unfortunately, the information which they sought from various sources was either nonexistent or in one case was refused to them because of the agency's guarantee of confidentiality given to each participating school. Consequently, it was necessary for them to abandon their original design and utilize another, less precise, design.

In the case of the research problem to be considered in the present study, it was our belief that the questions that we were raising, and the data which we had to obtain in order to answer these questions, would similarly necessitate a more controlled analysis than has often times been characteristic of survey research. It was necessary for us to control for the racial composition of the schools so as not to confound the impact of S.E.S. with any potential effects occurring primarily as a consequence of racial factors. It was necessary for us to control as well as possible for S.E.S. of the schools so that we could more accurately assess the impact of our hypothesized independent variables on achievement. Third, we had to have uniform data on achievement in order to maximize the probability that the effects of the independent variables on the dependent variable of achievement were comparable across schools and not simply a result of different test emphasis.

Certainly, the use of the term "control" in field research does not and cannot, at present, connote the same degree of precision that it does in experimental settings. For example, while we have seemingly controlled for the S.E.S. level of schools, how can we be certain that the occupations of the parents of the children in one school are not qualitatively different than the occupations of the parents in another school, even though the schools are matched on S.E.S.? Does it make a difference if we have two schools matched identically on S.E.S., but the parents of the children in one

school are generally content to remain at that level, while the parents of the children in the other school are generally upwardly mobile? Such questions may ultimately have to be considered if we wish to maximize the validity of the results we are to obtain in field research. Nevertheless, with no intent to minimize the importance of these considerations, it can be asserted that science is a series of successive approximations to the truth, and the present design does advance the level of approximation above that of most previous research in this area.

## Research Design

### Introduction

The initial attempts to obtain uniform data on achievement and S.E.S. coupled with school racial composition data proved fruitless. We contacted school systems in all parts of the United States requesting that they send us the above information on their elementary schools. We soon discovered that the achievement tests used in various school systems varied considerably. Second, data on S.E.S., when available, were generally district or area income figures.

Our second attempt proved to be as fruitless as the first. We decided that if we could obtain accurate racial composition data, and also if we could investigate only school systems which used the same achievement test, then we would be willing to weaken our S.E.S. control by seeking local "expert opinions" on the S.E.S. comparability of schools.

In order to maximize efficiency we decided to restrict our search to the state of Michigan and personally visit the research offices of each school system which used one type of achievement test. This proved to be useless because of the varied use of tests in Michigan school systems, and also because of the cumbersomeness of trying to find even similar S.E.S. areas.

At this point we were beginning to experience the frustration which McDill and his colleagues must have had in their attempt to acquire such data. Fortunately, we had one last but new option potentially available to us. The state of Michigan, Department of Education, in 1970 began a state-wide assessment program of its elementary schools. The data which they were obtaining were precisely those which we were looking for. Every elementary school in the state of Michigan was to be given a standardized achievement test plus a battery of questions designed to tap S.E.S., in addition to other data. After several weeks of negotiations they agreed to provide us with a computer tape on which all the data obtained for each school in the state were stored. In addition, they were willing to sponsor us in our attempts to gain entry into the selected schools. Their assistance and cooperation has been invaluable in this project.

#### Presentation of Design

With the assistance of Applications Programming Service at Michigan State University, we rearranged the data

on print outs so that all the elementary schools in Michigan were listed from lowest S.E.S. to highest S.E.S. Along with this information was the name of the school, the district and county in which it was located, the racial composition of the school (per cent black), and the composite achievement score for the school. We then proceeded to stratify the population into four S.E.S. categories (moderately high S.E.S., average S.E.S., moderately low S.E.S., and low S.E.S.). We then further subdivided each of these categories into predominately white (80 per cent or more) or predominately black (80 per cent or more). That part of the study considered in this research report deals only with the predominately white schools. Once the white population was stratified on S.E.S., we divided each S.E.S. category into high achieving and low achieving schools, and then proceeded to select schools in each division, as indicated in Table 1.

TABLE 1.--Classification of schools for sample selection.

S.E.S.	High Mean Achievement	Low Mean Achievement
Mod. High	2 schools	2 schools
Average	1 school	1 school
Mod. Low	1 school	1 school
Low	1 school	1 school

S.E.S. Index

The index of S.E.S. used in this study for the purpose of identifying schools was developed by the State Assessment Board, Michigan Department of Education. It is based primarily on an assessment of certain material acquisitions and life style factors which are characteristically associated with different socioeconomic levels in the United States. As with any S.E.S. index, there was some negative criticism leveled at a few of the items in terms of their discriminatory usefulness. For example, one item asked the question: "How many cars does your family have?" This, of course, often does not discriminate between higher and lower S.E.S. levels because as a black principal pointed out to me, "Many black families will have three or more cars in their yard, but if more than one is any better than junk they are doing well." Most of the other items used do, however, appear to discriminate well. Given the lack of any other S.E.S. data, we were required to place cautious faith in this unrecognized index. As a crude check on the validity of this index, we employed several methods. For each of the schools which were selected we spoke with key personnel in the school service area, such as the principal, teachers, research analysts, and so on, to inquire on such questions as income level and occupations in the area plus the homogeneity of such in the area. In addition, we would find out the school boundaries and drive through the total area in the attempt to find cues as to whether the school area that it is matched with is

radically dissimilar in S.E.S. As a post-hoc check we decided to incorporate an item in the student questionnaire which tapped the father's (or principal wage earner's) occupation. (See Appendix, item No. 8, Student Questionnaire.) We then scored this by using Duncan's occupational index (see Reiss, Albert J., Occupations and Social Status, 1962, p. 263). Our belief was that we could never identically match schools on objective S.E.S., but if we could match them identically on the State Assessment's index, then perhaps we would minimize the discrepancy which actually exists. The Duncan check was used as an index of confidence for us; i.e., if two indices were very similar, then perhaps we are not too far off in the objective. The comparability of the two can be seen in Table 2.

TABLE 2.--Vital information on sample schools.

	S.E.S. State Assessment	S.E.S. Duncan	Mean Achievement	% White	Sample n.
1 H <sup>a</sup>	55.1 <sup>b</sup>	50.5 <sup>b</sup>	59.6 <sup>c</sup>	85.0	140
1 L <sup>a</sup>	55.2	41.6	48.1	100.0	173
2 H	54.4	51.8	58.2	98.2	244
2 L	55.0	48.7	47.8	100.0	202
3 H	50.1	50.2	58.0	99.6	67
3 L	49.4	30.0	43.6	93.5	88
4 H	46.6	36.5	55.1	99.4	151
4 L	46.8	29.0	43.7	97.8	81
5 H	43.2	32.4	56.7	98.2	104
5 L	44.9	26.0	44.6	99.5	69

<sup>a</sup>The symbols "H" and "L" refer to the higher and lower achieving schools in the pair, respectively.

<sup>b</sup>The higher the score, the higher the S.E.S.

<sup>c</sup>The higher the score, the higher the achievement.

Despite our careful attempts to match the two schools on the State Assessment's S.E.S. criterion, in all cases the S.E.S. discrepancy widened between the matched schools. In one case there was a great discrepancy between S.E.S. scores (schools 3H and 3L). How this discrepancy affects our control of S.E.S. is uncertain. The Duncan scale is strictly an indicator of income and education found in certain occupations, while the State Assessment index directly assesses the education of the individual plus a number of other factors, such as life style and uses made of income. What significance this would have on the performance of children in the school is uncertain. However, an unplanned investigation of the relationship between occupational types and certain important achievement-related variables used in this study is warranted. The immediate question, however, is whether these matched schools differ enough on S.E.S. to warrant the conclusion that they are not justifiably comparable. We decided to proceed cautiously on the assumption they are comparable for three reasons. The first is that the Duncan scale has a much greater range of scores than does the State Assessment's scale. The Duncan scale can range from a score of 2 to 96 for individuals, and in our study the range of the mean school scores is from 26.0 to 51.8, a difference of 25.8 points. The State S.E.S. index had a statewide range in 1969 from approximately 39 to 69, and in our study the range of the mean school scores is from 43.0 to 55.2, a difference of 12.2 points. This is easily half the range of the Duncan scale

for the same schools. This fact could tend to maximize slight differences between schools, without any reason to believe that this is a reflection of greater sensitivity of the Duncan scale. Second, the question of what S.E.S. correlates are most responsible for the stimulation of high achievement factors is uncertain. Education of parents should indeed be an important correlate of S.E.S. as S.E.S. relates to performance in school. This should hold true not only from the standpoint of the child modeling his parents, but also from the potential favorable bias which teachers might impart to children of more highly educated parents. In this respect, then, if we can assume adequate reporting on the part of students, both scales include an assessment of male education, whereas the State Assessment index assesses both mother (female) and father (male) education.

A second consideration is the income factor in S.E.S. The Duncan scale directly assesses income for an occupation, whereas the State Assessment index indirectly assesses income by obtaining data on what people buy with their money. In this scale, we can therefore also assess life style to a certain degree.

A major consideration in deciding which scale is most adequate to the problem at hand is that of how the scales are constructed. The State Assessment includes questions on education, indirectly on income, and also on life style. These questions are asked of individuals. The Duncan scale, on the other hand, asks for a person's occupation and assigns

an S.E.S. score to the occupation and consequently to the individual. A major problem with this is that income and education figures on occupations are based on the 1950 census. Considerable change in both the amount of education and income associated with an occupation may have occurred in the 22 years since then. Duncan indicates that although the scale was reliable over short testings, "over a long period of time . . . it probably will be subject to serious obsolescence (Reiss, p. 146).

A second difficulty exists in the assessment of an individual's income and education by assigning a constant figure to all individuals who are in an occupation. The problem with this is that there is too much variation within occupational categories. Duncan himself points out that "individual measures of income and education do not correlate very highly with occupational socioeconomic status" (Reiss, pp. 143-144). For example, the large discrepancy between schools 3H and 3L on the two scales may be a reflection of this difficulty. Both schools are in small towns (not suburbs) located outside of a larger population concentration. The school represented by 3H had a large concentration of technically trained fathers who were teaching at a nearby technically oriented college. These fathers had to be scored as college professors on the Duncan scale, even though their education and income were probably much lower than the norm for that occupation. Therefore, it is likely that the State Assessment index was much more sensitive to this fact.

It seems very possible that the discrepancies which exist between schools on the Duncan scale may be at least partially produced by the shifting basis on the amount of income and education existing for specific occupations and by the lack of sensitivity which the Duncan scale has for variation within occupations. Given such considerations, how can we be sure which S.E.S. scale taps those dimensions best which affect achievement? One way would be to correlate each scale with the same achievement index. This, however, is not possible in this study because we would need occupation data from every school in the state. Finally, a Pearsonian zero correlation between the indices results in an  $r$  of .80 which is significant at alpha of .005.

#### Achievement Index

The index of achievement used in this study was developed by a team of measurement psychologists from the Michigan State Assessment Board. The index is a composite score of three separate achievement tests, i.e., reading, English expression, and arithmetic. The same identical tests were administered to the children in all the elementary schools in Michigan. The comparison of the matched schools on this composite achievement score can be seen in Table 2. The range of the mean achievement scores for schools in the state of Michigan is from approximately 41.0 to 63.0. The results seen in Table 2 represent highly significant achievement differences ( $p < .001$ ) between the schools in each match-up.

### Racial Composition

Information on the racial composition of the schools in terms of per cent black and white was compiled from school records and recorded along with the other data by the State Assessment Board. It was mentioned earlier that all of the schools had to be 80 per cent or more white. The final figures on this are presented in Table 2.

### Discussion of Sample Population

The question of what students we should collect data from became a problem. The data on S.E.S. and achievement had been obtained from the previous year's fourth grade classes. Consequently, it was obvious enough that we needed data from that same group, which would be the current year's fifth grade class. However, there were several other factors which had to be considered. We needed a larger sample than just the fifth grades; we needed a check on whether the fifth grade was representative of the remaining school population; we needed a student sample which could read the same questionnaire; and we wanted students who had potentially been in the school long enough so that any environmental factors which may be operating in the school would have had a chance to "show up" in the students' responses. Consequently, we decided to collect data from the fourth, fifth, and sixth grade classes. These three grades in any one school appeared to us to fulfill all the necessary requirements. Finally, we decided to obtain data from each and every class in these

three grades regardless of the number of classes and the size of the school. This was the only feasible alternative we could think of to eliminate the possibility of the principal sending us to just the "better" classes, or of eliminating the possibility of biasing our sample by randomly selecting ability-grouped classes.

Data were also obtained from every fourth, fifth, and sixth grade teacher in each school. In addition, the principal of each school was interviewed. The size of the samples in each school can be seen in Table 2.

### Research Instruments

#### Development and Pretest

Preliminary work on instrument development began in the summer of 1969. Our intention from the beginning was to develop three separate yet interrelated questionnaires, one for the students, one for the teachers, and an interview schedule for the principal. By "interrelated" I mean that a core of the same (or similar) questions were asked of the members of all three groups. This allows us to determine the consistency of reports and perceptions of the school environment across all groups. By "interrelated" I also mean that from one group we would receive attitudes and beliefs and from another group we would receive the perceptions of these attitudes and beliefs.

An inventory of the variables on which we wished to obtain data was developed. These variables were arrived at

from two sources. Either they were part of an existing theory or orientation which we wished to expand on or test propositions from, or they were variables which recent research has demonstrated to be important in relationship to academic achievement. A third source would be our own curiosity. There are a few variables considered on which there is very little or at best confusing or conflicting data. Our own curiosity as to how these variables operate provided a stimulus to incorporate a few of these as an exploratory aspect of the study.

Preliminary questionnaires were developed and evaluated by our staff. We then pretested the student questionnaire on approximately 200 third through sixth grade students. Our attention was primarily focused on awkward sentence construction, difficult words, total comprehension, and length of administration. The teacher, principal, and student questionnaires were evaluated by approximately 50 experienced teachers and principals in a combined session. These teachers and principals were particularly helpful in eliminating potential areas of ambiguity and in imbedding our items in terms which have meaning to educators.

### Pilot Study

With this preliminary work completed, we arranged a pilot study on six schools in Pontiac, Michigan. Because we did not yet have access to the necessary data for setting up the schools in the intended research design, we were forced

to use the cruder method of inspection and questioning to match schools on S.E.S. Fortunately, our subsequent interpretation of the parental occupation data by use of the Duncan scale demonstrated that this crude method was adequate in matching the schools.

Our second initial problem in the pilot study was finding schools which were significantly different in achievement, though similar in S.E.S. Efficiency and expense convinced us that we should restrict our choice of schools to one area, and consequently we would not have the more precise match-ups that we would have in the final study. Nevertheless, the match-ups were sufficient for us to proceed cautiously on a check of which items were not discriminating between high and low achieving schools.

On the basis of our pilot study, a few items were eliminated when it was determined that such data could not be accurately or efficiently obtained from elementary children. For example, only 40 per cent of the children were able or willing to report their father's level of education, and 57 per cent were able to report their mother's education. This indicates nothing about the accuracy of their reporting.

In addition, several items were found to be ambiguous or somewhat misleading, despite our careful attempts to guard for this. These items plus any additional items which were not sufficiently discriminating were again subjected to a careful analysis to determine why. In most instances we decided that the phrasing of the question was causing the

the problem and thus we concentrated on correcting this by simplifying the sentence. This, of course, is not always easy to do, given the obvious need to retain the intended meaning. Nevertheless, even with this extensive preliminary work, there are several items on the student and teacher questionnaires which we suspect were sufficiently ambiguous (after the final study) so as to lend serious doubt to their usefulness. We have chosen the safe route and eliminated these items from consideration in our final analysis.

#### Definition and Operationalizing of Variables

The variables on which data were collected will now be presented. The procedure will be to state the variable, define it or present its intended meaning, and then show how it was operationalized or indicated. The parentheses preceding the item indicate which questionnaire it is from and the item number in that questionnaire. For the response options on each item, please see the Appendix.

Socio-Economic Status (S.E.S.): The ranked position of a person in society on the basis of prestige, power, and property (income).

The means by which this was indicated for purposes of the Michigan State Assessment was discussed earlier. As a check on the assessment's indicator, we included the following item on occupation and scored it using the Duncan scale (Reiss, Occupations and Social Status, p. 263).

(Student: item No. 8) "If your father does not live with you or if he is not alive, please answer this question

for the person in your house who makes the most money."

"What type of work does your father do?" (Give a short description of his job.)

**Academic Achievement:** The level of performance which a child has demonstrated in academic subjects.

The criteria by which this was determined were discussed earlier in the chapter. However, as a summary, we used a composite score of reading, English expression, and arithmetic, each of which was indicated by a standardized test developed by the Michigan State Assessment Board. A composite score was developed for each pupil in the fourth grade in 1969-70. The mean score of each fourth grade was used as an indicator of the school's academic achievement level.

**Evaluation of Student's Academic Ability:** A subjective evaluation of the academic capability of the students in a school.

(Teacher: item No. 22) "How many of the students in this school are capable of getting mostly A's and B's?"

(Teacher: item No. 24) "How would you rate the academic ability of the students in this school compared to other schools?"

(Principal: item No. 26) "How many of the students in this school are capable of getting good grades?"

(Principal: item No. 27) "How would you rate the academic ability of the students in this school compared to other schools?"

Actual Academic Expectations for Students: The level of academic performance which is believed to be normal and probable of occurring for the students in a school.

(Teacher: item No. 14) "On the average, what level of achievement can be expected of the students in this school?"

(Teacher: item No. 18) "What per cent of the students in this school do you expect to attend college?"

(Principal: item No. 22) "On the average, what achievement level can be expected of the students in this school?"

(Principal: item No. 24) "What per cent of the students in this school do you expect to attend college?"

Perceived Academic Expectations: The level of academic performance which a student perceives "others" believe to be normal and probable for him.

(Student: item No. 57) "How far do you think the teacher you like the best believes you will go in school?"

(Student: item No. 64) "How far do you think your parents believe you will go in school?"

(Student: item No. 74) "How many of the students in this school do you think the principal believes will go to college?"

Climate of Academic Expectations: The level of academic performance which is believed to be normal and probable of occurring in general for the students in a school.

This variable is indicated by using the mean score of students on perceived teacher, perceived parent, and perceived principal expectations.

Academic Aspiration Level: The level of education which a student desires to obtain.

(Student: item No. 9) "If you could go as far as you wanted in school, how far would you like to go?"

Importance of Self-Identity (Role) Student: The degree to which an individual perceives his performance of the role of student as being necessary for the maintenance of his self-esteem.

(Student: item No. 15) "If the teacher that you like the best told you that you were a poor student how would you feel?"

(Student: item No. 16) "How important is it to you to be a good student?"

(Student: item No. 17) "If your parents told you that you were a poor student, how would you feel?"

(Student: item No. 18) "If your best friend told you that you were a poor student, how would you feel?"

Sense of Control: The feeling which an individual has as to the degree to which he is a helpless victim in the circumstances in which he operates; or how much he can control the circumstances which affect him.

(Student: item No. 26) "People like me will not have much of a chance to do what we want to in life."

(Student: item No. 27) "People like me will never do well in school even though we try hard."

(Student: item No. 28) "I can do well in school if I work hard."

(Student: Item No. 29) "In this school, students like me don't have any luck."

(Student: item No. 30) "You have to be lucky to get good grades in this school."

Press for Educational Achievement: The degree of future achievement which teachers demand from their students.

(Teacher: item No. 38) "Completion of high school is a realistic goal which you set for what percentage of your students?"

(Teacher: item No. 39) "Completion of college is a realistic goal which you set for what percentage of your students?"

Teacher Job Satisfaction: The degree to which a teacher is pleased with the psychic rewards received by that role.

(Teacher: item No. 29) "How much do you enjoy your teaching responsibilities in this school?"

(Teacher: item No. 30) "If someone were to offer you an interesting and secure nonteaching job for \$1,000 more a year, how seriously would you consider taking the job?"

(Teacher: item No. 31) "If someone were to offer you an interesting and secure nonteaching job for \$3,000 more a year, how seriously would you consider taking the job?"

Stability of the School: The mean number of years that the teachers and principal have been employed in that particular school.

(Teacher: item No. 4) "How long have you taught in this school? (include this year)"

(Principal: item No. 4) "How long have you been the principal in this school? (include this year)"

**Degree of Homogeneous Grouping:** The number of classrooms in a school in which the predominate grouping procedure is that where children of defined similar ability are placed together for purposes of instruction in the core academic areas.

(Teacher: item No. 11) "In general, what grouping procedure is practiced with your class?"

**Press for Individualized Academic Competition:** The degree to which students are encouraged to compete against each other on a one-to-one basis, for the best grades.

(Student: item No. 49) "How many teachers in this school tell students to try and get better grades than their classmates?"

**Stability of the Community:** The mobility rate of the families whose children are enrolled in the school.

(Student: item No. 7) "How many years have you been at this school? (include this year)"

In computing a stability score for each school, it was necessary to consider whether or not a school had a kindergarten attached. The means by which this score was computed was to sum the number of years in attendance of the children in each grade level, and then calculate the average score for each grade level. We then calculated the per cent of one year in attendance by dividing this figure by the possible number of years in attendance. (Thus, the need to consider whether the school had a kindergarten.) We then summed this score across each grade level and divided by the number of grade levels to obtain the average per cent of one year in attendance for the children in each school.

Degree of Community Support for the School: The perception which the teachers have of the degree to which the parents in the community are interested and concerned that the school successfully execute its primary task of educating their children.

(Teacher: item No. 59) "The parents in this school service area regard this school primarily as a 'baby-sitting' agency."

(Teacher: item No. 60) "The parents of this school service area are deeply concerned that their children receive a top quality education."

(Teacher: item No. 62) "How many parents in this school service area expect their children to complete college?"

#### Data Collection

After the appropriate schools were identified, it was necessary to obtain permission to collect data in them. The excessive demands which are being placed on schools to be used as research sites, plus the continuing criticism of educators by outsiders, is making it increasingly difficult to gain access to the schools for research purposes. Fortunately, the Michigan State Board of Education agreed to act as sponsors of our project insofar as they would make the preliminary contacts with the superintendent of each district, and also allow us to use the phrase "Sponsored by Michigan Department of Education and Michigan State University" on our questionnaires. The procedure was to contact the superintendent of the district, receive his (her) approval, and have him contact the school principal; then we would personally

contact the school principal to be assured of his compliance. In most instances we would then visit the school to answer any questions and allay any concerns which the principal, teachers, or parents might have. At this point, arrangements would be made for the date and time of administration.

The data were collected by a well-trained staff of four men in the winter and spring of 1971. Sessions were held with the staff to develop a standardized format of administration and also to sensitize the staff to potential areas of bias. In every instance the administration of the questionnaire to the students was conducted by a staff member. Teachers were cautioned not to walk around the room or answer any questions. While we were administering the student questionnaire, the teacher would be completing his (her) own questionnaire. The principal in every school was interviewed with a standard schedule (see Appendix). In order to maximize uniformity and minimize bias, I interviewed the principal in all of the schools.

Because of the care which we took to seek permission from every level and to thoroughly answer all questions for the schools used in this white sample, we received in most cases full and complete cooperation from superintendents, principals, teachers, and students.

## CHAPTER III

### LITERATURE, PROPOSITIONS, AND THEORY

#### Introduction

A major concern of this study is the effect of differential performance expectations on the academic performance of elementary school children. The fact that differential expectations from "others" have an impact upon the quality of performance of individuals has been well documented (as we shall discuss in detail later). A major concern, however, is how and why these differential expectations emerge, and once they exist, what effect they have upon the attitudes and role performance of participants in the social system.

In order to explore such a question, we must acknowledge the importance of many contributing sources such as the school personnel, students, parents, community, and even the larger society insofar as individuals bring with them certain beliefs and prejudices from the larger society into the specific school social system. In other words, it is our contention that the existing and predominate expectational climate in a school emerges from a number of sources, each of which acts and reacts to the influences of the other. Consequently, in order to approach an understanding of these interrelated interactions it is necessary to consider the

whole system and not just certain isolated segments of it. In this context, then, an axiomatic system of interrelated propositions can best show the relationship of these numerous factors by demonstrating how the variables in the total system are or are not logically related to each other. Given this fact, we are in a more efficient and thus better position to eliminate factors which prove not to be valid either empirically or in their logical connection to other system factors. More importantly, as separate discrete findings of other researchers are noted they can be incorporated into the theory, thus increasing the coordinated efficiency of research in this area. Finally, and perhaps most importantly, such a theoretical formulation allows us to derive theorems (hypotheses to be empirically tested) which may have been unanticipated and consequently may introduce important new insights into the search for knowledge in this area (see Zetterberg, 1966).

As was mentioned earlier, this is not intended to be a definitive work. There are a number of factors which readers may feel should have been included. The inclusion of certain factors into the theory and the exclusion of others is primarily done for efficiency purposes. There must be a beginning point, a point at which a concerted effort is made to coordinate discrete findings into a logical whole. After the explanatory power of the present axiomatic system has been ascertained, and invalid propositions eliminated, then we are at the point where we can

begin to refine the precision of the existing system and add new propositions to it.

#### Foundation of Theory and Basic Propositions

The foundation of the axiomatic system to be presented is in the following three abstract propositions.

The evaluation which P has of Y's ability in a dimension of behavior is positively associated with the performance expectations which P holds for Y in that dimension of behavior.

The performance expectations which P holds for Y in a dimension of behavior are positively associated with the perception which Y has of these expectations.

The perception which Y has of the expectations which are held for him is positively associated with his level of performance in that dimension of behavior.

These three propositions are, of course, out of the symbolic interactionist tradition of George H. Mead and Charles H. Cooley (Mead, Mind, Self, and Society, 1934; also Cooley, Human Nature and the Social Order, 1902).

The first basic proposition postulates a consistency in the mind of the "other" between what he believes someone can do and what he expects that person to do. In other words, if P believes that Y has a great ability as a pianist, then it would be consistent in P's mind if he also expects Y to give a great piano performance. Following the tradition of balance theory (see Brown, Social Psychology, 1965), the two cognitive elements of evaluation of ability on some task and expectations for performance on that task must be linked associatively or consistently with each other or the relationship will be unbalanced. The force to balance these two

cognitive elements will not emerge until the individual is aware or thinks about the relations. Once he has thought about the relationship between the two elements, then if they are unbalanced, there will be a force generated to bring them into balance. In the case of the present context, if P evaluates Y's ability as being high but expects Y to do poorly, then either his evaluation of Y's ability must be lowered to a point which is in balance with the low expectations, or his expectations for Y's performance must be raised to a point which is consistent with the high ability evaluation he gives Y.

Following from this idea, then, is the second basic proposition, which asserts that the actual expectations which are held for a person (Y) by an "other" (P) will be perceived with reasonable accuracy by the person (Y). An interesting point about this basic proposition is that to my knowledge there are few studies which have attempted to demonstrate this empirically. While there are literally scores of studies showing the relationship between differentially perceived expectations and some dependent performance variable, the attempt to show an empirical relationship between actual expectations by an "ego," is conspicuously missing from the literature. Perhaps the relationship is such an obvious one, or believed to be of so little importance, that researchers have just not wanted to waste time and money in investigating it. On the other hand, it may be of much greater importance than is thought. What if it is not the actual expectations

of "others" which affect an individual's performance, but rather some other factors which happen to coexist with expectations, such as warmth of demeanor (or lack of), and so on.

Although evaluations are not quite the same as expectations, in many instances we can assume that evaluations of a person on some dimension will generalize into an expectation of performance in that dimension. Miyamoto and Dornbusch (1965) in their classic study demonstrate a positive relationship between the actual evaluations of "others" and an individual's self-evaluation. They also show a positive relationship between the perceived evaluations of "others" and self-evaluations. In this study it is pointed out that the relationship between perceived evaluations and self-evaluations is stronger than the relationship between actual evaluations and self-evaluations. This still, however, leaves open the question of the primary relationship between actual and perceived. Videbeck (Sociometry, 1960) attempted to experimentally vary the reactions of others to see how it affects the self-evaluations of subjects. Prior to and after the experimental treatment he received self-evaluation scores from the subjects. His findings support the view that self-evaluations are learned as a result of interaction with others. Nevertheless, this is still indirect evidence of the relationship of which we are concerned.

It appears as though we must (at least temporarily) accept the assumption of researchers regarding the relationship between actual and perceived expectations. Subjects do

indicate a perception of evaluations or expectations from "others." While it is entirely possible that one's perception of others' evaluations and expectations can be totally incorrect, a more likely situation is one where there is a high relationship but not a perfect one because of such factors as competing evaluators, differential credibility of evaluators, defensive reactions to low evaluations and expectations, and so on.

The final basic proposition asserts a positive relationship between perceived expectations and performance of the subject in the dimension for which the expectations are held. The classic study reported by Roethlisberger and Dickson (Management and the Worker, 1939) coined the term "Hawthorne Effect" to label their finding that people who feel (perceive) that they have been especially selected (expected) to show an effect will tend to show it. Another classic case of this is reported by Guthrie (1938) of a shy and socially withdrawn college girl who was selected by some college men to be the object of a systematic attempt to change her behavior by relating to her in a way which indicated an expectation to be socially outgoing and adept. The girl's behavior changed in the direction anticipated by the expectations presented. Brookover and his associates (1967) report high positive correlations between grade point averages of high school students and the student's perceived parent's evaluations (a scale which includes several perceived expectation questions). He also reports a significantly positive

relationship between perceived teacher's and perceived friend's evaluations and grade point average.

There is little question that the effect of differential expectations on a person's behavior depends upon a number of factors. The most important factor is the relationship of the "other," or individual whose expectations are being perceived, to the recipient of the expectations or the perceiver. Not all "others" are important or "significant others." It appears as though the greatest effect of perceived expectations upon behavior occurs when the "other" is significant or important to the actor. A major question is what characteristics of an "other" make him "significant" in influencing behavior. Unfortunately, there is no conclusive evidence on this (see Webster, 1969). In the past, the most predominant way of assessing these "significant others" was to ask the subjects questions which indicate them. In the academic area, Brookover, et al. (1967) have found that "parents," "teachers," and "best friends" seem to be high choices, particularly in the lower grade levels. It is for this reason that we concentrate primarily on parental and teacher expectations in this study.

These three basic and abstract propositions which have been presented and evaluated can now be reformulated in a more specific and testable fashion. They provide the basis for the following research propositions and hypotheses, which will be the first to be presented in the development of the theory.

- Proposition 1: The evaluation which the teachers in a school have of the students' academic ability is positively associated with the academic expectations which the teachers hold for the students.
- Proposition 2: The evaluations which the principal in a school has of the students' academic ability is positively associated with the academic expectations which the principal holds for the students.
- Proposition 3: The academic expectations which the teachers in a school hold for the students is positively associated with the perception which the students have of these expectations.
- Proposition 4: The academic expectations which the principal in a school holds for the students is positively associated with the perception which the students have of these expectations.
- Proposition 5: The perception which the students in a school have of the academic expectations held for them (teacher, principal, and parent) is positively associated with the academic achievement of the students.
- Hypothesis 1: If the teachers in school H have higher evaluations of their students' academic ability than do the teachers in school L of their students, then the teachers in school H will hold higher academic expectations for their students than will the teachers in school L for their students.
- Hypothesis 2: If the principal in school H has higher evaluations of his students' academic ability than does the principal in school L of his students, then the principal in H will hold higher academic expectations for his students than will the principal in school L for his students.
- Hypothesis 3: If the teachers in school H hold higher academic expectations for their students than do the teachers in school L for their students, then the students in school H will perceive higher teacher academic expectations for self than will the students in school L.

- Hypothesis 4: If the principal in school H holds higher academic expectations for his students than does the principal in school L for his students, then the students in school H will perceive higher principal academic expectations for self than will the students in school L.
- Hypothesis 5: If the students in school H perceive higher academic expectations for themselves than do the students in school L for themselves, then the academic achievement of the students in school H will be higher than the academic achievement of the students in school L.

#### Effect Propositions

In this next section the consideration will focus on some of the effects of differential expectations on the school climate and on the students. The first proposition and hypothesis presented deal with academic aspirations.

- Proposition 6: The climate of academic expectations for the students in a school is positively associated with the academic aspiration level held by the students.
- Hypothesis 6: If the academic expectation climate in school H is higher than the academic expectation climate in school L, then the students in school H will have a higher academic aspiration level than will the students in school L.

Behavioral expectations are functionally limiting, in that they establish a performance norm. Once an expectation level is set it serves to define the minimum and indeed also the maximum level of acceptable performance. Apparently the attempt to deviate very far from the expectation either way can be costly in terms of time and energy for the individual. A person who does not perform well enough to approach the acceptable range of deviation from the expectation must

confront the negative reactions and loss of social approval from others. A person who performs much better than the expectation range oftentimes can be the target of antagonism for violating the normative expectation. A task performed much better than expected by an individual can sometimes be threatening to the expector, in that it violates the expector's beliefs about the individual. A performance significantly better than expected essentially communicates to the expector that he is incapable of making accurate evaluations. Consequently, one possible reaction is to try to bring the individual's performance level in line with the expectations held.

In the case of aspirations, this idea would seem to work even better than the situation where readjustment in expectations could occur as a consequence of immediate and irrefutable performance on a task. Expectations for short-range performance also have long-range latent implications, in that a person who is the object of low expectations for short-range performance generally will not aspire to long-range success in that area. It is foolish for an individual to invest time, energy, and self-esteem in aspiring for some high goal in a dimension of behavior in which he has been defined as being inadequate and not likely to succeed. There is another factor involved here also, in that certain aspirations may be out of the frame of legitimate reference for certain "types" of people. In other words, these aspirations or levels of aspirations may be defined as inappropriate or unnecessary for certain "types" and as a result the

short-range expectations in that particular area of aspirations may be ambiguous, ambivalent, or low for these people. For example, Herriott (1963) points out that boys have higher educational aspirations than girls; that children of well-educated parents have higher educational aspirations than children of poorly educated parents; that children of high income families have higher educational aspirations than children of low income families. The major question is, of course, why should this be so? What factors intervene between social, economic, and intellectual characteristics, and one's educational plans?

Gross, Mason, and McEachern (1958) approach this question of aspirations from role theory. The basic idea they present is that individuals who have certain social identities or occupy certain social positions behave with reference to the appropriate expectations for that position or identity. The major point here is that the appropriate role defined expectations direct an individual's aspiration level. If role theory provided the total answer, then we would certainly find a high positive relationship between expectations and aspirations, but on the other hand we should find very little, if any, difference on expectations and aspirations between our schools matched on S.E.S.

While restrictive expectations are imbedded in every socially defined role or position, they are not irrevocably fixed in that position. It seems plausible to assume that there are constraints operating to keep the actual expectations

in reasonable conjunction with the commonly recognized role expectations. Nevertheless, given certain organizational conditions there is no reason to believe that the actual expectations cannot deviate pervasively from the commonly recognized role or positional expectations. This is something which we hope to provide evidence for in this study. Before this can be done, however, the basic relationship between expectations and aspirations must be demonstrated. Herriott (1963) was interested in this particular question. He postulated that a basic influence on an individual's level of educational aspiration is the level of expectations which he perceives significant others hold for his behavior or performance in that dimension. He correlated aspirations with the perceived expectations of a number of "others" including teachers, friend, and parents. In all instances the Pearson correlation coefficient was significant at an alpha level of .001.

The next proposition is somewhat difficult to explicate. It rests on the intuitively appealing assumption that if individuals achieve success in a reasonably salient behavioral dimension, then that behavioral dimension (role) will be important for the individual as a means of self-esteem maintenance and enhancement. A better statement would be: The better the performance, the more the individual will stress the role as a means of self-esteem maintenance. One major problem here is the fact that individuals receive definitions of what roles are important by virtue of what roles

others tell them are important. Essentially, then, a role could be important for an individual as a means of self-esteem enhancement, but the individual could still be performing poorly in it. It is contended here, however, that the role will increase in importance as a function of the increase in role performance success. The proposition is as follows:

**Proposition 7:** The level of student academic achievement in a school is positively associated with the importance which students attach to their self-identity (role) student.

An implicit assumption in such a formulation is that the basis for accepting the student role as important occurs in early socialization. By this I do not mean that all parents communicate the importance of the student role to their children at an equal level. This would be absurd. Rather, the assumption is that most parents communicate some positive attitudes to their children about the student role. They do not denigrate the role from the beginning, but rather emphasize to a greater or lesser degree that the role is important. Given this assumption, then, we have a minimal foundation for the development and maintenance of the student role as an important one for self-identification and investment. Glasser (1969) points out that on the basis of his psychiatric work with elementary and high school students, he has found that lack of success in school leads to psychological withdrawal from the student role--a lack of involvement. On the other hand, Blau (1964) speaks of the relationship

between rewards and investments in a role by indicating that rewards received constitute returns for investments made and serve as incentives for greater investments. Extending this point, then, the greater the investments made, the greater will be the commitment (see also Stogdill, 1959; and Katz and Kahn, 1966).

There are several qualifications which must necessarily be made here. The first is the assumption that success on achievement tests constitutes a realistic indicator of rewards received. If success on achievement tests indicates the operation of other rewards in the everyday classroom and home situation, such as positive verbal approval for task success, then perhaps it can be a reasonable indicator. A second problem is the possibility that the student role will not increase in importance because of the diminishing value of the rewards given. If we interpret Homan's ideas of exchange somewhat loosely (1950, 1961), we note that one proposition says, "The more often a man in the recent past received a rewarding activity from another, the less valuable any further unit of that activity becomes to him and therefore . . . the less often he will emit the activity that gets him the reward." (1961, p. 55). In this context, then, as the student role is mastered and the individual is satiated by the rewards received, will the activity decline in expressed importance if the nature of the task and the rewards received do not change.

Summarizing the discussion, then (and hopefully not oversimplifying it), it seems reasonably plausible to assume that as success in an activity increases (as indicated by rewards received) the importance of that activity as a means of positive self-identification will increase up to some point of satiation. The implication is, of course, that the greater the importance of the role for self-esteem maintenance, the greater will be the investment of time and energy to maintain or increase that success. The process appears to be a reciprocal one with Theorem I specifying the activator. Proposition 7 generates the following hypothesis and theorems:

**Hypothesis 7:** If the level of student academic achievement is higher in school H than in school L, then the students in school H will attach greater importance to their self-identity (role) of student than will the students in school L.

**Theorem I:** The perception which the students in a school have of the academic expectations held for them is positively associated with the importance which the students attach to their self-identity (role) of student--(from Propositions 5 and 7).

**Theorem II:** If the students in school H have higher perceived academic expectations than do the students in school L, then the students in school H will attach a greater importance to their self-identity of student than will the students in school L--(from Hypotheses 5 and 7).

In their work on Equality of Educational Opportunity, Coleman and his associates (1966) increased the visibility and application of a concept called "sense-of-control." They found that the feeling that one had control over one's circumstances was positively associated with achievement in school. This relationship was particularly visible for

minority students. In addition, they discovered that "sense of control," and also "interest in learning and reading" and "self-concept" showed the strongest relation to achievement at all grade levels tested--stronger than all measures of family background and all school variables. These three attitudinal variables account for more of the variation in achievement than any other set of variables. Other researchers have similarly found the existence of a low sense of control among categories of children who typically do poorly in school. Battle and Rotter (1963) found that lower class children see themselves as more externally controlled and less capable of determining what will happen to them than middle-class children. Haggstrom (1964) and also Clark (1965) separately arrived at the conclusion that poverty and minority group status may produce a feeling of powerlessness, a feeling of a lack of control over one's fate.

Why should this feeling of having control over one's environment be so highly related to performance in school? There are several possible suggestions which might be offered. The first is the possibility of children being forced to act and perform in an environment where the values and goals which are defined as important by the organization have not been internalized as important values and goals by the individual. Second, even if the values and goals have been internalized and accepted as important and legitimate, there may be a lack of knowledge or learned skills on how to effectively attain these goals. Such a situation can lead to a sense of futility,

of frustration, when repeated attempts have met with failure. These ideas are not particularly new in the literature, but their implications are only now coming to be fully recognized and appreciated. Kurt Lewin and his associates (1944) pointed out that the experiencing of psychological success or failure is a major factor in determining one's self-esteem, involvement in learning, commitment to role performance, and level of aspiration. Relating this to the ideas which we have just discussed, they point out that the feelings of psychological success (sense of control?) are very much dependent upon three factors: (1) How well the person is able to define his own goals, (2) The degree to which the goals are related to his central needs and values, and (3) The realization that the achievement of these goals represents a realistic level of aspiration for himself.

If we apply these points to the child's success in school, we can appreciate the necessity that the child's family and peer socialization stress the values and goals which are reflected in the white middle-class schools, and also reward successful attempts at achieving tasks relevant to these values and goals. I stress the importance of family and peer influence in instilling these values and goals, and in allowing the child practice in achieving at relevant tasks, because the schools have traditionally not been flexible in allowing individual children the opportunity to define their own important goals, nor does it seem likely that the schools can do this for several reasons. Practically all schools, even

minority schools, reflect in hundreds of subtle ways the dominant achievement themes of middle-class society. All schools reflect the middle-class criteria of what are the legitimate and important "sought after things in life" and also the definitions of what are the appropriate behaviors or characteristics which must be exhibited to provide one the right to lay claim to such. This is reflected in the teachers who are a product of middle-class dominated colleges and universities; it is reflected in the curriculum and material presented to the children; and it is reflected in the state boards of education, the local boards of education, and the numerous administrators who have such an important and strong influence on what will occur in the schools. Therefore, it seems likely that a child who enters school without the internalization and acceptance of goals and means which are similar to those of the school will have a difficult time in adapting.

Ideas similar to this have been recognized in the literature in work and organization (see Argyris, 1964; and Katz and Kahn, 1966). These studies have found that workers who experience psychological failure are characterized by lack of involvement or commitment to what they are doing, high absenteeism and turnover, aggression against those responsible, lower aspiration and alienation, among others. These ideas lead to the following proposition and hypothesis:

**Proposition 8:** The level of student academic achievement in a school is positively associated with the sense of control which the students feel they have over their life space.

**Hypothesis 8:** If the level of student academic achievement is higher in school H than in school L, then the students in school H will have a greater sense of control over their life space than will the students in school L.

**Theorem III:** The perception which the students in a school have of the academic expectations held for them is positively associated with the sense of control which the students feel they have over their life space--(from Propositions 5 and 8).

**Theorem IV:** If the students in school H have higher perceived academic expectations held for them than do the students in school L, then the students in school H will have a greater sense of control over their life space than will the students in school L--(from Hypotheses 5 and 8).

Although we do have some evidence to support the assertion that higher expectations yield higher performance in a seemingly cause-effect relationship (Rosenthal and Jacobson, 1968), we still have little knowledge concerning the actual behavioral and cognitive processes that mediate the relationship. What occurs in the behavior of the expector once a level of expectations has been accepted as legitimate for another? Are there different types of behaviors which are exhibited by the expector as a consequence of different expectations? If there are different behaviors, what are they and how do they operate? One possible behavioral condition is that with higher expectations comes a greater demand for higher performance, a greater press for achievement. It seems intuitively appealing to assume that a person who

expects little from another will demand little. If he thinks a person cannot perform well he will be less likely to expend time and energy in the attempt to get the other person to do well, and to aspire to a higher level of performance. In the present situation we are particularly interested in the functional limitations imposed by a teacher on his own thinking about students. In other words, does a teacher's belief about the ability of his students limit his belief about their future performance, or academic accomplishments, and consequently restrict his press for future performance by his students? This idea derives from and is a natural extension of our earlier discussion of basic proposition one. Brookover and Erickson (1969) discuss this idea by pointing out that the organization of the current educational system in the United States with its differentiated curricula and different levels encourages such discrimination by forcing teachers to differentiate among students in terms of who should and who should not aspire to any particular level (see also Purkey, 1970).

These points lead to the next proposition and hypothesis:

**Proposition 9:** The academic expectations which the teachers in a school hold for the students is positively associated with the teacher's press for educational achievement.

**Hypothesis 9:** If the teachers' academic expectations for the students is higher in school H than in school L, then the teachers in school H will have a greater press for educational achievement than will the teachers in school L.

A teacher who is dissatisfied with his job is an unhappy teacher, one who is in some sense alienated from his work. A teacher's job as it is traditionally defined is to educate his students. The more the students learn, the better he may feel he is performing his job. If the students are not learning, there is a dilemma existing which must be resolved. One resolution is to blame the students, to compound the belief that most of the students are incapable of learning to any high degree. Another possible resolution is for the teacher to blame himself and perhaps rationalize the circumstances by saying that he doesn't have the tools to work with these "types" of students. In either event, it seems likely that there will be a higher probability of the teachers feeling some degree of dissatisfaction with their job, than if the students were doing well. The consequence would seem likely to be a state of frustration and/or anxiety which would affect successful role performance by inducing the teacher to be more negatively aggressive toward his pupils (Brown, 1965, p. 147), incline the teacher to search for alternative sources of satisfaction (Mandler and Watson, 1966, p. 267), increase the presence of excitable and disorganized behavior (Mandler and Watson, 1966, p. 267), and a host of other behaviors which appear to be nonfunctional for effective role performance as a teacher (Krech, Crutchfield, and Ballachey, 1962, pp. 117-125).

Herriott and St. John (1966) point out that "sub-standard academic performance (of their pupils) is a source

of great dissatisfaction to teachers" (1966, p. 90). In their research they found a positive relationship between the desire of teachers to leave the school and their dissatisfaction with the academic performance of the pupils in the school. The greater the dissatisfaction with the pupils' academic performance, the greater was the desire to leave that school (p. 91). This leads us to Propositions 10 and 11, and Hypothesis 10.

Proposition 10: The level of student academic achievement in a school is positively associated with the degree of teacher job satisfaction.

Hypothesis 10: If the level of student academic achievement is higher in school H than in school L, then the teachers in school H will be more satisfied with the job than will the teachers in school L.

Proposition 11: The degree of teacher job satisfaction is negatively related to the teacher turnover rate.

#### Source Propositions

In this section the intent is to isolate and consider certain factors in the school's social climate or environment which may contribute to the production and maintenance of expectational norms. The first factor to be considered is that of ability grouping.

Ability grouping in schools has been the subject of intense interest and research for many years. This is the practice of classifying and placing children into instructional groups on the assumption that the children in any one group are reasonably homogeneous on certain factors which

affect learning. The rationale behind this practice is rather extensive, but the essential reasons can be found in the idea that given such grouping, teachers can more effectively deal with the problems of any one type of student by adjusting the curriculum to fit the needs of each type. Consequently, on the basis of some criteria such as ability or achievement tests or teachers' judgments, students will be grouped with similar students in one or more subject areas. The idea has intuitive appeal, and perhaps for this reason, along with such other considerations as the fact that teachers find it easier, we can understand why it first came into practice and has continued in various forms for over 100 years.

There are three major points which must now be made. The first point is that the practice of dividing a grade level into several ability groups effectively establishes several strata of expectations of both teachers and students. The second point is that research has found very little evidence to support the proponents' contention that this practice will be beneficial in increasing the learning performance of children. Indeed, most evidence indicates no effect or a negative effect. The third point is that this practice is widely prevalent in United States schools today.

Considering point number two, Shores (1964) points out that "ability grouping does not seem to result in greater achievement." Some studies indicate that there are positive learning effects for the students in the highest ability level, but this is not consistent. Part of the reason for

this may lie in the discovery that teachers seldom, if ever, adjust their teaching techniques to meet the peculiar problems of each group. Instead, the tendency seems to be that the programs will simply be slowed down or accelerated, depending on the ability level. Consequently, as Brookover and Erickson point out, "By placement in these less adequate educational programs the disadvantages of these students are exacerbated rather than reduced" (1969, p. 120). Westby-Gibson (1966) labels this the "Myth of Homogeneity." She points out that the factor which increases performance is not grouping but rather the style of teaching, the way the teacher approaches his students.

If this is the case, then point number one must now be considered. Tillman and Hull (1964) demonstrate that teachers in systems with ability grouping tend to develop rigid opinions concerning individual differences in children. Teachers inevitably are constrained by this practice to perceive and divide children into the categories of bright, average, and dumb, which can turn into fixed, enduring beliefs about the children. Patricia Sexton views the situation from a slightly different angle. She indicates that:

The tendency to segregate students at increasingly early ages seems especially dangerous. Very young children are easily molded to form. If they are put in "slow" groups they will be slow since this is expected of them, and each semester they will fall further behind the "fast" groups which are moving ahead at an accelerated pace. (Italics mine.) (1969, p. 197)

Indeed, Goldberg, et al. (1966) demonstrate that children who by test criteria should have been placed in the "slow" groups

but instead were placed in a higher group, do significantly better academically than their counterparts who were placed in the "slow" group. Is this because of the higher performance expectations existing in the "brighter" ability groups?

Inducing from this, if we could conceive for heuristic purposes of a scale of expectations with a range of scores from zero to ten, then a grouped school could be seen as tending toward a mean of five on the aggregate. In a sense, then, the expectations which the teachers and students have of the school as a whole are functionally limited by the grouping structure which forces a certain number of children into each expectation category. This grouping structure is a visible symbol of mediocrity from the perspective of the school as a whole. By the same logic, then, a school where there is no homogeneous grouping has no such built-in limitations on performance expectations. This is not meant to deny or ignore the fact that teachers probably hold differential performance expectations for students anyway, and that students perceive them. But in the absence of a structure which essentially demands the recognition of differential ability, the probability is that expectations and achievement for the whole school will have a higher mean level.

J. C. Daniels (1961) tested this idea in British junior level schools, where the practice of grouping is prevalent (streaming is the term used in Britain). He compared schools which were grouped with ungrouped schools, while keeping size, I.Q. input distribution, and S.E.S. as constant as possible.

He found that the ungrouped schools had higher mean I.Q. increases, higher mean reading, English, and arithmetic scores than did the matched grouped schools. Also, the standard deviation on all these criteria was lower in the ungrouped than the grouped schools. If we can apply Goldberg, et al.'s (1966) findings to this, the lowering of the standard deviation does not occur at the expense of the "brighter" students, who may suffer from the presence of the "duller" students, but rather seems to result from the increased performance of the children who may have been considered as being "slow." Again, this quite possibly results from the higher level of expectations which the "slower" students are being exposed to. Consequently, I would hypothesize that within S.E.S. levels an ungrouped school will have a higher mean level of expectations than will a grouped school.

Proposition 12: The degree of homogeneous grouping in a school is inversely related to the level of expectations for students' academic achievement.

Hypothesis 11: If the degree of homogeneous grouping in school H is less than in school L, then the academic expectation level for the students will be higher in school H than in school L.

The question of which is a better learning environment, competition or cooperation, is an interesting one. Deutsch (1962) contends that in a cooperative social situation the goals of the separate individuals are so linked together that there is a positive correlation between their goal attainments. In a competitive social situation the individual's

goals are so linked that there is a negative correlation between their goal attainments. What type of general cooperative-competitive climate should exist in schools to enhance the performance of all children is an important question. Studies conducted by Deutsch (1949) and also Haines and McKeachie (1967) plus Lewin and Lippitt's classic study (1938) of the social environments created by autocratic or democratic control, indicate numerous positive effects of a cooperative environment such as less aggression, greater willingness to give and receive influence, less defensiveness, less possibility of "scapegoats," and so on. However, all three studies fail to demonstrate any achievement differences between the cooperative and competitive groups. There are some fundamental factors which must be considered, however. All the studies were conducted over a short span of time, and all the studies except Lewin and Lippitt's were executed with college students who, because of their long years of study, would certainly be highly adapted to the traditional competitive situation.

I would contend that if a cooperative learning environment exists in an elementary school, and the effects are measured after a longer period of time has elapsed, then the overall achievement of children will be greater in a cooperative than competitive environment. The Soviet schools have used the cooperative approach within schools for years with considerable success. If a child finishes his work quickly, then he will help another who may be having trouble. Older

students are encouraged to help younger students. The result is a situation where students learn not only as students, but also as teachers (Sexton, 1969, p. 199). In the cooperative setting psychological defensiveness is minimized; students do what a teacher can't do, and that is to be a potential source of help at any given moment; and students feel pride not only in their own work, but also in the work of others whom they may have helped. It is for reasons such as these that the next proposition and hypothesis are presented.

**Proposition 13:** The degree of press for individualized academic competition in a school is inversely related to the level of academic achievement of the school.

**Hypothesis 12:** If the degree of press for individualized academic competition in school H is lower than in school L, then the academic achievement in school H will be higher than in school L.

The final section in this chapter addresses itself to the question of community-school relations. Increasing polemic and to a certain degree empirical research, are suggesting that a special yet manipulable relationship can exist between the school and the community which has an impact upon the academic performance of the children.

We have heard it contended time and time again that schools operate in a vacuum, that they are not an integral part of the community. They are in the community but not of it. The community must adapt to the school, but the school has little obligation to adapt to the community. Yet this is a slight distortion of the situation. A major thesis of

this section is that the more structurally and socially integrated are the school and the community--that is the more correspondence there is between the values, ideals, behavioral norms, attitudes, and so on, of the teachers and the parents--the easier it will be to reach the objectives which the school has set. Now, the distortion of this idea of schools operating in a vacuum exists in the fact that if by chance there is a high correspondence between what parents and teachers regard as important goals, and means for attaining those goals, then, in the absence of any intercommunication, there is a higher probability of those goals being successfully reached, than if there is little or no correspondence of values, ideals, etc. Traditionally, the schools have espoused goals and means which might be termed middle-class. Consequently, even with the presence of little or no communication, middle-class children will, as a rule, find that the schools reinforce to a significantly greater degree that which is espoused at home, than do lower-class children.

It is difficult to isolate the numerous factors which tend to produce a lack of correspondence between school and community. It has been suggested that these factors emerge from differences in the socialization practices of lower-class and middle-class parents. The differences occur in the subtle definitions which are presented by parents as to what is important and what isn't, the methods of discipline used, the quality and quantity of parent-child interaction, and the differential and subtle reinforcement of beliefs about

what is possible and what isn't possible. These statements, however, tell us nothing. The fact that different patterns of child rearing create difficulties for some children when they enter school is an important area to explore, but it tells us nothing about how to solve the problem now, for we cannot isolate all the numerous subtle factors which produce this discrepancy. A more viable approach at this time seems to be one of isolating those factors which produce significant discrepancies and lack of correspondence on a behavioral level between community and school.

Even in those schools which operate in middle-class communities, mutual misunderstandings can develop between community and school. If parents do not understand or are not informed of the specific day-to-day programs and objectives which the school has, how can they show continued enthusiasm and support for them to their children? If parents are informed of and involved in discussions and decision-making processes, will their children interpret this as meaning that their parents regard the school as important? If parents understand and accept what the school is doing specifically, is it more or less likely that they can establish appropriate behavioral expectations? On the assumption that all parents believe their children can learn (at least in the early years) and expect their children to learn, given a high degree of community involvement in the school by the parents, will it be harder for a teacher to dismiss a child as unable to learn when she knows that she must make an account to the

parents? If teachers perceive high community support and interest in the children's learning and in the school, will they be less likely to "give up" in frustration? If children know that their parents and their teachers frequently communicate in a supportive way, will the children be more attentive in school, will they apply themselves harder, will they be less likely to be disruptive? If children know that their parents have high support for the school and the teachers, will they be more likely to regard what they are doing in school as important? Finally, if there is a high degree of involvement and interest in the school by many parents, will this increase reinforcement by the child's peers; will this create a stronger press for teachers to be involved and concerned with the community; will this increase the correspondence between school and community in values, goals, behavioral expectations, and so on? These questions and numerous others which the reader may have thought of are logically possible outcomes of the increased communication and consensus between schools and community. It seems intuitively sensible to assume that with greater involvement and support of parents (regardless of S.E.S. level) for the school, will come higher performance expectations for the children, and higher achievement. One major qualification must be made, however. The possibility of high involvement and support for the school (by virtue of understanding its specific objectives), plus the probability of community consensus and mutual reinforcement of this support and involvement

among parents, seems contingent upon the stability of the community. This is not to deny the possibility that middle-class parents may have a greater propensity to become involved in the school when they move into a community than will lower-class parents. It does seem likely, however, that with longer residency in a community comes greater involvement in community affairs. Certainly, a family which has had a history of high mobility will be less likely to become involved to any great degree with the concerns of the community if the move is suspected to be only temporary. Also, from a purely practical standpoint, it takes time for the families to meet each other, to meet the teachers and the principal.

Viewing this factor from the standpoint of the community as a whole, it seems likely that the more stable a community is, the greater is the possibility and probability of parents taking an active interest in the school and pressing for an involvement in school issues. The more stable a community is, the easier it will be to sustain any semblance of a consensus on school-related beliefs, attitudes, and norms. Therefore, given the existence of an emerging norm of involvement and support for the school, as the stability of a community increases, it would seem logical to assume that over time the community and school would increasingly come to operate in a cooperative and high consensual relationship.

What evidence is there to support these ideas that have been presented in the last several pages? McDill,

Meyers, and Rigsby (1966) cite the fact that Coleman (1966) found the degree of parental interest in their children's education to be positively related to the achievement of both elementary and high school students. Applying this finding to their own research on high school climates, they discovered that the degree of pressure by parents for involvement in the school policies was significantly related to mathematics achievement and college plans of these students. Finally, they cite a study by Gross, et al. (1966) on low socioeconomic elementary students reporting that there was a positive relationship between the faculty's assessment of the degree of parental interest in the academic performance of their children and the academic success of those children. Additionally, a study by Crane (1971) cites the fact that in communities where school millage proposals were defeated amidst an air of consternation and declining community morale, the academic achievement of the children declined over the long run. Was this a result of disharmony between school and community with declining supportive interaction, or was it because of less money to maintain programs?

A project is reported by Smith and Branch, in which fourth, fifth, and sixth grade children with serious reading problems from two matched schools were involved in an experiment. All the children were given a standardized reading test before the study was begun. In both schools the children were taught in the same way they had always been. However, in one of the schools the parents of these children

were involved in a series of discussions about the reading difficulties of their children and what could be done to improve their reading. In the other school there were no such meetings. At the end of five months, the same standardized reading test was readministered. The children in the control group (no parental involvement) had gained only 2.7 months in reading level on the average, while the children in the experimental group (parental involvement) had gained 5.4 months in reading level.

Another study reported by Willman (1969) was carried out on 485 black and 56 white children of "similar age, family background, and environment" participating in the Head Start program in Tallahassee, Florida, in the summer of 1966. Teachers were asked to keep records of the type and amount of parent participation and involvement in the school program. At the end of the program Willman divided the subjects into groups according to "active parental involvement," "highly active involvement," and "no parent involvement or participation in the program." She then compared the "mean reading readiness" scores of the children in each group. She found that the mean reading readiness score of the "active" parental participation group was higher than that of the "no parental participation" group at a significance level of .05. Comparing the "highly active" group to the "no participation" group, she found the difference to be even greater, at a significance level of .01.

Results similar to these are reported by Fantini (1969), where a concerted communitywide involvement and participation program was executed. As community participation increased and stabilized, reading, as measured by Metropolitan Reading Test, improved significantly, vandalism declined, school attendance of children increased, teacher absences declined, and teacher turnover declined. All this was accomplished in a low S.E.S. urban community.

Finally, let us look at some evidence reported by Sexton (1969) in her "Big-City" study. I have combined several tables which she presents to develop Table 3, which shows the relationship between income group; pupil turnover rate each year, not counting graduation; parent membership in P.T.A.; and mean Iowa achievement test scores for each group.

TABLE 3.--Parent income, P.T.A. membership, pupil turnover, and mean achievement scores.

Income Group	Parent Membership PTA (%)	Pupil Turnover % (1 year)	Mean Achievement Scores <sup>a</sup>	
			4th Grade	6th Grade
\$3,000 -	10.1	49.0	3.44	5.26
\$5,000 -	12.3	46.7	3.69	5.55
\$7,000 -	42.3	21.5	4.44	6.52
\$9,000 -	73.8	16.7	4.93	7.25

<sup>a</sup>These are standardized scores. At the beginning of fourth grade the average pupil should have a score of 4.00. Similarly, the average sixth grade pupil should have a score of 6.00 at the beginning of the sixth grade.

Caution must be used in interpreting such high relationships as are seen in Table 3. There is a very high relationship between parent participation, pupil turnover (which can be used as a crude indicator of community stability), and mean composite achievement of the pupils. Yet all of these factors are related to economic level, a fact which may lead one to conclude that the high association with mean achievement is a result of other factors existing in each S.E.S. level, and has no meaningful relation to community stability and parental participation. Certainly, I make no claim of cause-effect relationships here; nevertheless, this high association, coupled with the discussion and empirical evidence presented earlier, cannot help but make one wonder as to the unique contribution which community stability and parental participation make, independent of other S.E.S.-related factors, in influencing the achievement of children. The data which were gathered for this dissertation should shed some light on this question because we have high and low achieving schools in all S.E.S. levels.

This leads to the remaining propositions, theorems, and hypotheses.

- Proposition 14: The stability of a community is positively related to the degree of support which the community gives to the school.
- Proposition 15: The support which a community gives to the school is positively related to the academic achievement of the students.
- Theorem V: The stability of a community is positively related to the academic achievement of the students--(from Propositions 14 and 15).

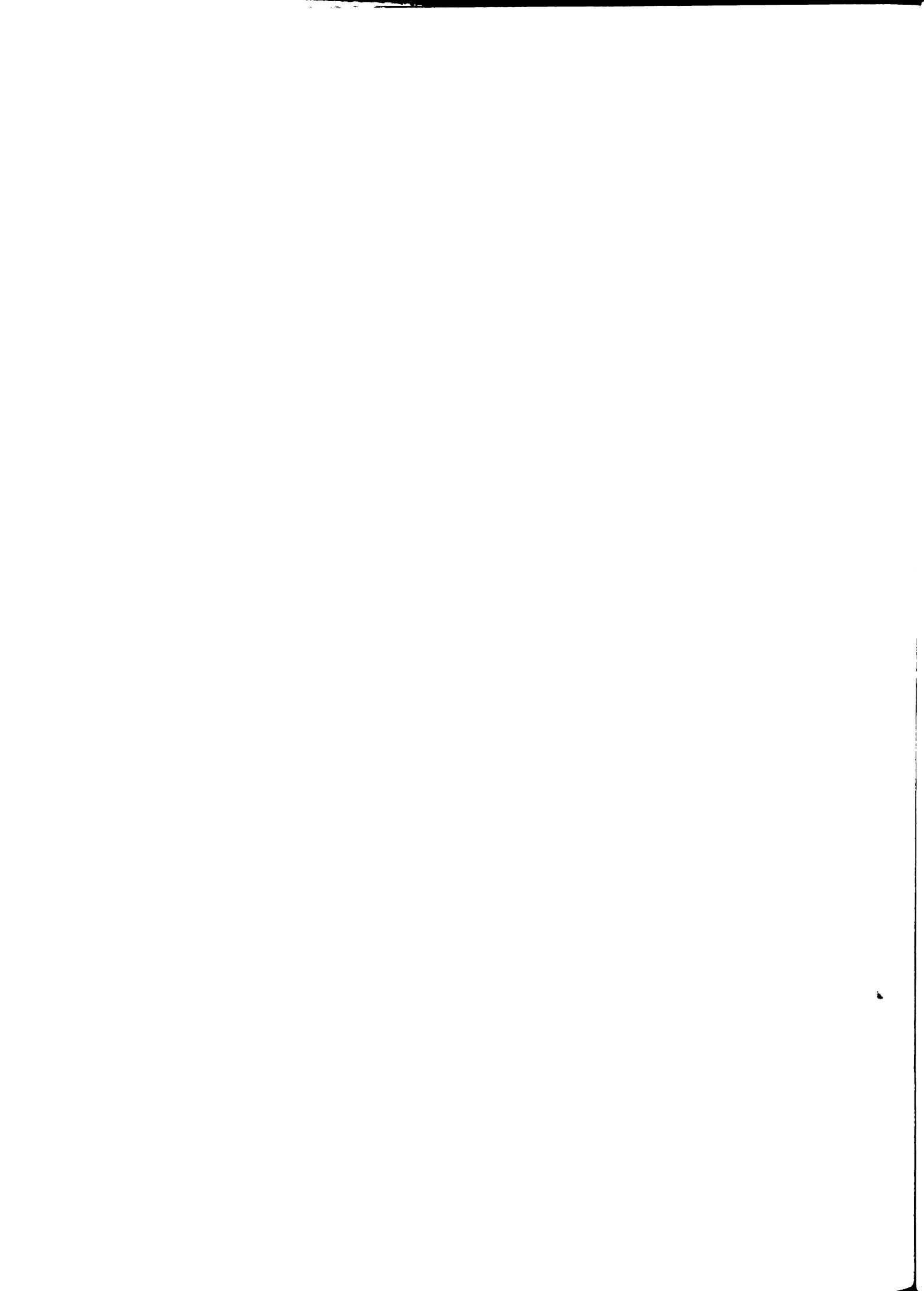
Proposition 16: The support which a community gives to a school is positively related to the perception which the students in that school have of the academic expectations held for them.

Theorem VI: The stability of a community is positively related to the level of academic expectations which students perceive are held for them--(from Propositions 14 and 16).

Hypothesis 13: (Theorem V) If the community of school H is more stable than the community of school L, then the achievement in school H will be higher than the achievement in school L.

Hypothesis 14: (Proposition 15) If the support of community H is greater than the support of community L, then the achievement in school H will be higher than the achievement in school L.

This concludes the presentation of the theory and empirical support. The data analysis will be presented in two parts. In Chapter IV the basic analysis called for by the form of the propositions, theorems, and hypotheses will be presented and discussed. In Chapter V the analysis will concentrate on a more in-depth investigation of the effects on achievement produced by the existence of certain variables in the "climates" or "environments" of the schools, above and beyond the effect on achievement of these variables as they exist within the individual.



## CHAPTER IV

### ANALYSIS OF RESULTS

#### Introduction

The procedures employed for data analysis are suggested by the nature of the propositions. The propositions allow for a test of association, and Pearson's product-moment correlation has been employed as the statistical technique. The significance of the simple correlations is checked by a t-test for  $r$ . The hypotheses, which specify a significant difference between means on a particular variable, are tested by using a one-tailed t-test for the significance of difference between means. A one-tailed t-test is employed because directionality is asserted in the hypotheses. Finally, in a few instances, association is tested by using a Pearson chi-square test of association. This has been employed where the data are categorical, such as when we are checking the relation of certain variables to types of ability grouping.

There are several cautions which should be employed by the reader in viewing the data analysis. In the first place, the number of schools used in the study is small. The use of the school as a unit of analysis would allow us to have an  $n$  of 10 with only 8 degrees of freedom. Consequently, in a strict sense the individual will be the unit of analysis

while employing aggregate scores for the school as a whole or for all high achieving versus all low achieving schools. The exploratory nature of the study plus the possible non-representativeness of the study makes it imperative that one view all the evidence presented when deciding whether a factor is operating as predicted.

One must not be as concerned with whether significance was achieved as much as whether the factors are operating in the same direction as predicted for all five matchups. This is particularly true for the teacher propositions where the  $n$  is small. Attention should also be given to the absolute size of difference between schools. It is possible for the absolute difference between schools to be great but not significant because of the small  $n$ . Finally, was the relationship predicted by the theory? If so, even though significance may not have occurred, the evidence on all three aspects should make one cautious about eliminating the proposition.

Second, one must be cautious about the sort of inferences he makes from these data, given the nature of the research design employed. First of all, the subjects tested in this study are all from the state of Michigan. Second, the number of schools selected in each S.E.S. stratum was done without any regard to the actual number of schools which exist in each S.E.S. level in the United States or in Michigan. Third, the schools selected within each S.E.S. level represent the high and low achievement extremes but ignore all those schools that have an achievement level which is closer to

average. Consequently, if one wanted to make inferences he would legitimately have to limit his population to white, (high) or (low) achieving, (x) S.E.S. level, Michigan elementary schools pupils, and even then the lack of a representative ratio of schools in each S.E.S. level would make the inferences doubtful.

The purposive sample used in this study technically prohibits the use of significance tests. The reader will note that their use in the analysis is solely for those individuals who believe that the tests will provide greater insight into the data.

Nevertheless, generalizability was not the intent of the study. The main goals of this study are to explore the basic relationship of certain important academic variables to each other and to achievement. Second, we hope to explore the possibility that these important factors are related to academic success independent of the socioeconomic level of the school. Finally, we hope to approach an appreciation for the possible generation of these factors in social climates, independent of socioeconomic level.

If these three goals can be successfully attained, then future research can attempt to isolate those conditions within each S.E.S. level which facilitate or constrain the emergence of these success-related factors in any situation.

We turn now to an analysis of the propositions, theorems, and hypotheses.

Analysis of Basic Propositions

Tables 4 and 5 summarize the results for Propositions 1 and 3, which hypothesize a positive relationship between teacher evaluations and teacher expectations, and between teacher expectations and the perceived teacher expectations, respectively.

TABLE 4.--Correlations of mean teacher evaluations and expectations for students.

Teacher Evaluations	Teacher Expectations	
	Item 14 <sup>a</sup>	Item 18 <sup>b</sup>
Per cent capable of getting mostly A's and B's (Item 22)	r = .61 t = 2.181 p<.05	.67 2.577 p<.05
Rated ability of students compared to other schools (Item 24)	r = .94 t = 7.992 p<.001	.84 4.299 p<.005

D.F. = 8

<sup>a</sup>Achievement level expected of students.

<sup>b</sup>Per cent expected to attend college.

TABLE 5.--Correlations of mean teacher expectations and mean perceived teacher expectations.

Perceived Teacher Expectations	Teacher Expectations	
	Item 14 <sup>a</sup>	Item 18 <sup>b</sup>
	r = .56 t = 1.91 p<.05	.69 2.68 p<.05

D.F. = 8

<sup>a</sup>Achievement level expected of students.

<sup>b</sup>Per cent expected to attend college.

The data in Table 4 support the assertion that teachers' academic evaluations of students and their expectations for student performance are highly related and significant. Evaluation item 22 produces the lowest association with expectations for performance. This is not surprising, since the question asks: "How many students are capable of getting A's and B's?" and grade assignment is relative to each school. That is, most teachers in lower S.E.S. schools probably do not believe that an "A" in math in their school implies the same ability as does an "A" in a high S.E.S. suburban school. On the other hand, teacher evaluation item 24, which simply asks the teachers to "rate the academic ability of the students in this school compared to other schools," produces highly significant relationships with expectations. The slightly lower correlation of this evaluation question with expectation item 18, which asks for the percentage expected to attend college, as opposed to 14, probably reflects the teachers' consideration of other factors which enter into the decision to attend college. That is, factors other than ability, such as finances, family tradition, and interest. The evidence provided in Table 4 appears to be sufficiently strong to accept Proposition 1 on the high relationship between teacher evaluations of students and their expectations for students.

Table 5 presents the analysis results for Proposition 3. Here we are assessing the relationship between the academic expectations which teachers hold for the students in a

school, and the perception which the students have of these expectations. Once again the association is significant ( $p < .05$ ). This is not a surprising finding, yet as was indicated earlier there is little previous empirical evidence to support this assertion. The operationalizing of perceived teacher expectations is not as satisfactory as we would have liked (i.e., "How far do you think the teacher you like the best believes you will go in school?"), but the necessity of standardizing the indicator of perceived expectations across schools forced us to use a reference point which was external to the relative standards of any one school. On the assumption that academic performance expectations held by teachers for their students limit their beliefs about how much formal education a child is capable of receiving, we felt that this would be a reasonably satisfactory indicator of other academic expectations. Also, the fact that the teachers are asked to present expectations for the children in the whole school, whereas the children were asked to focus on one particular teacher for the report of perceived expectations, probably contributed to a lower association than might have otherwise occurred. Nevertheless, the evidence does suggest that children do perceive with reasonable accuracy the educational expectations which teachers hold for them.

The results of the analysis on Propositions 2 and 4 are reported in Tables 6 and 7. These hypotheses assert the same associations as the ones we have been considering,

except that the focus is now on the principal. The items used to indicate principals' evaluations and expectations are identical to the items used to indicate teachers' evaluations and expectations, except for principal item 26, which is similar to teacher item 22. Similarly, the perceived expectations item for students is the same also, except that the reference point is the principal rather than the teacher.

TABLE 6.--Correlations of principal evaluations and expectations for students.

Principal Expectations	Principal Expectations	
	Item 22 <sup>a</sup>	Item 24 <sup>b</sup>
Per cent capable of getting good grades (Item 26)	r = .35 t = 0.979 n.s.	.73 2.858 p<.05
D.F. = 7		
Rated ability of students compared to other schools (Item 27)	r = .58 t = 2.01 p<.05	.78 3.51 p<.005
D.F. = 8		

<sup>a</sup>Achievement level expected of students.

<sup>b</sup>Per cent expected to attend college.

TABLE 7.--Correlations of principal expectations and mean perceived principal expectations.

Perceived Principal Expectations	Principal Expectations	
	Item 22 <sup>a</sup>	Item 24 <sup>b</sup>
	r = .37 t = 1.12 n.s.	.50 1.65 n.s.
D.F. = 8		

<sup>a</sup>Achievement level expected of students.

<sup>b</sup>Per cent expected to attend college.

Table 6 shows the correlation results between principals' evaluations and their expectations for the students. All of the correlations are significant at an alpha level of .05 or less except for one which is in the predicted direction but not significant. When we consider our earlier discussion which suggested a high correlation between evaluations and expectations because of the press toward cognitive consistency for an evaluator, it seems possible that the principals would have less pressure toward establishing consistency, given the fact that they are not directly confronted with the children's academic performance on a day-to-day basis as are the teachers. Consequently, the association might not be as high for principals as it is for teachers. This might account in part for the lower associations of evaluations with the principal expectation item number 22, which asks: "What achievement level can be expected of the students in this school?" If we correlate the teachers' and principals' expectations for the students, we find a higher agreement on the expectations for attending college ( $r = .78$ ,  $p < .005$ ) than we do on the expectations for general achievement ( $r = .65$ ,  $p < .05$ ). One interesting finding in this respect is that when we look at each school individually in regard to expectations for general achievement, and compare the principal's expectations with the mean score of teachers' expectations, we find that in the higher achieving schools the principals have lower expectations for general achievement than the teachers in three out of four schools, with

one school having identical teacher and principal expectations. On the other hand, if we look at the lower achieving schools, the principals indicate higher expectations for general achievement than their teachers do in four out of five schools, with one school having identical teacher and principal expectations.

It would be easy to "explain" this away by saying that in the lower achieving schools the principals are trying to change teacher attitudes toward higher expectations, but how do you "explain" the lower principal expectations in the higher achieving schools? Perhaps they, as the spokesmen for the schools, are protecting themselves and their teachers from future potential criticism in the event that achievement might decline somewhat. If they profess lower achievement expectations to the public and the children are doing better than expected, then the principal can claim that the school is doing an exceptional job. If, on the other hand, achievement should decline somewhat, then the principal can simply say that the children are performing as expected. The question is an interesting one, which unfortunately cannot be answered given the data at hand.

Table 7 presents the results of the correlation between principal expectations and the perception of these by the students. The correlations are high and in the right direction, but are not significant by our .05 alpha level criterion. This is not surprising given the fact that the principals' academic contact with the students would be far less than

that of the teachers. Consequently, the students would be less likely to accurately perceive the principals' expectations. Assumedly, the smaller the school and/or the more the principal interacts with his students on academic matters, the higher the correspondence should be. In either event, it would be unwise to generalize from these findings and say that principals are not very important in shaping children's academic expectations. Rather, it probably would be safe to assume that teachers would be more important than principals, given their more frequent contact.

The final basic proposition asserts that the expectations which students perceive are held for them are positively related to the academic achievement of the students. Table 8 shows the correlation between the mean achievement of the students tested and the mean perceived principal, teacher, and parental expectations.

TABLE 8.--Correlations of achievement and perceived expectations.

		Perceived Principal Expectations	Perceived Teacher Expectations	Perceived Parental Expectations
Achievement	r =	.53	.76	.79
	t =	1.758	3.35	3.65
		n.s.	p<.005	p<.005
D.F. = 8				

The results clearly indicate a high positive association for teacher and parental expectations but not for

principal. The relation between perceived principal expectations and achievement is in the predicted direction and closely approaches our cutoff point for significance of .05. The assumption here and for subsequent analyses is that the perception which children have of expectations held for them is the important limiting factor, and not the actual expectations held. The results in Table 8 establish a firm foundation for the remaining analysis by indicating that a child's performance in school is directly related to the expectation beliefs which he perceives others hold for him. If, indeed, there is some cause-effect function between perceived expectations and performance (which these data do not, of course, demonstrate), then the effect would be dependent upon the nature of the evaluating source. Such characteristics of the source as perceived expertise, a competence to evaluate, credibility, liking, and frequency of contact in the dimension of evaluation, among others, seem to strengthen or weaken one's acceptance as a significant evaluator. The lower relations of perceived principal expectations to achievement is probably accounted for, at least in part, by these factors.

Hypothesis 1 asserts that if the teachers in the higher achieving schools have higher evaluations of their students than the teachers in the lower achieving schools, then the former teachers will also hold higher expectations. Table 9 presents the results of the analysis. The table allows us to see whether the higher and lower achieving

schools can be discriminated by teachers' evaluations and expectations.

TABLE 9.--Difference between high and low achieving schools on mean teacher evaluations and expectations for students.

	Evaluations <sup>a</sup>		Expectations <sup>a</sup>	
	Item 22 <sup>b</sup>	Item 24 <sup>c</sup>	Item 14 <sup>d</sup>	Item 18 <sup>e</sup>
Higher Achieving	3.04	2.22	2.04	2.74
Lower Achieving	3.70	3.82	3.70	3.82
t =	3.2054	9.9677	8.869	4.555
D.F. =	44	47	45	47
	p<.005	p<.001	p<.001	p<.001

<sup>a</sup>The lower the mean score, the higher the evaluations or expectations.

<sup>b</sup>Per cent capable of getting mostly A's and B's.

<sup>c</sup>Rated ability of students compared to other schools.

<sup>d</sup>Achievement level expected of students.

<sup>e</sup>Per cent expected to attend college.

In all cases the teachers in the higher achieving schools hold higher academic evaluations and expectations for their students than their counterparts do in the lower achieving schools.

Evaluation item number 24, which asks the teachers to evaluate the academic ability of the students in their school compared to other schools, and also item 14 in expectations, which asks what level of achievement can be expected of the students in their school, are both general questions. By

this I mean that they are asking the teachers to express their evaluations and expectations without qualifying them by considering other latent factors. For this reason they would seem to tap these beliefs in the least biased fashion. The results show that these items discriminate high and low achieving schools better than do the more situationally specific items 22 and 18, which ask how many students are capable of getting mostly A's and B's, and what per cent do you expect to attend college. In both instances, however, it is obvious that the teachers in higher achieving schools hold higher academic evaluations and expectations for their students than do the teachers in the lower achieving schools, even with S.E.S. controlled for.

Hypothesis 2 specifies the same assertion just discussed, only this time the consideration is on the evaluations and expectations held by the school principals. Table 10 shows that the same pattern emerges here as occurred for teachers. The principals in higher achieving schools hold higher evaluations and also expectations for their students than do the principals in lower achieving schools, with S.E.S. controlled. The absolute difference is large between high and low schools, even though the probability is not as great as existed with the teachers. Again, this is not a surprising result, as cognitive consistency would suggest that with high evaluations would come high expectations and vice versa for low evaluations and expectations.

TABLE 10.--Difference between high and low achieving schools on mean principal evaluations and expectations for students.

	Evaluations <sup>a</sup>		Expectations <sup>a</sup>	
	Item 26 <sup>b</sup>	Item 27 <sup>c</sup>	Item 22 <sup>d</sup>	Item 24 <sup>e</sup>
Higher Achieving	2.30	1.80	2.10	2.50
Lower Achieving	4.00	3.60	3.20	4.40
t =	2.443	3.610	2.540	3.722
D.F. =	7	8	8	8
	p<.02	p<.005	p<.02	p<.005

<sup>a</sup>The lower the mean score, the higher the evaluations or expectations.

<sup>b</sup>Per cent capable of getting good grades.

<sup>c</sup>Rated ability of students compared to other schools.

<sup>d</sup>Achievement level expected of students.

<sup>e</sup>Per cent expected to attend college.

The more crucial question is, given a particular expectation level held by teachers and principals, do the students perceive this with reasonable accuracy, and extending this for the present consideration, do the students in the higher achieving schools perceive higher expectations held for them than do the students in the lower achieving schools? The earlier discussion (Tables 5 and 7) of the correlation between actual and perceived expectations showed that the two factors are positively associated for both teachers and principals, but to a higher degree for teachers. Table 11 shows that if the teachers in the higher achieving schools hold higher expectations for their students than do the teachers

in the lower achieving schools, then the perception of these by the students will be in the same order (Hypothesis 3).

TABLE 11.--Difference between high and low achieving schools on mean teacher expectations and perceived teacher expectations.

	Actual Teacher Expectations <sup>a</sup>		Perceived Expectations <sup>a</sup>
	Item 14 <sup>b</sup>	Item 18 <sup>c</sup>	
Higher Achieving	2.04	2.74	.59
Lower Achieving	3.70	3.82	.86
	t = 8.869	4.555	4.1577
	D.F. = 45	47	1293
	p<.001	p<.001	p<.001

<sup>a</sup>The lower the mean score, the higher the expectations.

<sup>b</sup>Achievement level expected of students.

<sup>c</sup>Per cent expected to attend college.

The results presented in Table 11 show that the perception which students have of the teacher expectations held for them differentiates high and low achieving schools in the same way as actual teacher expectations while controlling for S.E.S. The large student n on perceived expectations would suggest that these means are fairly stable.

I have not reported all of the comparisons between matched schools because of the number and size of the tables involved. Therefore, it will be necessary on occasion to report these results in the context of discussion so as to further demonstrate the operation of a variable. In the

present circumstances, the difference between the higher and lower achieving schools on perceived teacher expectations is a large significant difference at the .001 probability level. It seems apparent that the children in the higher achieving schools perceive significantly higher academic expectations held for them by their teachers than do the children in the lower achieving schools, even though the S.E.S. is similar between the two groups.

If we consider the matched schools within each S.E.S. category, in all five matches the children in the school with the higher achievement perceive higher expectations held for them by their teachers, and indeed in all instances the teachers do hold higher actual expectations.

Looking at this same relationship between actual and perceived expectations, but this time for the principal (Hypothesis 4), we see in Table 12 that the same magnitude of difference between high and low achieving schools occurs on perceived principal expectations as it did on perceived teacher expectations. The difference is significant at the .001 probability level.

As predicted, if the teachers and principals in the higher achieving schools hold higher academic expectations for their students than do the teachers and principals in the lower achieving schools, then the children in these respective categories will perceive these expectations in the same order.

TABLE 12.--Difference between high and low achieving schools on mean principal expectations and mean perceived principal expectations.

	Actual Principal Expectations <sup>a</sup>		Perceived Expectations <sup>a</sup>
	Item 22 <sup>b</sup>	Item 24 <sup>c</sup>	
Higher Achieving	2.10	2.50	2.41
Lower Achieving	3.20	4.40	2.67
t =	2.540	3.722	4.127
D.F. =	8	8	8
	p<.02	p<.005	p<.001

<sup>a</sup>The lower the mean score, the higher the expectations.

<sup>b</sup>Achievement level expected of students.

<sup>c</sup>Per cent expected to attend college.

The final assertion in these basic propositions is represented by the results of the analysis on Hypothesis 5 reported in Table 13. The assertion here is that the achievement difference between the high and low achieving schools is reflected in the whole perceived expectational climate of the students. An earlier discussion demonstrated the high positive relationship between perceived principal, teacher, and parent expectations and achievement. The major question is whether high and low achieving schools differ in expectations held for the students, regardless of S.E.S. level. In other words, do high and low expectations differentiate high and low achieving schools regardless of S.E.S.? Many researchers have found a positive relationship between expectations

and achievement, between S.E.S. and achievement, and between S.E.S. and expectations. It is assumed in this study that the important stimulus for achievement is expectations, which are usually higher in higher S.E.S. schools. But when a high S.E.S. school has an achievement which is lower than "normal," or when a low S.E.S. school has an achievement higher than "normal," can we provide evidence that the expectations held continue to operate in correspondence with the achievement of the school independent of S.E.S.? Table 13 presents perceived teacher, principal, and parental expectations plus achievement between the high and low achieving schools matched on S.E.S.

TABLE 13.--Difference between high and low achieving schools on mean achievement, and mean perceived teacher, principal, and parental expectations.

	Achievement <sup>a</sup>	Perceived Teacher Expectations <sup>b</sup>	Perceived Principal Expectations <sup>b</sup>	Perceived Parental Expectations <sup>b</sup>
Higher Achieving	57.52	.59	2.41	.42
Lower Achieving	45.56	.86	2.67	.66
	t =	4.1577	4.127	4.126
	D.F. =	1293	1282	1290
		p<.001	p<.001	p<.001

<sup>a</sup>The higher the mean score, the higher the achievement.

<sup>b</sup>The lower the mean score, the higher the expectations.

In this table we can clearly see the magnitude of difference between the two categories on achievement. For each of the five match-ups within each S.E.S. category, the difference in achievement is significant at a probability level of .001. Looking at the table, we can see that the children in each category also perceive significantly different expectations held for them by teachers, principals, and parents.

Given the evidence presented in this table and in earlier discussions, we can pose a preliminary conclusion that academic expectations presented by "significant others" and perceived with reasonable accuracy by the students are importantly associated with the achievement of students. Second, we can suggest that high expectations will stimulate high achievement and conversely, regardless of the S.E.S. level of the students. A more thorough investigation of the variance of expectations within each school in each S.E.S. category is warranted if we are to gain a better understanding of how this factor is operating. It is quite unlikely that uniform expectations are held for all the children in each school. More than likely, the lower achieving schools in each S.E.S. level have a large group of students who are being selected by the parents and staff to be the target of lower expectations. This group, if it does exist, could be lowering achieving. We will explore this question in more depth when we consider the factor of structural effects in Chapter V.

Analysis of Effect Propositions

In this section we will consider some of the correlates of differential expectations in the schools. This is certainly not intended to be an exhaustive consideration of all the possible correlates of differential expectations. Rather, we will consider some of the more salient relationships which literature has suggested to be important.

The first consideration, specified by Proposition 6, is the relationship of perceived expectations and academic aspiration level held by the students.

Table 14 presents the results of the correlation between expectations and aspirations for all the schools. The correlations are between mean aspirations and mean perceived expectations (parents, principal, and teacher considered separately) for the children in each school. The relationship is a clear, positive, and highly significant one. The correlation for perceived principal expectations is .64,  $p < .05$ ; for perceived teacher expectations is .88,  $p < .001$ ; and for perceived parent expectations is .89,  $p < .001$ . The functional limitations imposed by expectations from important "others" are dramatically represented in these results. Individuals receive ideas of what is appropriate and legitimate behavior for them by virtue of what others tell is appropriate. When frustrations or problems develop in the pursuit of a task, the individual who perceives lower expectations can legitimate his difficulty without the perceived loss of approval from "others," for he has done what was

expected. Conversely, the individual with higher perceived expectations will probably work harder to master the task so as to gain the approval of adequately meeting the perceived expectations. Quite possibly, however, the process will occur in a much simpler fashion than this. Given certain definitions of what is expected and therefore normal for himself, the individual will accept this definition without any thought at first as to whether it is possible. He accepts this behavioral expectation without any more thought as to its legitimacy than he might give to the expectation that he should wear clothes. The corollary behavior of the expectation also comes to be regarded as normal, such as paying attention to the teacher and studying one's lessons.

TABLE 14.--Correlations of mean perceived expectations and mean academic aspirations.

		Perceived Principal Expectations	Perceived Teacher Expectations	Perceived Parent Expectations
Academic Aspirations	r =	.64	.88	.89
	t =	2.350	5.255	5.610
		p<.05	p<.001	p<.001
D.F. = 8				

Given this high positive relationship, do we find that high and low achieving schools of similar S.E.S. can be discriminated on aspirations? Hypothesis 6 asserts that if the academic expectation climate in the higher achieving schools is higher than in the lower achieving schools, then

academic aspirations will follow the same ordering. Table 15 presents the results of this analysis. The results show that the hypothesis is upheld at a probability level of .001, which is consistent with the difference between the schools on perceived expectations. Indeed, the children in the higher achieving schools hold higher aspirations, even with S.E.S. controlled. Second, these higher aspirations are in direct relationship to expectations, even with S.E.S. controlled.

TABLE 15.--Difference between high and low achieving schools on mean aspiration level and mean perceived principal, teacher, and parental expectations.<sup>a</sup>

	Aspira- tions	Perceived Principal Expectations	Perceived Teacher Expectations	Perceived Parent Expectations
Higher Achieving	.46	2.41	.59	.42
Lower Achieving	.69	2.67	.86	.66
t =	3.873	4.127	4.1577	4.166
D.F. =	1315	1282	1293	1290
	p<.001	p<.001	p<.001	p<.001

<sup>a</sup>The lower the mean score, the higher the aspirations and expectations.

Proposition 7 hypothesizes a direct, positive relationship between achievement in a school and the importance which students attach to their self-identity or role of

student (will be referred to as ISIS). Table 16 shows the correlational results.

TABLE 16.--Correlation of achievement and mean importance of the self-identity (role) of student.

		Importance of Identity of Student			
		Item 15 <sup>a</sup>	Item 16 <sup>b</sup>	Item 17 <sup>c</sup>	Item 18 <sup>d</sup>
Achievement	r =	.25	-.29	.23	.09
	t =	.724	-.848	.669	.256
		n.s.	n.s.	n.s.	n.s.

D.F. = 8

<sup>a</sup>Teacher.

<sup>b</sup>How important to be a good student.

<sup>c</sup>Parents.

<sup>d</sup>Best friend.

It is clear that the association of achievement with how important the student role is to students is a weak and almost nonexistent one. The three items which show a small positive relationship (items 15, 17, and 18) all asked the same question: "If your \_\_\_\_\_ told you that you were a poor student how would you feel?" Item 15 is for teachers, 17 for parents, and 18 for best friend. Assumedly, if a student regards the role as important, then negative evaluations will be upsetting to the student. The data on each school (not presented here) show that students in both high and low achieving schools would be upset with negative evaluations, by virtue of low scores, for all schools. These

three items, however, do not discriminate between high and low achieving schools. Indeed, they appear to operate quite independently of achievement, for in some match-ups, on all three items the higher achieving schools will display higher importance for the role and in other match-ups, the converse is the case. The overall pattern on this between high and low achieving schools can be seen in Table 17.

TABLE 17.--Difference between high and low achieving schools on mean achievement and mean importance of the self-identity of student.

	Achievement <sup>a</sup>	Importance of Self-Identity <sup>b</sup>			
		Item 15 <sup>c</sup>	Item 16 <sup>d</sup>	Item 17 <sup>e</sup>	Item 18 <sup>f</sup>
Higher Achieving	57.52	1.67	1.41	1.54	2.05
Lower Achieving	45.56	1.73	1.38	1.58	2.09
	t =	1.219	-.8128	.7898	.6489
	D.F. =	1311	1311	1311	1314
		n.s.	n.s.	n.s.	n.s.

<sup>a</sup>The higher the mean score, the higher the achievement.

<sup>b</sup>The lower the mean score on all ISIS items, the greater the importance attached to the role.

<sup>c</sup>Teacher.

<sup>d</sup>How important to be a good student.

<sup>e</sup>Parents.

<sup>f</sup>Best friend.

The overall school means on these three items indicate that, on the average, the children in higher achieving

schools attach slightly higher importance to the student role by virtue of the expression of "bad" feelings if they are evaluated poorly, but the evidence is very weak. Indeed, it seems as though the only conclusion to be reached is that most students regard the role as important enough so that negative evaluations from significant others will not be received well. If we view Table 17 a little more closely, we can see that negative parental evaluations (item 17) would be more upsetting than negative teacher evaluations (item 15), which would be more upsetting than negative friend evaluations (item 18). These results are consistent with other findings in this study which indicate that for elementary school children, parents are most significant as a rule, with teachers being second most significant.

Viewing Tables 16 and 17 again, we see that item 16 is negatively associated with achievement, and that the higher achieving schools express slightly less importance for the the role than do the lower achieving schools. This item asks the direct question of "How important is it to you to be a good student?" The correlation with achievement is nonsignificant, and the difference between the higher and lower achieving schools is nonsignificant, yet the reversal of this item with the others is interesting. Referring back to our discussion in Chapter III, it appears as though Homans' (1961) idea of declining marginal utility could possibly be operating here. While the evaluation of others is still important, it appears as though the value of emitting the

same activity may decline as rewards (high grades, etc.) continue. Given this proposition of Homans, as the students achieve the rewards for doing well, the value of the activity of being a good student declines, and other activities become important. This does not mean necessarily that the students will stop trying to do well; rather it appears possible that the importance of doing well declines. The idea is an interesting one that I have never seen discussed in this framework before. The evidence for such a relationship is certainly weak in the present data; however, future investigation designed specifically to test this occurrence and its implications is warranted.

Theorem I is derived from Propositions 5 and 7. Proposition 5 asserts a positive relationship between perceived expectations and achievement. Proposition 7, which we have just considered, asserts a positive relationship between achievement and the importance of the student role. Given these two propositions, then, Theorem I specifies a positive association between perceived expectations and the importance of the student role. If the theory is consistent, however, Theorem I should be false because Proposition 7 proved to be false. Similarly, Theorem II, which is derived from the hypotheses of Propositions 5 and 7 should also be false, for while Hypothesis 5 indeed demonstrated that higher achieving schools are significantly higher in perceived expectations than are lower achieving schools, Hypothesis 7 failed to demonstrate that students in higher achieving schools

attach a significantly greater importance to their student role than do students in lower achieving schools.

Table 18 presents the correlational results of Theorem I. The results show that the theorem is not upheld as expected by the failure of Proposition 7. Similarly, Table 19 (Theorem II) demonstrates, as expected by the failure of Hypothesis 7, that because high and low achieving schools can be significantly discriminated on perceived expectations, does not mean that they will also be significantly different on the importance attached to the student role.

TABLE 18.--Correlations between mean perceived expectations and mean importance of the self-identity (role) of student.

Perceived Expectations	Importance of Self-Identity of Student			
	Item 15 <sup>a</sup>	Item 16 <sup>b</sup>	Item 17 <sup>c</sup>	Item 18 <sup>d</sup>
Perceived Principal Expectations	r = .02 t = .059 n.s.	-.04 -.103 n.s.	.31 .926 n.s.	-.12 -.355 n.s.
Perceived Teacher Expectations	r = .28 t = .830 n.s.	-.15 -.43 n.s.	.41 1.26 n.s.	-.03 -.090 n.s.
Perceived Parental Expectations	r = .23 t = .673 n.s.	-.24 -.686 n.s.	.49 1.573 n.s.	-.06 -.1596 n.s.

<sup>a</sup>Teacher.

<sup>b</sup>How important to be a good student.

<sup>c</sup>Parents.

<sup>d</sup>Best friend.

TABLE 19.--Difference between high and low achieving schools on mean perceived expectations and mean importance of the self-identity of student.<sup>a</sup>

	Perceived Teacher Expect.	Perceived Principal Expect.	Perceived Parental Expect.	Importance of Self-Identity of Student		
				Item 15 <sup>b</sup>	Item 16 <sup>c</sup>	Item 17 <sup>d</sup> Item 18 <sup>e</sup>
Higher Achieving	.59	2.41	.42	1.67	1.41	1.54 2.05
Lower Achieving	.86	2.67	.66	1.73	1.38	1.58 2.09
t =	4.1577	4.127	4.166	1.219	-.8128	.7898 .6489
D.F. =	1293	1282	1290	1311	1311	1311 1314
	p<.001	p<.001	p<.001	n.s.	n.s.	n.s. n.s.

<sup>a</sup>The lower the mean score, the higher the expectations and also the more importance attached to the role.

<sup>b</sup>Teacher.

<sup>c</sup>How important to be a good student.

<sup>d</sup>Parents.

<sup>e</sup>Best friend.

With hindsight it is not difficult to understand the potential dynamics operating here. Significant others such as parents, teachers, principals, and friends may communicate the importance of being a good student, but fail to instill the belief or expectation that indeed they can be good students. Stretching the Mertonian idea, it can be a lack of correspondence between a widely held and espoused value or goal, and the belief that one has the means to attain that goal. The two factors can indeed operate independently. If such a dynamic is operating, then frustration should arise in the lower achieving students where perceived expectations for academic success are low, but the value of doing well is strong. This should produce a sense of inadequacy, of inability to conduct oneself successfully in his environment. The next proposition, hypothesis, and two theorems explore this question.

A continuous poor performance at a valued task is not likely to enhance one's feelings of adequacy. Similarly, once one comes to feel that he is unable to do things well, that he is a victim in uncontrollable circumstances, then he certainly will be less likely to approach old or new circumstances with confidence and belief in himself. Table 20 shows the results of the correlation between achievement and the five sense of control items (Proposition 8). Table 21 (Hypothesis 8) shows the difference between higher and lower achieving schools on sense of control.

TABLE 20.--Correlation between achievement and mean sense of control.

	Item 26 <sup>a</sup>	Item 27 <sup>b</sup>	Item 28 <sup>c</sup>	Item 29 <sup>d</sup>	Item 30 <sup>e</sup>
Achievement	r = .82 t = 4.048 p < .005	.86 4.813 p < .001	.52 1.718 n.s.	.77 3.401 p < .005	.84 4.303 p < .005
D.F. = 8					

<sup>a</sup>Chance to direct one's life.

<sup>b</sup>Never do well in school.

<sup>c</sup>Can do well if work hard.

<sup>d</sup>I don't have any luck.

<sup>e</sup>Need luck to get good grades.

Certainly, a sense of control is highly related to school performance, and highly discriminates higher and lower achieving schools. The discussion in Chapter III explores some of the theoretical and empirical aspects of this factor, but an underscore of the importance of this factor should be made here. The lack of correspondence between one's personal needs and the things which the organization in which you are forced to operate stresses as important; the compounding effect of repeated failure creates a cycle of failure which reinforces one's feeling that one is incapable of success and consequently serves as a further stimulus to poor performance, again reinforcing the previously mentioned factors. How this lack of correspondence occurs is discussed in Chapter III. A consideration of some of the empirical

TABLE 21.--Difference between higher and lower achieving schools on mean achievement and mean sense of control.<sup>a</sup>

	Achievement	Item 26 <sup>b</sup>	Item 27 <sup>c</sup>	Item 28 <sup>d</sup>	Item 29 <sup>e</sup>	Item 30 <sup>f</sup>
Higher Achieving	57.5	2.88	3.19	3.61	3.12	3.35
Lower Achieving	45.4	2.62	2.85	3.48	2.91	2.91
		t = 4.877	6.331	3.303	4.578	8.834
		D.F. = 1298	1300	1305	1305	1301
		p<.001	p<.001	p<.001	p<.001	p<.001

<sup>a</sup>In all cases, the higher the mean score, the higher the sense of control.

<sup>b</sup>Chance to direct one's life.

<sup>c</sup>Never do well in school.

<sup>d</sup>Can do well if work hard.

<sup>e</sup>I don't have any luck.

<sup>f</sup>Need luck to get good grades.

correlates will occur later in this chapter, when we explore community-school relations. For the present consideration, our operationalizing of sense of control focuses specifically on the child's feelings that he has some control over how well he can operate and be evaluated in the school setting. We consider the child's feeling that the grades he obtains are controlled by fate and not by his own initiative. In addition, we explore the more general feeling as to whether the child believes he has some control over what happens to him in his future.

It seems likely that, given the high association between perceived expectations and achievement, there should also be a high association between perceived expectations and sense of control. Theorem III, derived from Propositions 5 and 8 and reported in Table 22, asserts this relationship. Ideally, it would be theoretically neat if we could say that perceived expectations yields achievement, which yields sense of control, which in turn reinforces the preceding variables. Unfortunately, our data do not allow us to assert such a relationship. Nevertheless, it is quite possible that such a process is occurring. The results reported in Table 22 show a fairly consistent positive relationship between perceived expectations and sense of control. The perceived principal expectations have a lower association with sense of control than do perceived teachers and parents expectations, which previous results in this chapter suggest should occur. Item 28 in sense of control produces the lowest association,

as it did in the association with achievement. The reason for this result lies undoubtedly in the nature of the question, which says "I can do well in school if I work hard," a phrase which school personnel use repeatedly and indiscriminately. The children are probably conditioned to respond positively to this query, even if they don't believe it will work for them.

TABLE 22.--Correlations between mean perceived expectations and mean sense of control.

		Sense of Control				
		Item 26 <sup>a</sup>	Item 27 <sup>b</sup>	Item 28 <sup>c</sup>	Item 29 <sup>d</sup>	Item 30 <sup>e</sup>
Perceived Principal Expectations	r =	.55	.59	.33	.70	.60
	t =	1.872	2.057	.986	2.787	2.111
		p<.05	p<.05	n.s.	p<.05	p<.05
Perceived Teacher Expectations	r =	.71	.78	.38	.73	.65
	t =	2.888	3.568	1.160	2.985	2.400
		p<.05	p<.005	n.s.	p<.01	p<.05
Perceived Parent Expectations	r =	.82	.83	.59	.66	.66
	t =	4.033	4.283	2.086	2.477	2.509
		p<.005	p<.005	p<.05	p<.05	p<.05

D.F. = 8

<sup>a</sup>Chance to direct one's life.

<sup>b</sup>Never do well in school.

<sup>c</sup>Can do well if work hard.

<sup>d</sup>I don't have any luck.

<sup>e</sup>Need luck to get good grades.

Theorem IV, derived from Hypotheses 5 and 8, asserts that if higher and lower achieving schools can be discriminated on perceived expectations, then they will also be significantly different in the same way on the sense of control which students have. These results can be seen by looking at Table 21 for sense of control and Table 15 for the difference on perceived expectations. The results clearly show that both factors differentiate higher and lower achieving schools in the same way and at a probability level of .001. The importance of this idea of "sense of control" for students is only in recent years coming to be recognized. Much of the movement behind "free schools" and "open-classroom" approaches to education is undoubtedly based in the belief that failure propagates failure and success (because you are doing something of interest and importance to you) will condition you to approach new situations with the confidence and belief that you can do well. Unfortunately, these programs can sometimes produce limited results when applied to children who have too long been exposed to failure. The children from whom the present data are collected are only fourth through sixth graders, and yet they already manifest strong beliefs about what they can and cannot do. More research into the causative factors of low sense of control and the behavioral consequences of such, is necessary before we can successfully create learning environments where these problems are overcome.

Exploring further now the question of the effects of differential expectations, Proposition 9 asserts that the

degree to which teachers will press their students for educational achievement is dependent upon how well they believe their students can do, i.e., the academic expectations which they hold for their students. If a person believes that another person is incapable of performing a task, then he is unlikely to expend time and energy in encouraging the person to do so. Table 23 presents the correlational results between the teacher expectation item, which asks "What level of achievement can be expected of the students in this school?" and several questions designed to tap the teachers' press for future education by the students. Table 24 shows the difference between higher and lower achieving schools on these variables. Clearly there is a strong tendency for teachers with high expectations to also demonstrate a high press for future performance and conversely. Item 40, which has a low correlation with expectations and also weakly differentiates the schools, is heavily value laden, and this may have been the cause of its weakness. This item asks the question "How often do you stress to your students the necessity of a post-high school education for a good job and/or a comfortable life?"

Some teachers may be hesitant to confuse learning for its own sake with learning for pragmatic reasons. Other teachers, especially in low S.E.S. schools, may be hesitant to express this for fear of denigrating the jobs of the parents or the life style of the families, and so on.

TABLE 23.--Correlation between mean teacher expectations and mean teacher press for educational achievement.

	Item 38 <sup>a</sup>	Item 39 <sup>b</sup>	Item 40 <sup>c</sup>
Expectations	r = .88	.90	.35
	t = 5.140	5.75	1.039
D.F. = 8	p<.001	p<.001	n.s.

<sup>a</sup>Completion of high school.

<sup>b</sup>Completion of college.

<sup>c</sup>Stress education for good job and life.

TABLE 24.--Difference between higher and lower achieving schools on mean teacher expectations and mean teacher press for educational achievement.<sup>a</sup>

	Expectations	Item 38 <sup>b</sup>	Item 39 <sup>c</sup>	Item 40 <sup>d</sup>
Higher Achieving	2.04	1.15	2.96	2.48
Lower Achieving	3.70	1.91	3.81	2.59
t =	8.869	4.906	2.22	.3886
D.F. =	45	47	46	47
	p<.001	p<.001	p<.02	n.s.

<sup>a</sup>The lower the mean score, the higher the expectations and the greater the mean press for educational achievement.

<sup>b</sup>Completion of high school.

<sup>c</sup>Completion of college.

<sup>d</sup>Stress education for good job and life.

These results provide a slight glimpse of the many potential correlates of differential expectations. Apparently

expectations are not only associated with the performance of children but also with the approach which teachers take to their children. Expectations may not only limit the children's attempted behaviors but also the behaviors of teachers in terms of what they will and will not stress, will and will not try. This limitation of teacher behaviors in various areas may contribute to the establishment of performance norms in the school, norms which establish the minimum and indeed maximum level of acceptable performance by children.

The next proposition (10) and hypothesis (10) are similar to the ones just discussed, in that we are considering teacher attitudes and speculating on their effect on teacher performance. Proposition 10 asserts that the level of achievement in schools is positively associated with the degree of teacher job satisfaction. Similarly, Hypothesis 10 asserts that teacher job satisfaction will be higher in high achieving schools than in low achieving schools, even with S.E.S. controlled. Tables 25 and 26 provide evidence that the achievement of students in a school is not a sufficient basis upon which teachers will or will not be satisfied with their job. This does not mean that the performance of students will not affect the satisfaction of teachers. The evidence does, however, suggest that numerous other factors must be operating in the determination of teacher job satisfaction. Such factors as job security, salary, prestige, interpersonal relations, and autonomy most certainly operate to some extent for each teacher. Nevertheless, there appears to be a slight

TABLE 25.--Correlations between mean teacher job satisfaction and achievement of students.

		Teacher Job Satisfaction		
		Item 29 <sup>a</sup>	Item 30 <sup>b</sup>	Item 31 <sup>c</sup>
Achievement	r =	.42	.14	-.06
	t =	1.298	.411	-.176
		n.s.	n.s.	n.s.

D.F. = 8

<sup>a</sup>How enjoy teaching responsibilities here?<sup>b</sup>Take new job for \$1,000 more?<sup>c</sup>Take new job for \$3,000 more?TABLE 26.--Difference between higher and lower achieving schools on achievement and mean teacher job satisfaction.<sup>a</sup>

	Achievement	Item 29 <sup>b</sup>	Item 30 <sup>c</sup>	Item 31 <sup>d</sup>
Higher Achieving	57.5	3.81	3.11	2.59
Lower Achieving	45.4	3.64	3.05	2.73
	t =	1.013	0.2178	0.4337
	D.F. =	47	47	47
		n.s.	n.s.	n.s.

<sup>a</sup>The higher the mean score, the greater the job satisfaction.<sup>b</sup>How enjoy teaching responsibilities here?<sup>c</sup>Take new job for \$1,000 more?<sup>d</sup>Take new job for \$3,000 more?

association between achievement of students and job satisfaction if you look at item 29 in the two tables. This item differs from the other two, in that it refers directly to the immediate school situation. The other two items focus directly on satisfaction with the teaching role in the abstract. When viewing item 29, we see a much higher correlation with achievement and a better discrimination between higher and lower achieving schools than for the other items. Significance is not, however, obtained, and it appears as though we must reject the hypothesis, on the assumption that the factors contributing to teacher job satisfaction are too complicated to be indicated by the level of achievement in the school, even with S.E.S. controlled.

Following from this line of reasoning is Proposition 11, which asserts that the degree of teacher job satisfaction is positively related to the stability of the school, as indicated by the teacher turnover rate. Assumedly, the more appealing are the circumstances at any school, the less likely will there be turnover of teachers because they are dissatisfied. In Table 27 we see the correlation between the expression of teachers in a school as to how much they enjoy their teaching responsibilities in that school, and the stability of the school's teachers. The correlation is a positive and strong enough one to indicate some association. However, significance is not obtained. The same problem which we encountered in the previous proposition seems to be applying

here; that is, the weakness with which we have indicated job satisfaction.

TABLE 27.--Correlation between mean teacher job satisfaction and stability of the school's teachers.

Job Satisfaction	
Stability	$r = .46$ $t = 1.478$ n.s.
D.F. = 8	

This question of teacher turnover rate is important because a high rate is disruptive to the establishment of good rapport with the parents, and indeed the students also.

#### Analysis of Source Propositions

This final section concentrates on some of the factors which may contribute to the production and maintenance of higher expectations and a supportive normative climate in higher achieving schools and conversely for low achieving schools. Again, the factors which may contribute to a certain school climate and expectation level are far too numerous to consider here. Rather, we have isolated three variables which we suspect have a strong influence on the type of academic norms generated in a school. The first variable is that of grouping practices in the school. The second variable is the competition-cooperation emphasis in the school. The last is a rather lengthy consideration of community input into the

school. These variables have not been selected because they are necessarily the most important factors, but rather because they have either never been empirically or theoretically considered or not considered to be important and meaningful contributing factors.

Proposition 12 asserts that the degree of homogeneous grouping in a school is inversely related to the level of academic expectations for the students in the school. In other words, the more the school isolates segments of the students on the criterion of what they can and cannot do, then the lower will be the level of academic expectations. This was tested by a chi-square test of association employing two categories of ability grouping: homogeneous grouping (where the children of the same tested or presumed ability level are placed together); and no homogeneous grouping, which does not mean that the children have not been identified as being at a certain ability level but simply that they have not been placed together in a special group for the purposes of instruction. Given this qualitative dichotomy, several different expectation levels were tested against it for dependent association. The following attempts occurred: perceived teacher expectations; actual teacher expectations for students in classroom; teacher expectations for students in the school; teacher expectations while dichotomizing achievement levels and also S.E.S. levels; and perceived teacher expectations while dichotomizing achievement and S.E.S. levels separately. In each instance, five levels of expectations were possible.

The results were that expectations and grouping were unrelated in all attempted analyses. I have not presented a table for the present analysis, primarily because 25 separate tables exist and the question of which analysis best represents the indicated failure of the proposition is uncertain. The most overwhelming evidence is that 25 separate tests of this proposition failed to demonstrate a significant association.

Why is this so? The failure of this hypothesis does not indicate that the practice of identifying and labeling children according to ability is not an important contributing factor in establishing expectations either for the teachers or students. What it does suggest is that grouping as a technique in and of itself is not an important factor for most children in establishing expectations. Rather, the identification of children's ability and the subsequent effect on expectations most likely occurs prior to grouping. In other words, it appears that whether or not a teacher decides to use grouping as a teaching tool, she still has developed ideas about the ability of her students, and these ideas are perceived by the students, regardless of whether grouping is or is not employed.

The fact that grouping does not produce expectation states for teachers or students also gives us no indication as to the relative ease or difficulty of changing expectation states after grouping has been employed, as compared to situations where it has not been employed.

Hypothesis 11 asserts that if high and low achieving schools can be differentiated on the degree of grouping practiced, then expectations will be in an inverse relation to the degree of grouping. In other words, if there is less grouping in the higher achieving schools than in lower achieving schools, then the expectations will be higher in the higher achieving schools. We have already seen from earlier tables that expectations are indeed higher in higher achieving schools. We have also seen from the discussion of Proposition 12 that homogeneous grouping and low expectations are apparently unrelated. Table 28, however, shows that the practice of homogeneously grouping classrooms is much more prevalent in lower achieving schools than in higher achieving schools. This again in no way demonstrates that homogeneous grouping produces low expectations. Yet, why do the higher achieving schools employ homogeneous grouping so infrequently, and what are the learning consequences of this? It is difficult to arrive at any conclusions on this. Speculation might suggest that the higher achieving schools have more freedom to employ innovative techniques such as individualized instruction for their lower achieving students, given the smaller number of these students. On the other hand, it is quite possible that while expectation states are formed independently of homogeneous grouping, this practice, and any behaviors which occur with this practice, may lower the achievement. In other words, it may account for some of the variance in low achievement not accounted for by low

expectations. Finally, of course, it is quite possible that the large difference in the practice of grouping between higher and lower achieving schools does not account for any of the difference in achievement whatsoever, but simply reflects perhaps a hesitance to experiment with new procedures.

TABLE 28.--Grouping rates in higher and lower achieving schools by per cent of classrooms grouped and ungrouped.

	% of Classrooms Homogeneously Grouped	% of Classrooms Not Grouped
Higher Achieving	10% (3)	90% (27)
Lower Achieving	59% (13)	41% (9)

The next proposition (13) asserts that the greater is the press for competition in a school, the lower will be the achievement, and conversely. Following from this is Hypothesis 12, which states that higher and lower achieving schools can be discriminated on the press for competition, with higher achieving schools having a lower degree of press for competition than lower achieving schools.

Table 29 presents the results of the correlation between mean school achievement and mean perceived press for competition. As you can see, there is a significant correlation between achievement and competition. The lower the

press for competition, the higher the achievement. Similarly, Table 30 shows that the higher achieving schools have significantly less press for competition than the lower achieving schools.

TABLE 29.--Correlation between mean press for competition and mean school achievement.

Press for Competition	
Achievement	$r = -.79$ $t = -3.679$ $p < .005$
D.F. = 8	

TABLE 30.--Difference between higher and lower achieving schools on mean press for competition.

	Achievement	Press for Competition <sup>a</sup>
Higher Achieving	57.5	1.47
Lower Achieving	45.4	1.90
		$t = -4.852$ D.F. = 1296 $p < .001$

<sup>a</sup>The lower the mean score, the less the press for competition.

In Chapter III we discussed the theory behind this relationship. We stressed the point that a cooperative

learning environment is a better learning situation than is a competitive environment. We cannot, of course, be certain that simply because there is less competition, it follows that there is more cooperation. It does, however, seem safe to conclude that there are strong constraints against cooperation when students are encouraged to vie with each other for grades, teacher attention, and approval. This is an interesting finding, for if we can assume that there is more cooperation in the less competitive environments, then the higher achievement levels in the less competitive environments contradict some of the earlier work in this area (see Chapter III), which reports that although cooperative environments have many more positive effects for the functioning of groups than do competitive environments, there is no difference in the performance of the groups in terms of their final product. I contended that these studies did not show an achievement differential because of their short duration necessitated by their experimental approach. Given adequate time for the development and maintenance of cooperative norms and interpersonal relations, then it seemed plausible to predict higher group achievement for the less competitive groups. This is indeed what seems to have occurred. More work, however, which focuses directly on cooperative and competitive environments in schools is necessary before firm conclusions can be drawn.

This final section deals with three propositions and theorems derived from them, utilizing community variables. The first proposition (14) asserts that the stability of a

community is positively related to the degree of support which the community gives to the school. The indicators of community support are teacher reports of parental interest in the school and in their children's education. The rationale for this relationship is discussed in Chapter III. Table 31 shows the results of the correlations between community stability and the three separate indicators of community support. (Item numbers refer to teacher questionnaire.)

TABLE 31.--Correlations between community stability and mean community support of the school.

		Community Support		
		Item 59 <sup>a</sup>	Item 60 <sup>b</sup>	Item 62 <sup>c</sup>
Stability	r =	.60	.73	.41
	t =	2.1057	3.059	1.2896
	p < .05		p < .01	n.s.
D.F. = 8				

<sup>a</sup>Parents regard school as "baby-sitting" agency.

<sup>b</sup>Parents want top quality education.

<sup>c</sup>Parents expect children to complete college.

It appears as though the proposition can be accepted and the rationale discussed in Chapter III may be valid. The more stable is a community, the more favorable are the teachers' perceptions of parental support. The argument presented was that with longer residence comes a greater opportunity to become involved in school affairs and to increase mutual understanding and correspondence of what the teachers and parents consider to be desirable and appropriate goals. The

correlations are all positive and high. Item 62 was nonsignificant, and in hindsight the reason for this can be seen. The question was asked: "How many of the parents in this school service area expect their children to complete college?" Certainly, parents do not vary their desire of college for their children simply because they move or don't move frequently. The reason for using this item as one indicator of community support was the belief that teachers would consider high parental desire for their children to attend college as an endorsement of the importance of the school. This item apparently does not tap the dimensions of support which the other two items do.

Extending this idea of community support to its relationship with the mean level of achievement in the schools, Proposition 15 posits a positive association between the two. The greater the community support, the higher will be the achievement. Table 32 presents the correlational results for this proposition. As can be seen, these three indicators of community support are positively related to student achievement in a significant manner.

In Chapter III we asserted that this would occur because of the correspondence between the specific goals of the families and schools. The basic idea is that children are being reinforced for similar behavior and in a similar way at home and at school, or of course the converse, where this is not occurring and lower achievement is likely to occur.

TABLE 32.--Correlations between mean community support for the school and student achievement.

	Item 59 <sup>a</sup>	Item 60 <sup>b</sup>	Item 62 <sup>c</sup>
Achievement	r = .54 t = 1.809 p < .05	.69 2.683 p < .05	.89 5.477 p < .001

D.F. = 8

<sup>a</sup>Parents regard school as "baby-sitting" agency.

<sup>b</sup>Parents want top quality education.

<sup>c</sup>Parents expect children to complete college.

Theorem V is derived from this proposition (15) and the previous proposition (14). Theorem V asserts that the stability of a community is positively related to the academic achievement of the students. Given the fact that both Proposition 14 and 15 were supported in the analysis, then Theorem V, which is derived from them, should also be upheld. Table 33 shows that this is indeed the case.

TABLE 33.--Correlation between community stability and student achievement.

		Stability		
		Overall	Top 6 S.E.S.	Bottom 4 S.E.S.
Achievement	r = .60 t = 2.139 p < .05	.61 p < .05	.88 p < .001	

D.F. = 8

The more stable is a community, the higher is the achievement of the students. This would appear to contradict in a sense the sociological premise that the academic normative climate which exists in a community is the crucial factor, and that this climate exists at any level, regardless of how stable the community is. Certainly this question needs more exploration. However, if the rationale presented in Chapter III has any validity, then the idea that given a stable community and given the desire of most parents to have their children do well in school, then over time with the emergence of greater intercommunication between school and community, there will be a strong tendency for a similar academic orientation to emerge which generally favors higher achievement than might "normally be expected." This is not to deny that conflicts can develop between community and school, even with high stability, but only to suggest that they are less likely to occur and become established when greater communication exists.

The stability scores on each school individually suggest that there is a point at which the effect of stability on achievement levels off and no longer increases the tendency toward higher achievement. In other words, there appears to be an optimum level for the effect of stability upon achievement--a point at which the effect of stability upon achievement "slows down." Similarly, Table 33 shows that the correlation between stability and achievement is much lower for the top six S.E.S. schools than it is for the bottom four.

The number of schools involved are so few that it is unsafe to arrive at any conclusions on this. However, it is quite possible that low S.E.S. schools benefit more from high community stability than do high S.E.S. schools. High S.E.S. schools have a cultural bias in their favor, in that school personnel oftentimes prejudge the ability of higher S.E.S. children as being of a high level. This is usually the opposite in the lower S.E.S. schools. Consequently, high stability may be an important factor in improving achievement in lower S.E.S. schools.

Continuing, then, in our consideration of community factors, it seems likely that the more support a community gives to a school, the higher will be the expectations for student performance. This is asserted in Proposition 16, and the results are presented in Table 34. If we view support item 59 first, we see that perceived principal expectations are correlated with this item to a much higher degree than are the other two perceived expectation scores. This item taps the degree to which parents regard the school primarily as a "baby-sitting agency." Are principals more sensitive to this type of community attitude and do they develop expectations for children's performances around criteria of this sort?

If we look at item 60, which approaches the support idea from the standpoint of parental concern over a "top quality education" for their children, we see that perceived teacher expectations have the highest relationship, and the

principal correlation declines markedly. Finally, item 62 has the highest correlation with perceived expectations of all three support items. This item approaches the idea of support through the reported belief of parents that their children will complete college. Again we see perceived principal expectations as the lowest, although significant. The perceived teacher and parental expectations are highly correlated with this item. It appears as though the support which the school receives from the community is associated with the expectations which students perceive as being held for them by important "others."

TABLE 34.--Correlations between mean community support for the school and mean students' perceived expectations.

Community Support		Perceived Principal Expectations	Perceived Teacher Expectations	Perceived Parental Expectations
Item 59 <sup>a</sup>	r =	.77	.57	.49
	t =	3.444	1.965	1.593
		p<.005	p<.05	n.s.
Item 60 <sup>b</sup>	r =	.25	.50	.40
	t =	0.733	1.628	1.582
		n.s.	n.s.	n.s.
Item 62 <sup>c</sup>	r =	.65	.88	.92
	t =	2.439	5.211	6.569
		p<.05	p<.001	p<.001
D.F. = 8				

<sup>a</sup>Parents regard school as a "baby-sitting agency."

<sup>b</sup>Parents want top quality education.

<sup>c</sup>Parents expect children to complete college.

On the basis of the weak evidence presented above, it seems as though principals may be more influenced in forming expectation states for students by functional considerations such as the parents' attitude toward the school's immediate purpose for existing. This is contrasted with teachers, who seem to form expectations on the basis of the community's interest in the abstract idea of learning, per se. This, of course, would need much more verification with a broader range of support dimensions before any definitive statement could be made.

Extending this idea, then, Theorem VI specifies a positive association between the stability of a community and academic expectations which students perceive are held for them. This theorem is derived from Propositions 14 and 16, and should be substantiated given the empirical evidence for the two propositions. Proposition 14 asserts that the stability of a community is positively related to the degree of support which the community gives to the school. Proposition 16 states that the support which a community gives to a school is positively related to the perception which the students in that school have of the academic expectations held for them. As you can see in Table 35, the theorem is not upheld. It is unclear why this occurred. Given the substantiation of Propositions 14 and 16, this theorem should also have been substantiated. The first conclusion to derive is that either Proposition 14 or Proposition 16 or both were falsely upheld. A second possible conclusion is that the associations posited

by one or both of the propositions are actually weaker than what appeared, and consequently the relationship in Theorem VI is validly weak. A third possibility is that the relationship in Theorem VI between stability and perceived expectations is being falsely rejected. It could be that the relationship is indeed true and the smallness of the sample  $n$  is producing nonsignificance.

TABLE 35.--Correlations between community stability and perceived academic expectations.

		Perceived Principal Expectations	Perceived Teacher Expectations	Perceived Parental Expectations
Stability	$r =$	.11	.19	.20
	$t =$	0.323	0.543	0.591
		n.s.	n.s.	n.s.
D.F. = 8				

When we consider all of these factors, I am inclined to think that the relationships between stability and community support plus community support and expectations do indeed exist as tendencies which modify the existing forces on achievement, but they are not as strong as the evidence presented here might suggest. This would indeed diminish the relationship between stability and expectations, although there probably still are tendencies to lower expectations when community stability is low, particularly at the lower S.E.S. levels. Repeatedly in our visits to schools we would hear principals and teachers cite the problem of expecting too

much from the children because they "move in and out so fast we don't have a chance to work with them very well." This is indeed a problem; however, its effect may only be apparent at the lower S.E.S. levels where, as was mentioned earlier, the students do not have the cultural advantage of having a performance expectation bias in their favor as do middle-class children.

The final two hypotheses are presented simultaneously in Table 36. Hypothesis 13 (from Theorem V) asserts that if the schools can be differentiated on high and low achievement, then they can also be differentiated in the same way on how stable the respective communities are. Hypothesis 14 (from Proposition 15) posits the same differentiation between higher and lower achieving schools, but this time on community support. Clearly, this is the situation. A major point again which we must remember is that the higher and lower achieving schools are matched on S.E.S. Consequently, this clear and consistent difference on stability and support, and its relationship to achievement, is probably not a result of differential S.E.S.

In summary, this whole question of community-school relations and its effect upon the performance and attitudes of students, teachers, and parents appears to warrant some further in-depth exploration on its own. The present data would suggest that while these factors considered are not causative variables of expectations and achievement, they are modifying or intervening variables. The presence or absence of high stability and support seems to modify the level of

expectations and achievement. Again, considerably more research is necessary in order to isolate the true nature of these dynamics.

TABLE 36.--Differentiation of higher and lower achieving schools on community stability and mean support.

	Achievement	Stability <sup>a</sup>	Support <sup>a</sup>		
			Item 59 <sup>b</sup>	Item 60 <sup>b</sup>	Item 62 <sup>c</sup>
Higher Achieving	57.5	.76	3.50	3.30	2.71
Lower Achieving	45.4	.60	2.90	2.75	1.32
	n=1,321	n=1,321	n=50	n=50	n=50

<sup>a</sup>The higher the mean score, the greater the stability and support.

<sup>b</sup>Parents regard school as a "baby-sitting agency."

<sup>c</sup>Parents want top quality education.

<sup>d</sup>Parents expect children to complete college.

## CHAPTER V

### STRUCTURAL EFFECTS

One of the major underlying assumptions in this study is that those factors which influence the attitudes and behavior of students are not just individual level factors which operate independently of the social context. Rather, it is assumed that the social or normative climate of a school and community generates certain forces which modify the individual characteristics to a degree which affects the attitudes and behavior of students above and beyond their own tendencies.

Blau (1960) points out that there are two basic types of social facts: (1) common values and norms, and (2) networks of social relations. These are attributes or characteristics of social groups ("collectivities") and not of individuals. Individuals may or may not be affected by these structural factors in a way which could not necessarily be predicted by looking at the individual factors alone. It is to the question of common values and norms with which we are concerned here. Are there certain norms which operate in various school settings which affect the attitudes and behavior of students in such a way that if they were in another setting these attitudes and behaviors would be different? *In* other words, does the "climate of norms" in a school and

community make any difference in the behavior of students above and beyond the personal and individual characteristics of the students?

As Blake and Davis (1964) point out:

Human societies differ from animal societies in that the rules of behavior differ from group to group. For insects and animals, behavior tends to be nearly identical, varying only with external conditions.

Thus, in order to truly understand why humans act as they do, we must understand the normative aspects of their behavior.

Blake and Davis are quick to assert, however, that while "norms exercise some influence on behavior . . . [the ultimate] question is how much?" These norms and values "are among the world's most difficult objects to identify with certainty."

One must be extremely careful about asserting that a norm exists, simply because there is some regularity of behavior among members of a collectivity.

Selvin and Hagstrom (1963) in their formulation for classifying groups, point out that there are two types of group properties: "aggregative properties," which are based on the characteristics of smaller units within the group, that is, derived from the behavior of individual members; and "integral properties," which are not based on smaller units. Whenever one is assessing the behavior of members in a group, he "must be careful not to confuse an attribute of an individual's context with an attribute of the individual himself." *This* becomes a major problem in sociological analysis.

Up until this point, we have presented evidence that expectations are associated with various attitudes and behavior of students. We have also suggested that high and low achieving schools actually have "climates" which maintain norms of high expectations or low expectations independently of the individual's expectation level. We have, however, provided no evidence to this effect. In this chapter the question of structural effects will be explored to a limited degree.

In the last 12 years three major approaches to the problem of isolating structural effects have been developed (see Blau, 1960; Davis, Spaeth, and Huson, 1961; and Tannenbaum and Backman, 1964). The method developed by Blau will be used because of its relative simplicity of application, given the present data.

Blau asserts that:

The structural effects of a social value can be isolated by showing that the association between its prevalence in a community or group and certain patterns of conduct is independent of whether an individual holds this value or not.

He provides the following example:

If we should find that, regardless of whether or not an individual has an authoritarian disposition, he is more apt to discriminate against minorities if he lives in a community where authoritarian values prevail than if he lives in one where they do not, we would have evidence that this social value exerts external constraints upon the tendency to discriminate--structural effects that are independent of the internalized value orientation of individuals.

The method which he suggests is to find the relationship between the distribution of a given characteristic in

various groups and some effect criterion, while holding this characteristic constant for individuals. If there are no structural forces operating within groups which aggregately differ on the characteristic, then there should be no difference between groups for individuals who have the same score on that characteristic with regard to its relationship to some dependent variable. For example, in regard to the present data, if there are two groups which differ on the aggregate level of perceived teacher expectations for the students, i.e., one group exhibits a higher mean level of perceived teacher expectations than the other group; and if we are interested in the effect of expectations on aspiration level; if we find that individuals in both groups with high personal expectations have the same per cent of high aspirations, then this would provide evidence that aspirations operate independently of any structural forces and are a result of individual expectations. On the other hand, if we should find a large difference on aspirations for these same individuals between groups, then we would generally have evidence that "social processes originating outside the individual personality are responsible for the differences in the dependent variable, since the influences of psychological processes have been controlled in the analysis" (Blau, 1960, p. 191).

Using this method, then, I would like to explore the existence of structurally based expectations for both the

effect of perceived teacher expectations (within school), and perceived parental expectations (within community and student peer group). The dependent variables were selected primarily because of their high correlations with perceived expectations and also achievement in the earlier analysis. Unfortunately, we cannot use achievement of individuals as a dependent variable because there were no data available on this for each individual.

We had also hoped to assess the effect of the climate of actual expectations among teachers upon certain dependent variables of teacher performance such as their press for student achievement, while controlling for each teacher's personal expectation level. It was assumed that teachers operating in the high expectation climate would demand more from their students, etc., regardless of their personal expectation level, than would teachers of the same level operating in the lower expectation climate. Unfortunately, the size of the teacher sample was too small, and the number of teachers in certain cells was so small as to make the results practically meaningless.

The final table to be presented is not strictly an attempt to isolate structural effects as Blau dictated it. What has been done is to control for S.E.S. levels of students within higher and lower achievement level (and thus expectation level) schools, in order to assess whether students of various S.E.S. levels operate the same or differently

in different achievement-expectation climates. The results are very interesting.

In Table 37 we see the dichotomy of schools with higher and lower mean perceived teacher expectation climate. The schools in the higher and lower expectation categories are the higher and lower achieving schools, respectively, which were matched on S.E.S. This dichotomy will be the same for the remaining two tables. Within each type of teacher expectation climate we have dichotomized the individual on high and low perceived teacher expectations. The same criterion for assigning students was, of course, used for both types of school climates. Similarly, the same criterion for defining high and low aspirations and sense of control was used for children in all categories. Once again, all of the dichotomies for high and low are exactly the same for all three tables in this chapter, thus allowing for meaningful cross table checking is desired. The listing of item numbers under sense of control corresponds to the items on the student questionnaire, which can be found in the Appendix.

Beginning first with aspirations in Table 37, we see that while aspirations are highly related to perceived teacher expectations, it makes no difference whether a student operates in a high or low expectation climate. Individuals with high perceived teacher expectations have the same degree of high aspirations, whether they go to school in a high or low expectation climate. The same holds true for individuals with low perceived teacher expectations. A

TABLE 37.--Aspirations and sense of control by individual perceived teacher expectation level and school mean perceived teacher expectation level.

		Higher Expectation Level		Lower Expectation Level	
		High Ind. Perceived Expect.	Low Ind. Perceived Expect.	High Ind. Perceived Expect.	Low Ind. Perceived Expect.
		n=444 (63%)	n=257 (37%)	n=341 (57%)	n=254 (43%)
Aspirations	High:	85%	45%	85%	45%
	Low:	15%	55%	15%	55%
-----					
Sense of Control					
Item 26 <sup>a</sup>	High:	71%	64%	61%	47%
	Low:	29%	36%	39%	53%
-----					
Item 27 <sup>b</sup>	High:	85%	81%	78%	62%
	Low:	15%	19%	22%	38%
-----					
Item 28 <sup>c</sup>	High:	96%	95%	93%	87%
	Low:	4%	5%	7%	13%
-----					
Item 29 <sup>d</sup>	High:	86%	79%	81%	67%
	Low:	14%	21%	19%	33%
-----					
Item 30 <sup>e</sup>	High:	90%	82%	77%	62%
	Low:	10%	18%	23%	38%

<sup>a</sup>Chance to direct one's life.

<sup>b</sup>Never do well in school.

<sup>c</sup>Can do well if work hard.

<sup>d</sup>I don't have any luck.

<sup>e</sup>Need luck to get good grades.

startling finding, however, is the vast difference between individuals with high and low expectations on the aspirations which they hold. The correspondence between what they perceive the teachers expect them to do and what they want to do is very high. These results indicate that the teacher expectation climate in schools does not affect aspirations beyond the effect which individually perceived expectations do.

The same is not true, however, for sense of control. Except for item 28, which poses the cliché question of "I can do well in school if I work hard," the differences between the two expectation climates on high and high, and low and low are distinct and consistent, suggesting that structural effects are indeed operating to either raise the sense of control of students in the high expectation climate, or to lower the sense of control of the students in the low expectation climate. Indeed, on all five sense of control items not only are the students who have low expectations in the higher expectation climate consistently higher than their counterparts in the lower expectation climate, but they are higher in sense of control than individuals with high perceived expectations from the lower expectation climate on all items except one.

Is it possible that children who operate in a high expectation climate and report low perceived expectations for themselves are less likely to regard these expectations and their implications as permanent characteristics of themselves,

and consequently are less likely to resign themselves, to believe that they can't do it? Given the extreme importance of sense of control as evidenced by the present study and also by the work of James Coleman (Equality of Educational Opportunity), it seems to be crucial that students not resign themselves or come to feel that they are victims of circumstances if they are ever going to perform well academically. According to this present evidence, students will possess a higher sense of control (and consequently willingness to try new things?) regardless of personal perceived teacher expectations, if they are operating in a climate of high perceived teacher expectations.

Let us look at the same question, but this time for perceived parental expectation climate. The reader may wonder if this is a legitimate use of the idea of structural effects, i.e., by using perceived parental expectations. I believe that it is warranted for two reasons: parents are indeed an important part of the school social system. As we have seen, they apparently influence teachers, principals, and students on academic matters. Similarly, as members of the community they can generate a belief system about the academic ability of the children in the area which can become a part of the normative system. Second, parental beliefs about the students in their child's school are internalized by the children and can be propagated in the "peer culture," thus establishing a structural effect based upon perceived parental expectations. Table 38 presents the results of this analysis.

TABLE 38.--Aspirations and sense of control by individual perceived parental expectation level and school mean perceived parental expectation level.

		Higher Expectation Climate		Lower Expectation Climate	
		High Ind. Perceived Expect. n=502 (71%)	High Ind. Perceived Expect. n=199 (29%)	High Ind. Perceived Expect. n=397 (67%)	High Ind. Perceived Expect. n=194 (33%)
Aspirations	High:	85%	34%	85%	33%
	Low:	15%	66%	15%	67%
-----					
Sense of Control					
Item 26 <sup>a</sup>	High:	72%	59%	58%	48%
	Low:	28%	41%	42%	52%
-----					
Item 27 <sup>b</sup>	High:	86%	76%	75%	64%
	Low:	14%	24%	25%	36%
-----					
Item 28 <sup>c</sup>	High:	97%	93%	92%	87%
	Low:	3%	7%	8%	13%
-----					
Item 29 <sup>d</sup>	High:	86%	79%	79%	68%
	Low:	14%	21%	21%	32%
-----					
Item 30 <sup>e</sup>	High:	91%	78%	74%	64%
	Low:	9%	22%	26%	36%

<sup>a</sup>Chance to direct one's life.

<sup>b</sup>Never do well in school.

<sup>c</sup>Can do well if work hard.

<sup>d</sup>I don't have any luck.

<sup>e</sup>Need luck to get good grades.

As can be seen, the results are almost identical to the ones reported in Table 37. Aspirations seem to operate independently of the parental expectation climate, but sense of control does not. It appears as though the perceived teacher and parent climates of expectation may influence the sense of control which children have, independently of personally perceived expectations.

In this final section we abandon the attempt to strictly isolate structural effects as Blau suggested, and instead look at the question of how children of high and low family S.E.S. fare on certain factors when they operate in a high or low achievement environment (and consequently a high or low expectation climate, respectively). Table 39 presents the results of this analysis. As you can see by viewing the per cent of students with high S.E.S. in both categories, i.e., higher and lower achieving schools, we see a difference of 12 per cent more in the higher achieving schools. The criterion for dividing high and low S.E.S. was to ascertain the median S.E.S. score for both categories combined, and then divide the sample within each category by that criterion.

This result suggests that the schools may not have been matched on S.E.S. as well as was thought. Thus, many of the results found in this study could be biased by the inadequate control of S.E.S., a problem which researchers in this area are continually bothered with. This, of course, would only be valid if you believe that the Duncan scale, which is used in this table, is more accurate than the State

TABLE 39.--Perceived expectations, aspirations, and sense of control by individual S.E.S. level and school mean achievement level.

		Higher Achieving Schools		Lower Achieving Schools	
		High Ind. S.E.S.	Low Ind. S.E.S.	High Ind. S.E.S.	Low Ind. S.E.S.
		n=345 (55%)	n=287 (45%)	n=219 (43%)	n=296 (57%)
Perceived Teacher Expect.	High:	72%	56%	71%	50%
	Low:	28%	44%	29%	50%
-----					
Perceived Parental Expect.	High:	79%	65%	78%	61%
	Low:	21%	35%	22%	39%
-----					
Aspirations	High:	78%	65%	79%	64%
	Low:	22%	35%	21%	36%
-----					
Sense of Control					
Item 26 <sup>a</sup>	High:	72%	66%	64%	50%
	Low:	28%	34%	36%	50%
-----					
Item 27 <sup>b</sup>	High:	86%	81%	82%	66%
	Low:	14%	19%	18%	34%
-----					
Item 28 <sup>c</sup>	High:	96%	96%	94%	87%
	Low:	4%	4%	6%	13%
-----					
Item 29 <sup>d</sup>	High:	87%	82%	84%	71%
	Low:	13%	18%	16%	29%
-----					
Item 30 <sup>e</sup>	High:	91%	84%	79%	67%
	Low:	9%	16%	21%	33%

<sup>a</sup>Chance to direct one's life.

<sup>b</sup>Never do well in school.

<sup>c</sup>Can do well if work hard.

<sup>d</sup>I don't have any luck.

<sup>e</sup>Need luck to get good grades.

Assessment index. (See discussion in Chapter II.) On the other hand, we can't be certain that the S.E.S. between the schools is that discrepant because 172 out of 1,319 students left the S.E.S. question blank. Seventy-four blanks were from the high achieving schools and 98 were from the low achieving schools. These omissions were undoubtedly produced to a large extent by uncertainty on the part of students as to their father's occupation. A close look at the variables in this table might help us to see whether the scores on these variables are simply a reflection of individual S.E.S. level or whether the normative climates indeed differ enough to affect students of high or low S.E.S. when they operate within them.

Looking at perceived teacher and parent expectations, we see no real difference for high S.E.S. youngsters in the two achievement categories. We do, however, see a clear but not very large difference for low S.E.S. students on both perceived teacher and parent expectations, with low S.E.S. students in the high achievement schools scoring higher. On aspirations there is no difference for either high or low S.E.S. students in either group. In the area of sense of control we see a clear difference between high S.E.S. children in high achievement-expectation climates as opposed to their counterparts in the lower achievement-expectation category. This difference is most dramatic for the low S.E.S. youngsters. Not only are the low S.E.S. students in the high achievement-expectation climate considerably higher in

sense of control than their counterparts in the low achievement-expectation climate, but they are approximately equal or higher in sense of control than the high S.E.S. students in the low achievement-expectation climate.

These results suggest that normative climates exist in schools and influence the performance of students. They also suggest, however, that as Coleman and many others have demonstrated, the school is important but in no way as important as the effect of the child's family. The results in Table 39 strongly suggest that the students who have the most to gain from a climate of high achievement-expectations are the lower S.E.S. students. Clearly and consistently they do better on the factors listed when they are in such a climate, as opposed to a low achievement-expectation climate. This is, of course, a major argument of those people who advocate busing to raise the performance of children. The present evidence would suggest that they are correct on that account. When viewing the results in Table 39, there is little question but that there is a strong bias against low S.E.S. children in both categories, even though it is lessened in the high achievement-expectation environments.

In conclusion, it is possible that the differences in achievement between schools in this study are a reflection of a different attitude and approach to the low S.E.S. students in the different schools. These different attitudes and approaches are the very questions we have been raising throughout. The fact that bias against these low S.E.S.

children may be minimized in certain schools, and that these children may be incorporated into the "mainstream" if you will, could very well account in large part for the mean differences between schools on achievement, perceived expectations, sense of control, and so on.

## CHAPTER VI

### CONCLUSIONS

This report was initiated by posing the question of what variables and processes are directly or indirectly related to the academic performance of children, and how do certain school and community social environment factors influence the operation of these variables and processes. The underlying assumption in this study was that a climate of norms emerges in schools, and this climate can modify and direct the performance of children. Basically, it appears as though this assumption holds true. It also seems to be true, however, that the climate does not operate uniformly for all students. The heterogeneity of the student population in a school may constrain the emergence of a uniform climate. This does not mean to suggest that the variables which are highly associated with student performance do not operate on an individual or small group basis, however. At this point I would like to summarize a little of what has been found and add some concluding remarks.

#### Substantive Contributions of This Study

A major purpose for and finding of this study was the pervasiveness of expectations as a facilitating and limiting

variable in the social system of the school. We were concerned with the direct connection between the evaluations of "key" people in the system, the expectations which are associated with these evaluations, and the correlated behavior of students. The whole network of relationships in this system is oriented either directly or indirectly toward the formation of expectations or more generally, beliefs about what should or should not be attempted, and what can or cannot be done.

We know from our everyday interactions that when we are continually confronted by others who stress a certain belief, then it is difficult for us to avoid tending toward accepting that belief. Regardless of our own personal beliefs, there is a strong tendency for us to modify our behavior and attitudes toward that espoused by others. While our operationalizing of community support and interest could have been better, nevertheless we were able to see the relationship of degree of community support to the formation of expectations by teachers. The importance of the community as a part of the school social system has never been systematically investigated. In this day of controversy over busing as a short-term or immediate answer to the problem of overcoming educational deficiencies of lower S.E.S. children, perhaps it is time that we begin to investigate seriously the possibility of community development and the integration of the school into the community so as to increase the mutual support and consequently improve learning of the children. Certainly

we cannot restrict mobility of community residents, but we can find ways to meaningfully involve parents in the educational decision-making process. Small group research clearly indicates that group members who are on the periphery of communication and decision making manifest patterns of apathy and withdrawal. The time has come to "break down" this barrier and coordinate the needs of the people with what is going on in the schools. With greater involvement of the community in a meaningful way, interest in the school and its goals should increase, parental reinforcement of the importance of school should increase, and there should be more hesitance on the part of parents to accept the belief that their children cannot learn.

The finding in this study that a lack of emphasis on competition is associated with higher performance on the part of children is intimately linked with this system orientation. Stressing the individual will only serve to further entrench those who are having difficulty because this whole competition approach is geared toward rewarding those who do well and casting aside those who do poorly, with little intelligent regard as to why they are doing poorly. The cyclical nature of this process is apparent. Competition provides a situation whereby those who have the necessary tools to learn will succeed, and those who do not will fail. This failure establishes low expectations, which reinforces the failure. Similarly, as failure continues the individual easily comes to believe that he is incapable of succeeding and consequently

a low sense of control gradually emerges which inhibits this individual from even attempting new tasks. The net result is a further entrenchment of low expectations and poor performance. With the successful integration of the community and school can come a cooperative orientation which stresses the success of the whole group and not just individuals. The motivation for learning does not have to come from the pursuit of scarce rewards (i.e., grades, teacher approval, and so on), but rather can come from the attempt to live up to group norms.

If parents, teachers, and children believe that all children can learn, and if the whole system is oriented toward helping each other, it will become difficult for most children to deny the possibility that they too can learn. Subtle cues will indicate to a person that "others" have given up on him, that they no longer believe he can learn. Similarly, subtle cues indicate that "others" believe he can do it. With the removal of competition and the instituting of cooperation, there is a greater probability that these cues will indicate the belief that he can do it.

Extending from this discussion, then, although the present study indicated that the practice of homogeneous grouping does not establish expectation states, it seems likely that grouping will reinforce expectation states and make it more difficult to change them later. If the cooperative practice of using children to teach other children is employed, then this possibility is minimized. It is possible

that the higher achieving schools in this study used such a practice, because competition was low and the per cent of grouping was very low. When we were collecting our data an interesting observation was made, that in the high achieving schools children were in many cases continually engaged in instrumental or task-oriented interaction with other children, whereas in the low achieving schools there was a preponderance of the "sit up straight and listen to the teacher" type of behavior. The desire to learn and the motivation to learn must come from the individual. However, the social environment is the primary force in shaping these desires and motivations.

#### Theoretical and Methodological Contributions

The first obvious and major theoretical contribution of this study was the attempt to systematically relate all parts of the school social system to the formation, maintenance, and operation of expectation states and its correlates by using a deductive axiomatic approach. To my knowledge this is the first time this has been attempted in the substantive area being considered. The approach was somewhat of a shotgun type. By this I mean that several factors were introduced into the deductive system which actually have little or minor bearing on the attempt to develop a theory of expectation development and operation in schools. Similarly, there may be other factors which will have to be introduced at a later point in time which could be of great importance.

However, the present formulation was necessarily restricted by the nature and amount of data collected.

On the whole, the deductive system operated well. Only one theorem (VI) was not empirically validated, even though the propositions from which it was derived were given empirical support. A more thorough investigation of these two propositions and their theorem will be necessary before we can ascertain where the problem exists. This situation, however, serves as a good example of the usefulness of an axiomatic theory in research. Because the propositions were empirically supported, we would have operated on the assumption that the relationships specified were valid. However, given their systematic relationship to other propositions, we were able to suspect that one or both of them were not valid because of the apparent invalidity of a theorem derived from them. In a sense, then, with such an approach we have a dual check on the validity of our hypotheses, an empirical and logical (theoretical) check. I wonder how many action programs have been developed around faulty premises, when the probability of this happening could have been minimized if they had a good theoretical as well as empirical basis?

Theoretically, this study contributes to research in the area, in several ways. We were able to link the community to the formation of expectations by students and teachers in the school. Also, we were able to show the importance of the community input to achievement levels of students. The

relationship of sense of control to expectations was theoretically and empirically demonstrated for what I believe to be the first time. Finally, we presented an important field test and expansion of the developing theory of expectations. The basic propositions of expectation theory (i.e., evaluations → actual expectations → perceived expectations → performance) were empirically supported, thus providing greater support for the validity of this theory. Similarly, we provided one of the few examples of evidence for the link between actual expectations and the perception of them by others.

From the standpoint of methodology, our attempts to "control" for S.E.S. and race of the schools stand as one of few reasonably successful attempts in the area. While it is obvious that the controls employed were not entirely adequate, a great deal was learned about the difficulties of controlling for S.E.S. We cannot simply control for the mean S.E.S. of schools. Rather, it is important to assess the distribution of S.E.S. scores within matched schools. There should be a uniform percentage of students in the same S.E.S. levels in the matched schools. If one school has students who represent all S.E.S. levels from the lowest to the highest, and another school has students who predominately cluster around the mean, then just because their mean S.E.S. scores are similar, obviously does not in any way imply that the S.E.S. composition of the two schools is the same. This problem exposes the need to assess not only the mean of the S.E.S. in a school,

but also the distribution of scores, before we can assert that S.E.S. has been controlled.

Second, this research has also underscored the necessity of assessing qualitative S.E.S. factors when controlling for S.E.S. That is, two schools can be identically matched on S.E.S. according to the procedure just outlined, but still be radically dissimilar in terms of the usual correlates of S.E.S. (which is really what is important). Two occupations can have the same score on the Duncan scale, but one might be a factory machinist and another might be a clerical worker. Would this make a difference in terms of life style, mobility orientation, and so on? How would this affect the attitudes of students and teachers? It would, of course, be an extremely difficult, if not impossible, task to assess the attitudinal tendencies of people in various occupations; however, if there is a suspicion that such factors will make a difference, then as much as possible, occupations should be matched.

#### Implications and Prospectus for Further Research

With greater isolation of the social factors which contribute to high quality performance, and with a greater understanding of how they are or are not generated, will come a more efficient and effective approach to successfully transforming learning environments for the betterment of all children.

Given the importance of expectations and sense of control for high quality performance, future research must

concentrate specifically on how these two factors can be effectively introduced and maintained in schools. Second, more attention must be given to the dynamic interplay of the school personnel with the parents and community at large. What structural factors are operating to constrain or facilitate the emergence of high expectations and sense of control? Third, a more effective operationalizing of expectations must be utilized than what occurred in this study. We must obtain not only expectations for the school as a whole and for the individuals, but also we should try to obtain a greater variety of academically oriented expectations, and especially the behavioral correlates of teachers and others when they hold a certain expectation state.

It appears as though the importance of behavioral expectations is finally coming to be understood and accepted by teachers. Consequently, future research must efficiently focus in on the major, important questions as quickly as possible. Speed and efficiency are cited; otherwise we might have the sort of situation in which an elementary school teacher said to this author: "Oh yes! I read about this expectation idea and I decided to try it out on two of my students, but it didn't work. . . I wasn't really surprised, though, because they are the dumbest kids in my class."

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APPENDIX

The material on this page lists the items used by the Michigan State Assessment Bureau in its attempt to develop an index of Socio-Economic Status. These items were selected out of a larger battery of attitudinal items by the author for presentation here. The questions listed below are for the year 1969-1970, and are not necessarily the ones presently being used by the Bureau.

---

1. Does your family have a dictionary?
  - a. Yes
  - b. No
  - c. I don't know
2. Does your family have an encyclopedia?
  - a. Yes
  - b. No
  - c. I don't know
3. Does your family have a vacuum cleaner?
  - a. Yes
  - b. No
  - c. I don't know
4. Does your family have a typewriter?
  - a. Yes
  - b. No
  - c. I don't know
5. Does your family have a dishwashing machine?
  - a. Yes
  - b. No
  - c. I don't know
6. How many cars does your family have? (Don't count trucks)
  - a. None
  - b. One
  - c. Two or more

7. Do you have your own wrist watch?
  - a. Yes
  - b. No
8. Has anyone in your family traveled in an airplane in the last year?
  - a. Yes
  - b. No
  - c. I don't know
9. How much education does your father have?
  - a. Grade school--Grades 1-8
  - b. High school--Grades 9-12
  - c. College or special training after high school
  - d. I don't know
10. How much education does your mother have?
  - a. Grade school--Grades 1-8
  - b. High school--Grades 9-12
  - c. College or special training after high school
  - d. I don't know
11. How many different schools have you gone to since you started first grade? Count only the schools which you went to during the day.
  - a. One--only this one
  - b. Two
  - c. Three
  - d. Four
  - e. Five or more
12. What is the highest grade you want to finish in school?
  - a. I don't want to go to school any more
  - b. I only want to finish high school
  - c. I want to go to a special school, like a nursing or business school
  - d. I want to go to college
13. Are you planning to go to college?
  - a. Yes
  - b. No
  - c. I'm not sure

The material included in the remainder of the Appendix is the questionnaires used in the present study.

SCHOOL SOCIAL ENVIRONMENT STUDY  
STUDENT QUESTIONNAIRE

Sponsored by  
Michigan Department of Education  
and  
Michigan State University

Dr. Wilbur Brookover, Professor of Sociology and Education,  
Project Director

DIRECTIONS: We are trying to learn more about students and their work in schools. We would, therefore, like for you to respond to the following questions. This is not a test of any sort and will not affect your work in school. Your teacher and your principal will not see your answers. There are no right or wrong answers; we simply want you to tell us your answer to each question.

1. Name \_\_\_\_\_

PLEASE ANSWER THE FOLLOWING QUESTIONS BY CIRCLING THE NUMBER ON THE RIGHT OF YOUR BEST ANSWER TO THE QUESTION. PICK ONLY ONE ANSWER FOR EACH QUESTION!

2. How old were you on your last birthday?

9 years old ..... 1.  
10 years old ..... 2.  
11 years old ..... 3.  
12 years old ..... 4.  
13 years old ..... 5.

3. Are you a boy or girl?

boy ..... 1.  
girl ..... 2.

4. What grade are you in?

3rd grade ..... 1.  
4th grade ..... 2.  
5th grade ..... 3.  
6th grade ..... 4.  
7th grade ..... 5.

5. Please write your teacher's name.

\_\_\_\_\_



6. Please write the name of your school.

---

7. How many years have you been at this school?

- |                  |       |    |
|------------------|-------|----|
| Less than 1 year | ..... | 1. |
| 2 years          | ..... | 2. |
| 3 years          | ..... | 3. |
| 4 years          | ..... | 4. |
| 5 years          | ..... | 5. |
| 6 years          | ..... | 6. |
| 7 years or more  | ..... | 7. |

If your father does not live with you or if he is not alive, please answer this question for the person in your house who makes the most money.

8. What type of work does your father do? (Give a short description of his job)

---



---

THE FOLLOWING QUESTIONS ARE TO BE ANSWERED BY CIRCLING THE NUMBER ON THE RIGHT OF THE CORRECT ANSWER. REMEMBER, NO ONE WILL SEE YOUR ANSWERS EXCEPT THOSE OF US FROM MICHIGAN STATE UNIVERSITY, SO PLEASE TELL US JUST WHAT YOU THINK. (Pick only one answer for each question)

9. If you could go as far as you wanted in school, how far would you like to go?

- |                               |       |    |
|-------------------------------|-------|----|
| Finish grade school           | ..... | 1. |
| Go to high school for a while | ..... | 2. |
| Finish high school            | ..... | 3. |
| Go to college for a while     | ..... | 4. |
| Finish college                | ..... | 5. |

10. How many students in this school try hard to get a good grade on their weekly tests?

- |                             |       |    |
|-----------------------------|-------|----|
| Almost all of the students  | ..... | 1. |
| Most of the students        | ..... | 2. |
| Half of the students        | ..... | 3. |
| Some of the students        | ..... | 4. |
| Almost none of the students | ..... | 5. |

11. How many students in this school will work hard to get a better grade on the weekly tests than their friends do?
- |                             |       |    |
|-----------------------------|-------|----|
| Almost all of the students  | ..... | 1. |
| Most of the students        | ..... | 2. |
| Half of the students        | ..... | 3. |
| Some of the students        | ..... | 4. |
| Almost none of the students | ..... | 5. |
12. How many students in this school don't care if they get bad grades?
- |                             |       |    |
|-----------------------------|-------|----|
| Almost all of the students  | ..... | 1. |
| Most of the students        | ..... | 2. |
| Half of the students        | ..... | 3. |
| Some of the students        | ..... | 4. |
| Almost none of the students | ..... | 5. |
13. How many students in this school do more studying for weekly tests than they have to?
- |                             |       |    |
|-----------------------------|-------|----|
| Almost all of the students  | ..... | 1. |
| Most of the students        | ..... | 2. |
| Half of the students        | ..... | 3. |
| Some of the students        | ..... | 4. |
| Almost none of the students | ..... | 5. |
14. If most of the students here could go as far as they wanted in school how far would they go?
- |                               |       |    |
|-------------------------------|-------|----|
| Finish grade school           | ..... | 1. |
| Go to high school for a while | ..... | 2. |
| Finish high school            | ..... | 3. |
| Go to college for a while     | ..... | 4. |
| Finish college                | ..... | 5. |
15. If the teacher that you like the best told you that you were a poor student how would you feel?
- |                                 |       |    |
|---------------------------------|-------|----|
| I'd feel very bad               | ..... | 1. |
| I'd feel somewhat bad           | ..... | 2. |
| It wouldn't bother me very much | ..... | 3. |
| It wouldn't bother me at all    | ..... | 4. |
16. How important is it to you to be a good student?
- |  |       |    |
|--|-------|----|
| It's the most important thing I can do                 | ..... | 1. |
| It's important, but other things are just as important | ..... | 2. |
| It's important, but other things are more important    | ..... | 3. |
| It's not very important                                | ..... | 4. |

17. If your parents told you that you were a poor student, how would you feel?

- |                                 |       |    |
|---------------------------------|-------|----|
| I'd feel very bad               | ..... | 1. |
| I'd feel somewhat bad           | ..... | 2. |
| It wouldn't bother me very much | ..... | 3. |
| It wouldn't bother me at all    | ..... | 4. |

18. If your best friend told you that you were a poor student, how would you feel?

- |                                 |       |    |
|---------------------------------|-------|----|
| I'd feel very bad               | ..... | 1. |
| I'd feel somewhat bad           | ..... | 2. |
| It wouldn't bother me very much | ..... | 3. |
| It wouldn't bother me at all    | ..... | 4. |

19. How do you think most of the students in this class react when one of you does a bad job on school work?

- |   |       |    |
|---|-------|----|
| They feel badly and want to help him<br>(her) do better | ..... | 1. |
| They feel sorry, but don't say anything                 | ..... | 2. |
| They really don't care                                  | ..... | 3. |
| They are secretly happy that it happened                | ..... | 4. |

20. How do you think most of the teachers in this school react when one of the students does a bad job on school work?

- |   |       |    |
|---|-------|----|
| They feel badly and want to help him<br>(her) do better | ..... | 1. |
| They feel sorry, but don't say anything                 | ..... | 2. |
| They really don't care                                  | ..... | 3. |
| They are secretly happy that it happened                | ..... | 4. |

21. What do you think most students say when a student has done good or better than he usually does in his school work?

- |   |       |    |
|---|-------|----|
| He was just lucky, he won't do that<br>good next time | ..... | 1. |
| Anyone could do it if they studied                    | ..... | 2. |
| I wish I could do as well as he did                   | ..... | 3. |
| I'm glad for him; I hope he does as<br>well next time | ..... | 4. |

22. How important do most of the students in this class feel it is to do well in school work?

Almost everybody thinks it is the most important thing you can do.	..... 1.
Most students think it is quite important to do well.	..... 2.
Doing well in school work is a good thing but other things are important too.	..... 3.
Most students don't seem to care how well they do, but it's okay for others to do well.	..... 4.
Most students don't seem to care how good they do, but they don't like other students to do good.	..... 5.

23. How important do you think most of the students in this school feel it is to do well in school work?

Almost everybody thinks it is the most important thing you can do.	..... 1.
Most students think it is quite important to do well.	..... 2.
Doing well in school work is a good thing but other things are important too.	..... 3.
Most students don't seem to care how well they do, but it's okay for others to do well.	..... 4.
Most students don't seem to care how good they do, but they don't like other students to do good.	..... 5.

PLEASE ANSWER THE FOLLOWING QUESTIONS BY CIRCLING THE NUMBER WHICH BEST ANSWERS THE QUESTION FOR YOU. PICK ONLY ONE ANSWER FOR EACH QUESTION.

24. Think about the boys or girls you play with at recess or after school. How often do they read in their free time?

Very often	..... 1.
Quite a bit	..... 2.
Sometimes, but not very much	..... 3.
Seldom	..... 4.
Almost never	..... 5.

25. When you and your friends are together after school or on weekends, how often do you talk about your school work?

Very often	..... 1.
Quite a bit	..... 2.
Sometimes, but not very much	..... 3.
Seldom	..... 4.
Almost never	..... 5.

26. People like me will not have much of a chance to do what we want to in life.
- |                   |       |    |
|-------------------|-------|----|
| Strongly agree    | ..... | 1. |
| Agree             | ..... | 2. |
| Disagree          | ..... | 3. |
| Strongly disagree | ..... | 4. |
27. People like me will never do well in school even though we try hard.
- |                   |       |    |
|-------------------|-------|----|
| Strongly agree    | ..... | 1. |
| Agree             | ..... | 2. |
| Disagree          | ..... | 3. |
| Strongly disagree | ..... | 4. |
28. I can do well in school if I work hard.
- |                   |       |    |
|-------------------|-------|----|
| Strongly agree    | ..... | 1. |
| Agree             | ..... | 2. |
| Disagree          | ..... | 3. |
| Strongly disagree | ..... | 4. |
29. In this school, students like me don't have any luck.
- |                   |       |    |
|-------------------|-------|----|
| Strongly agree    | ..... | 1. |
| Agree             | ..... | 2. |
| Disagree          | ..... | 3. |
| Strongly disagree | ..... | 4. |
30. You have to be lucky to get good grades in this school.
- |                   |       |    |
|-------------------|-------|----|
| Strongly agree    | ..... | 1. |
| Agree             | ..... | 2. |
| Disagree          | ..... | 3. |
| Strongly disagree | ..... | 4. |
31. Think of your friends. Do you think you can do school work better, the same, or poorer than your friends?
- |          |       |    |
|----------|-------|----|
| Better   | ..... | 1. |
| The same | ..... | 2. |
| Poorer   | ..... | 3. |
32. Think of the students in your class. Do you think you can do school work better, the same, or poorer than the students in your class?
- |          |       |    |
|----------|-------|----|
| Better   | ..... | 1. |
| The same | ..... | 2. |
| Poorer   | ..... | 3. |
33. When you finish high school, do you think you will be one of the best students, about the same as most of the students, or below most of the students?
- |  |       |    |
|--|-------|----|
| One of the best                        | ..... | 1. |
| About the same as most of the students | ..... | 2. |
| Below most of the students             | ..... | 3. |

34. Do you think you could finish college?
- |  |       |    |
|--|-------|----|
| Yes, with no difficulty at all                       | ..... | 1. |
| Yes, as long as I work hard                          | ..... | 2. |
| Yes, but I will probably have a lot<br>of difficulty | ..... | 3. |
| No, it will be too difficult                         | ..... | 4. |
35. If you went to college, do you think you would be one of the best students, about the same as most of the students, or below most of the students?
- |  |       |    |
|--|-------|----|
| One of the best                        | ..... | 1. |
| About the same as most of the students | ..... | 2. |
| Below most of the students             | ..... | 3. |
36. If you want to be a doctor or a teacher, you need more than 4 years of college. Do you think you could do that?
- |  |       |    |
|--|-------|----|
| Yes, with no difficulty at all                       | ..... | 1. |
| Yes, as long as I work hard                          | ..... | 2. |
| Yes, but I will probably have a lot<br>of difficulty | ..... | 3. |
| No, it will be too difficult                         | ..... | 4. |
37. Forget how your teachers mark your work. How good do you think your own work is?
- |  |       |    |
|--|-------|----|
| Excellent                              | ..... | 1. |
| Good                                   | ..... | 2. |
| About the same as most of the students | ..... | 3. |
| Below most of the students             | ..... | 4. |
| Poor                                   | ..... | 5. |
38. What marks do you think you really can get if you try?
- |            |       |    |
|------------|-------|----|
| Mostly A's | ..... | 1. |
| Mostly B's | ..... | 2. |
| Mostly C's | ..... | 3. |
| Mostly D's | ..... | 4. |
| Mostly E's | ..... | 5. |

NOW WE WOULD LIKE YOU TO ANSWER SOME QUESTIONS ABOUT PEOPLE THAT YOU KNOW. ANSWER THESE QUESTIONS BY CIRCLING THE NUMBER AS YOU DID IN THE OTHER QUESTIONS. (Pick only one answer)

39. When you do good work in school, who do you most want to know about it?
- |                          |       |    |
|--------------------------|-------|----|
| Mother                   | ..... | 1. |
| Father                   | ..... | 2. |
| Brother or sister        | ..... | 3. |
| Teacher                  | ..... | 4. |
| Friend                   | ..... | 5. |
| Other _____<br>(specify) | ..... | 6. |

40. Who is the most interested in your work in school?

- |                   |       |    |
|-------------------|-------|----|
| Mother            | ..... | 1. |
| Father            | ..... | 2. |
| Brother or sister | ..... | 3. |
| Teacher           | ..... | 4. |
| Friend            | ..... | 5. |
| Other             | ..... | 6. |
| (specify)         |       |    |

NOW WE WOULD LIKE YOU TO ANSWER SOME QUESTIONS ABOUT YOUR BEST FRIEND. STOP FOR A MINUTE AND THINK WHO YOUR BEST FRIEND IS. ANSWER THESE QUESTIONS BY CIRCLING THE NUMBER AS YOU DID IN THE OTHER QUESTIONS. REMEMBER, YOUR BEST FRIEND WILL NOT SEE YOUR ANSWERS. (Pick only one answer)

41. How far do you think your best friend believes you will go in school?

- |                               |       |    |
|-------------------------------|-------|----|
| Finish grade school           | ..... | 1. |
| Go to high school for a while | ..... | 2. |
| Go to college for a while     | ..... | 3. |
| Finish college                | ..... | 4. |

42. How good a student does your best friend expect you to be in school?

- |                                  |       |    |
|----------------------------------|-------|----|
| One of the best                  | ..... | 1. |
| Better than most of the students | ..... | 2. |
| Same as most students            | ..... | 3. |
| Not as good as most students     | ..... | 4. |
| He doesn't really care           | ..... | 5. |

43. Think of your best friend. Would your best friend say you can do school work better, the same, or poorer than other people your age?

- |          |       |    |
|----------|-------|----|
| Better   | ..... | 1. |
| The same | ..... | 2. |
| Poorer   | ..... | 3. |

44. Would your best friend say that your grades would be with the best, same as most, or below most of the students when you graduate from high school?

- |               |       |    |
|---------------|-------|----|
| With the best | ..... | 1. |
| Same as most  | ..... | 2. |
| Below most    | ..... | 3. |

45. Does your best friend think you could finish college?

- |       |       |    |
|-------|-------|----|
| Yes   | ..... | 1. |
| Maybe | ..... | 2. |
| No    | ..... | 3. |

46. Remember you need more than four years of college to be a teacher or doctor. Does your best friend think you could do that?
- Yes ..... 1.  
 Maybe ..... 2.  
 No ..... 3.
47. What grades does your best friend think you can get?
- Mostly A's ..... 1.  
 Mostly B's ..... 2.  
 Mostly C's ..... 3.  
 Mostly D's ..... 4.  
 Mostly E's ..... 5.

NOW WE WOULD LIKE TO ASK SOME QUESTIONS ABOUT THE TEACHERS IN THIS SCHOOL. ANSWER THESE QUESTIONS AS YOU ANSWERED THE OTHER ONES BY CIRCLING THE NUMBER. REMEMBER, NO TEACHER WILL SEE YOUR ANSWERS SO BE AS HONEST AS YOU CAN.

48. Of the teachers that you know in this school, how many tell students to try hard to do better on tests?
- Almost all of the teachers ..... 1.  
 Most of the teachers ..... 2.  
 Half of the teachers ..... 3.  
 Some of the teachers ..... 4.  
 Almost none of the teachers ..... 5.
49. How many teachers in this school tell students to try and get better grades than their classmates?
- Almost all of the teachers ..... 1.  
 Most of the teachers ..... 2.  
 Half of the teachers ..... 3.  
 Some of the teachers ..... 4.  
 Almost none of the teachers ..... 5.
50. Of the teachers that you know in this school, how many don't care if the students get bad grades?
- Almost all of the teachers ..... 1.  
 Most of the teachers ..... 2.  
 Half of the teachers ..... 3.  
 Some of the teachers ..... 4.  
 Almost none of the teachers ..... 5.



51. Of the teachers that you know in this school, how many tell students to do extra work so that they can get better grades?
- |                             |       |    |
|-----------------------------|-------|----|
| Almost all of the teachers  | ..... | 1. |
| Most of the teachers        | ..... | 2. |
| Half of the teachers        | ..... | 3. |
| Some of the teachers        | ..... | 4. |
| Almost none of the teachers | ..... | 5. |
52. Of the teachers that you know in this school, how many make the students work too hard?
- |                             |       |    |
|-----------------------------|-------|----|
| Almost all of the teachers  | ..... | 1. |
| Most of the teachers        | ..... | 2. |
| Half of the teachers        | ..... | 3. |
| Some of the teachers        | ..... | 4. |
| Almost none of the teachers | ..... | 5. |
53. Of the teachers that you know in this school, how many don't care how hard the student works, as long as he passes?
- |                             |       |    |
|-----------------------------|-------|----|
| Almost all of the teachers  | ..... | 1. |
| Most of the teachers        | ..... | 2. |
| Half of the teachers        | ..... | 3. |
| Some of the teachers        | ..... | 4. |
| Almost none of the teachers | ..... | 5. |
54. If the teachers in this school think a student can't do good work, how many will try to make him work hard anyway?
- |                             |       |    |
|-----------------------------|-------|----|
| Almost all of the teachers  | ..... | 1. |
| Most of the teachers        | ..... | 2. |
| Half of the teachers        | ..... | 3. |
| Some of the teachers        | ..... | 4. |
| Almost none of the teachers | ..... | 5. |
55. Of the teachers that you know in this school, how many may think it is not good to ask more work from a student than he is able to do?
- |                             |       |    |
|-----------------------------|-------|----|
| Almost all of the teachers  | ..... | 1. |
| Most of the teachers        | ..... | 2. |
| Half of the teachers        | ..... | 3. |
| Some of the teachers        | ..... | 4. |
| Almost none of the teachers | ..... | 5. |
56. Of the teachers that you know in this school, how many believe that students should be asked to do only work which they are able to do?
- |                             |       |    |
|-----------------------------|-------|----|
| Almost all of the teachers  | ..... | 1. |
| Most of the teachers        | ..... | 2. |
| Half of the teachers        | ..... | 3. |
| Some of the teachers        | ..... | 4. |
| Almost none of the teachers | ..... | 5. |



57. How far do you think the teacher you like the best believes you will go in school?
- |                               |       |    |
|-------------------------------|-------|----|
| Finish grade school           | ..... | 1. |
| Go to high school for a while | ..... | 2. |
| Finish high school            | ..... | 3. |
| Go to college for a while     | ..... | 4. |
| Finish college                | ..... | 5. |
58. How good of a student does the teacher you like the best expect you to be in school?
- |                                  |       |    |
|----------------------------------|-------|----|
| One of the best                  | ..... | 1. |
| Better than most of the students | ..... | 2. |
| Same as most students            | ..... | 3. |
| Not as good as most students     | ..... | 4. |
| She doesn't really care          | ..... | 5. |
59. Think of your teacher. Would your teacher say you can do school work better, the same, or poorer than other people your age?
- |          |       |    |
|----------|-------|----|
| Better   | ..... | 1. |
| The same | ..... | 2. |
| Poorer   | ..... | 3. |
60. Would your teacher say that your grades would be with the best, same as most, or below most of the students when you graduate from high school?
- |               |       |    |
|---------------|-------|----|
| With the best | ..... | 1. |
| Same as most  | ..... | 2. |
| Below most    | ..... | 3. |
61. Does your teacher think you could finish college?
- |       |       |    |
|-------|-------|----|
| Yes   | ..... | 1. |
| Maybe | ..... | 2. |
| No    | ..... | 3. |
62. Remember you need more than four years of college to be a teacher or doctor. Does your teacher think you could do that?
- |       |       |    |
|-------|-------|----|
| Yes   | ..... | 1. |
| Maybe | ..... | 2. |
| No    | ..... | 3. |
63. What grades does your teacher think you can get?
- |            |       |    |
|------------|-------|----|
| Mostly A's | ..... | 1. |
| Mostly B's | ..... | 2. |
| Mostly C's | ..... | 3. |
| Mostly D's | ..... | 4. |
| Mostly E's | ..... | 5. |

NOW, WE WOULD LIKE YOU TO ANSWER SOME QUESTIONS ABOUT YOUR PARENTS. ANSWER THEM THE SAME WAY YOU ANSWERED THE OTHER ONES.

64. How far do you think your parents believe you will go in school?
- |                               |       |    |
|-------------------------------|-------|----|
| Finish grade school           | ..... | 1. |
| Go to high school for a while | ..... | 2. |
| Finish high school            | ..... | 3. |
| Go to college for a while     | ..... | 4. |
| Finish college                | ..... | 5. |
65. How good of a student do your parents expect you to be in school?
- |                                     |       |    |
|-------------------------------------|-------|----|
| One of the best                     | ..... | 1. |
| Better than most of the students    | ..... | 2. |
| Same as most of the students        | ..... | 3. |
| Not as good as most of the students | ..... | 4. |
| They don't really care              | ..... | 5. |
66. Think of your mother and father. Do your mother and father say you can do school work better, the same, or poorer than your friends?
- |              |       |    |
|--------------|-------|----|
| Better       | ..... | 1. |
| Same as most | ..... | 2. |
| Poorer       | ..... | 3. |
67. Would your mother and father say that your grades would be with the best, same as most, or below most of the students when you finish high school?
- |              |       |    |
|--------------|-------|----|
| The best     | ..... | 1. |
| Same as most | ..... | 2. |
| Poorer       | ..... | 3. |
68. Do they think you could finish college?
- |       |       |    |
|-------|-------|----|
| Yes   | ..... | 1. |
| Maybe | ..... | 2. |
| No    | ..... | 3. |
69. Remember, you need more than four years of college to be a teacher or doctor. Do your mother and father think you could do that?
- |       |       |    |
|-------|-------|----|
| Yes   | ..... | 1. |
| Maybe | ..... | 2. |
| No    | ..... | 3. |
70. What grades do your mother and father think you can get?
- |            |       |    |
|------------|-------|----|
| Mostly A's | ..... | 1. |
| Mostly B's | ..... | 2. |
| Mostly C's | ..... | 3. |
| Mostly D's | ..... | 4. |
| Mostly E's | ..... | 5. |

NOW WE WANT TO ASK YOU SOME QUESTIONS ABOUT THE PRINCIPAL OF THIS SCHOOL. REMEMBER, YOUR PRINCIPAL WILL NOT SEE YOUR ANSWERS.

71. How many students in this school do you think the principal believes can get high grades?
- |                             |       |    |
|-----------------------------|-------|----|
| Almost all of the students  | ..... | 1. |
| Most of the students        | ..... | 2. |
| Half of the students        | ..... | 3. |
| Some of the students        | ..... | 4. |
| Almost none of the students | ..... | 5. |
72. How do you think your principal would grade the work of the students in this school, compared to other schools?
- |                                |       |    |
|--------------------------------|-------|----|
| Would grade it much better     | ..... | 1. |
| Would grade it somewhat better | ..... | 2. |
| Would grade it the same        | ..... | 3. |
| Would grade it somewhat lower  | ..... | 4. |
| Would grade it much lower      | ..... | 5. |
73. How many of the students in this school do you think the principal believes will finish high school?
- |                             |       |    |
|-----------------------------|-------|----|
| Almost all of the students  | ..... | 1. |
| Most of the students        | ..... | 2. |
| Half of the students        | ..... | 3. |
| Some of the students        | ..... | 4. |
| Almost none of the students | ..... | 5. |
74. How many of the students in this school do you think the principal believes will go to college?
- |                             |       |    |
|-----------------------------|-------|----|
| Almost all of the students  | ..... | 1. |
| Most of the students        | ..... | 2. |
| Half of the students        | ..... | 3. |
| Some of the students        | ..... | 4. |
| Almost none of the students | ..... | 5. |
75. How many of the students in this school do you think the principal believes will finish college?
- |                             |       |    |
|-----------------------------|-------|----|
| Almost all of the students  | ..... | 1. |
| Most of the students        | ..... | 2. |
| Half of the students        | ..... | 3. |
| Some of the students        | ..... | 4. |
| Almost none of the students | ..... | 5. |
76. When I do a good job on my school work, I am more popular with other students.
- |                             |       |    |
|-----------------------------|-------|----|
| Yes                         | ..... | 1. |
| No                          | ..... | 2. |
| Doesn't make any difference | ..... | 3. |

77. If I do well in school, it will be easier for me to get the job I want when I graduate.
- |  |                |          |
|--|----------------|----------|
|  | Yes            | ..... 1. |
|  | No             | ..... 2. |
|  | Doesn't matter | ..... 3. |
78. My parents allow me greater freedom when I do well in school.
- |  |                |          |
|--|----------------|----------|
|  | Yes            | ..... 1. |
|  | No             | ..... 2. |
|  | Doesn't matter | ..... 3. |
79. If you came home with a good report card, what would your parents most likely do?
- |                                      |  |          |
|--------------------------------------|--|----------|
| Nothing in particular                |  | ..... 1. |
| Praise me                            |  | ..... 2. |
| Give me special privileges           |  | ..... 3. |
| Give me money or some special reward |  | ..... 4. |
| Other _____                          |  | ..... 5. |
| (specify)                            |  |          |
80. If you came home with a poor report card, what would your parents most likely do?
- |                                |  |          |
|--------------------------------|--|----------|
| Nothing in particular          |  | ..... 1. |
| Scold me                       |  | ..... 2. |
| Take away privileges           |  | ..... 3. |
| Punish me severely in some way |  | ..... 4. |
| Other _____                    |  | ..... 5. |
| (specify)                      |  |          |
81. Sometimes what you want to happen is not what you think will happen. How far do you think you will go in school?
- |                               |  |          |
|-------------------------------|--|----------|
| Finish grade school           |  | ..... 1. |
| Go to high school for a while |  | ..... 2. |
| Finish high school            |  | ..... 3. |
| Go to college for a while     |  | ..... 4. |
| Finish college                |  | ..... 5. |

## TEACHER QUESTIONNAIRE

1. Name \_\_\_\_\_
2. Sex (Please check appropriate line)  
female \_\_\_\_\_  
male \_\_\_\_\_
3. Please write the name of this school  
\_\_\_\_\_
4. How long have you taught in this school?  
(Include this year) \_\_\_\_\_
5. How long have you taught school?  
\_\_\_\_\_
6. What grade level are you teaching?  
\_\_\_\_\_
7. How much formal preparation do you have? (Circle the number of the correct answer)
  1. Less than a Bachelor's degree
  2. Bachelor's degree
  3. Some graduate work but less than Master's degree
  4. Master's degree
  5. More than Master's degree but not Doctorate
  6. Doctor's degree
8. How did you feel about this school before coming here?  
(Give general attitude)
  
- 9a. Has your attitude changed since? (Circle number of correct answer)
  1. yes
  2. no

9b. If so, how?

We would like to ask you some questions about grouping practices and use of standardized tests in this school. Please feel free to write any additional comments after each question.

10. In general, what grouping procedure is practiced across sections of particular grade levels in this school?
1. Homogeneous grouping according to ability
  2. Heterogeneous grouping according to ability
  3. Random grouping
  4. No intentional grouping
  5. Other (indicate) \_\_\_\_\_
11. In general, what grouping procedure is practiced within your class?
1. Homogeneous grouping according to ability
  2. Heterogeneous grouping according to ability
  3. Random grouping
  4. No intentional grouping
  5. Other (indicate) \_\_\_\_\_
12. How important do you think the standardized test scores of your students are?
1. Very important
  2. Somewhat important
  3. Not very important
  4. Not important at all
13. How often do you use the standardized test scores of your students?
1. Very often
  2. Often
  3. Sometimes
  4. Seldom
  5. Never

Please answer each of the following questions by circling the letter before the choice which most nearly answers the question for you.

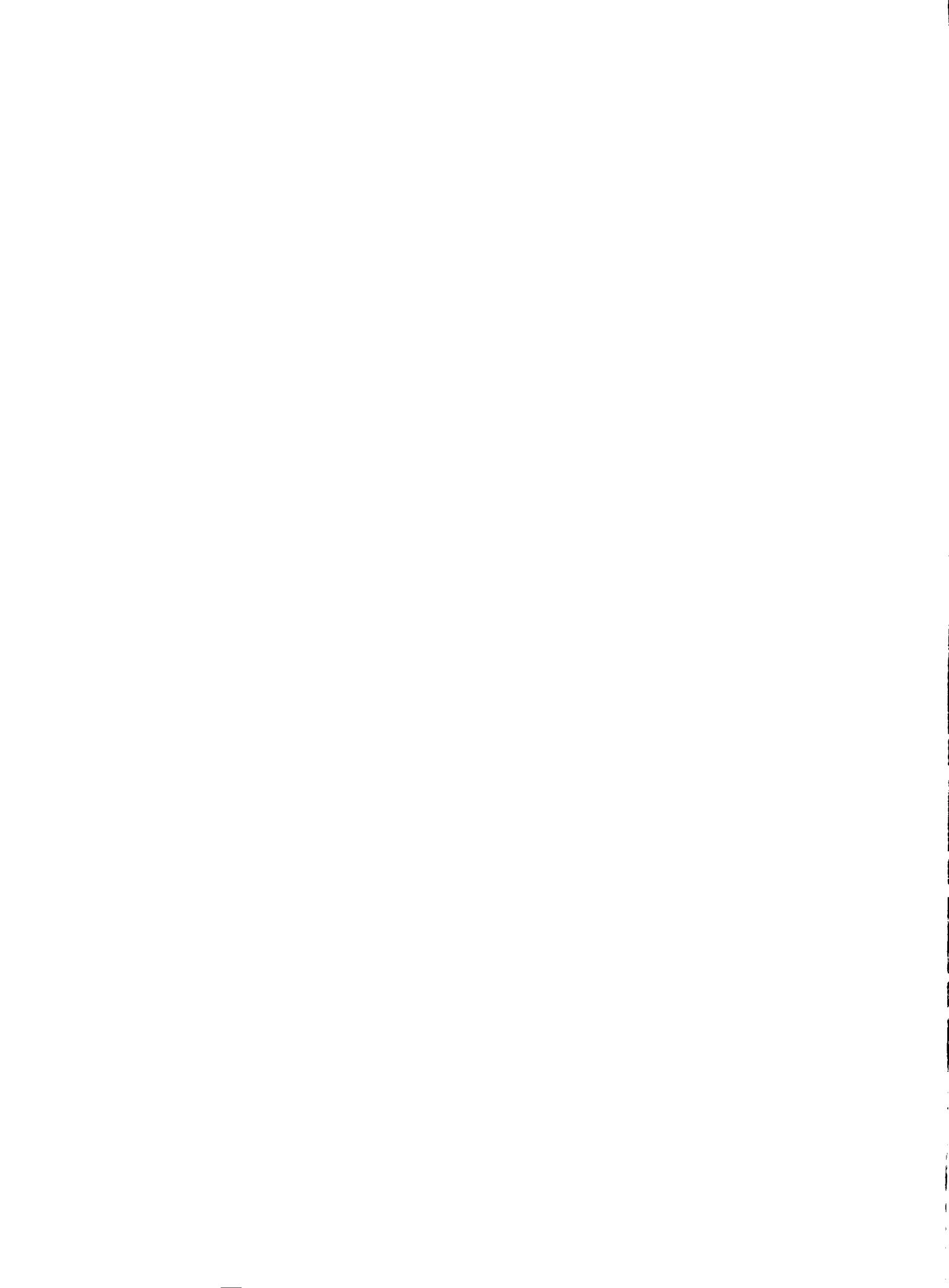
14. On the average what level of achievement can be expected of the students in this school?
  1. Much above national norm
  2. Slightly above national norm
  3. Approximately at national norm
  4. Slightly below national norm
  5. Much below national norm
  
15. On the average what level of achievement can be expected of the students in your class?
  1. Much above national norm
  2. Slightly above national norm
  3. Approximately at national norm
  4. Slightly below national norm
  5. Much below national norm
  
16. What per cent of the students in this school do you expect to complete high school?
  1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%
  
17. What per cent of the students in your class do you expect to complete high school?
  1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%
  
18. What per cent of the students in this school do you expect to attend college?
  1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%
  
19. What per cent of the students in your class do you expect to attend college?
  1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%

20. What per cent of the students in this school do you expect to complete college?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%
21. What per cent of the students in your class do you expect to complete college?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%
22. How many of the students in this school are capable of getting mostly A's and B's?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%
23. How many of the students in your class are capable of getting mostly A's and B's?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%
24. How would you rate the academic ability of the students in this school compared to other schools?
1. Ability here is much higher
  2. Ability here is somewhat higher
  3. Ability here is about the same
  4. Ability here is somewhat lower
  5. Ability here is much lower
25. What per cent of the students in this school would you say want to complete high school?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%

26. What per cent of the students in your class would you say want to complete high school?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%
27. What per cent of the students in this school would you say want to go to college?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%
28. What per cent of the students in your class would you say want to go to college?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%

Please remember, your answers to all of these questions are completely confidential. No one but our research staff will see your answers.

29. How much do you enjoy your teaching responsibilities in this school?
1. Very much
  2. Much
  3. Average
  4. Little
  5. Not at all
30. If someone were to offer you an interesting and secure nonteaching job for \$1,000 more a year, how seriously would you consider taking the job?
1. Very seriously
  2. Somewhat seriously
  3. Not very seriously
  4. Not at all



31. If someone were to offer you an interesting and secure nonteaching job for \$3,000 more a year, how seriously would you consider taking the job?
1. Very seriously
  2. Somewhat seriously
  3. Not very seriously
  4. Not at all
32. How often do you stay after school to help students?
1. Very often
  2. Often
  3. Sometimes
  4. Seldom
  5. Never
33. What per cent of the students in this school do you think the principal expects to complete high school?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%
34. What per cent of the students in this school do you think the principal expects to attend college?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%
35. What per cent of the students in this school do you think the principal expects to complete college?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%
36. How many students in this school do you think the principal believes are capable of getting mostly A's and B's?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%

37. How do you think your principal rates the academic ability of the students in this school, compared to other schools?
1. Rates it much better
  2. Rates it somewhat better
  3. Rates it the same
  4. Rates it somewhat lower
  5. Rates it much lower
38. Completion of high school is a realistic goal which you set for what percentage of your students?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%
39. Completion of college is a realistic goal which you set for what percentage of your students?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%
40. How often do you stress to your students the necessity of a post high school education for a good job and/or a comfortable life?
1. Very often
  2. Often
  3. Sometimes
  4. Seldom
  5. Never
41. For those students who do not have the resources which will allow them to go to college, you are careful not to promote aspirations in them which probably can not be fulfilled.
1. Strongly agree
  2. Agree
  3. Not sure
  4. Disagree
  5. Strongly disagree
42. The teachers in this school push students to work too hard.
1. Strongly agree
  2. Agree
  3. Not sure
  4. Disagree
  5. Strongly disagree

43. How many teachers in this school aren't concerned how hard most students work, as long as they pass?
1. Almost all of the teachers
  2. Most of the teachers
  3. Half of the teachers
  4. Some of the teachers
  5. Almost none of the teachers
44. It is unfair to demand more from a student than he is capable of giving.
1. Strongly agree
  2. Agree
  3. Not sure
  4. Disagree
  5. Strongly disagree
45. If you think a student is not able to do some of the school work, you won't try to push him very hard.
1. Strongly agree
  2. Agree
  3. Not sure
  4. Disagree
  5. Strongly disagree
46. For most students you are very careful not to push them to their frustration level.
1. Strongly agree
  2. Agree
  3. Not sure
  4. Disagree
  5. Strongly disagree
47. How many teachers in this school encourage students to try hard to improve on previous test scores?
1. Almost all of the teachers
  2. Most of the teachers
  3. About half of the teachers
  4. Some of the teachers
  5. Almost none of the teachers
48. How many teachers encourage students to seek extra school work so that the students can get better grades?
1. Almost all of the teachers
  2. Most of the teachers
  3. About half of the teachers
  4. Some of the teachers
  5. Almost none of the teachers

49. How many students in this school try hard to improve on previous work?
1. Almost all of the students
  2. Most of the students
  3. About half of the students
  4. Some of the students
  5. Almost none of the students
50. How many students in your class try hard to improve on previous work?
1. Almost all of the students
  2. Most of the students
  3. About half of the students
  4. Some of the students
  5. Almost none of the students
51. How many students in this school will try hard to do better on tests than their friends do?
1. Almost all of the students
  2. Most of the students
  3. About half of the students
  4. Some of the students
  5. Almost none of the students
52. How many students in your class will try hard to do better on tests than their friends do?
1. Almost all of the students
  2. Most of the students
  3. About half of the students
  4. Some of the students
  5. Almost none of the students
53. How many students in this school are content to do less than they should?
5. Almost all of the students
  4. Most of the students
  3. About half of the students
  2. Some of the students
  1. Almost none of the students
54. How many students in your class are content to do less than they should?
1. Almost all of the students
  2. Most of the students
  3. About half of the students
  4. Some of the students
  5. Almost none of the students

55. How many students in this school will seek extra work so that they can get better grades?
1. Almost all of the students
  2. Most of the students
  3. About half of the students
  4. Some of the students
  5. Almost none of the students
56. How many students in your class will seek extra work so that they can get better grades?
1. Almost all of the students
  2. Most of the students
  3. About half of the students
  4. Some of the students
  5. Almost none of the students
57. How many students in this school don't care when other students do much better than they do?
5. Almost all of the students
  4. Most of the students
  3. About half of the students
  2. Some of the students
  1. Almost none of the students
58. How many students in your class don't care when other students do much better than they do?
1. Almost all of the students
  2. Most of the students
  3. About half of the students
  4. Some of the students
  5. Almost none of the students
59. The parents in this school service area regard this school primarily as a "baby-sitting" agency.
5. Strongly agree
  4. Agree
  3. Not sure
  2. Disagree
  1. Strongly disagree
60. The parents of this school service area are deeply concerned that their children receive a top quality education.
1. Strongly agree
  2. Agree
  3. Not sure
  4. Disagree
  5. Strongly disagree

61. How many of the parents in this school service area expect their children to complete high school?
1. Almost all of the parents
  2. Most of the parents
  3. About half of the parents
  4. Some of the parents
  5. Almost none of the parents
62. How many of the parents in this school service area expect their children to complete college?
1. Almost all of the parents
  2. Most of the parents
  3. About half of the parents
  4. Some of the parents
  5. Almost none of the parents
63. How many of the parents in this school service area don't care if their children obtain low grades?
5. Almost all of the parents
  4. Most of the parents
  3. About half of the parents
  2. Some of the parents
  1. Almost none of the parents
64. How many of the parents in this school service area like feedback from the principal and teachers on how their children are doing in school?
1. Almost all of the parents
  2. Most of the parents
  3. About half of the parents
  4. Some of the parents
  5. Almost none of the parents

## PRINCIPAL QUESTIONNAIRE

1. Name \_\_\_\_\_
2. Sex (Please check)  
Male \_\_\_\_\_  
Female \_\_\_\_\_
3. Please write the name of this school. \_\_\_\_\_
4. How long have you been the principal in this school?  
(Include this year)  
\_\_\_\_\_
5. How long have you been a principal? \_\_\_\_\_
6. Have you ever taught school?  
Yes \_\_\_\_\_  
No \_\_\_\_\_
7. If so, how long did you teach? \_\_\_\_\_
8. How did you feel about this school before coming here?
9. Has your attitude changed?

We would now like to ask you some questions about grouping practices, teacher credentials, and testing procedures in your school. Please feel free to write any additional comments after each question.

10. In general, what grouping procedure is practiced across sections of particular grade levels in this school?
  1. Homogeneous grouping according to ability
  2. Heterogeneous grouping according to ability
  3. Random grouping
  4. No intentional grouping
  
11. In general, what grouping procedure is practiced within individual sections of particular grade levels of this school?
  1. Homogeneous grouping according to ability
  2. Heterogeneous grouping according to ability
  3. Random grouping
  4. No intentional grouping
  
12. In general, what grouping procedure is practiced across grade levels in this school?
  1. Homogeneous grouping according to ability
  2. Heterogeneous grouping according to ability
  3. Random grouping
  4. No intentional grouping
  
13. How many teachers in this school have a Bachelor's degree?
  1. 75% or more
  2. 50-75%
  3. 25-50%
  4. 25% or less
  
14. How many teachers in this school have a provisional teaching certificate?
  1. 75% or more
  2. 50-75%
  3. 25-50%
  4. 25% or less
  
15. How many teachers in this school have a permanent teaching certificate?
  1. 75% or more
  2. 50-75%
  3. 25-50%
  4. 25% or less



Please answer each of the following questions by circling the letter before the choice which most nearly answers the question for you.

22. On the average, what achievement level can be expected of the students in this school?
1. Much above national norm
  2. Slightly above national norm
  3. Approximately at national norm
  4. Slightly below national norm
  5. Much below national norm
23. What per cent of the students in this school do you expect to complete high school?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. less than 30%
24. What per cent of the students in this school do you expect to attend college?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%
25. What per cent of the students in this school do you expect to complete college?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%
26. How many of the students in this school are capable of getting good grades?
1. 90% or more
  2. 70% or more
  3. 50% or more
  4. 30% or more
  5. Less than 30%

27. How would you rate the academic ability of the students in this school compared to other schools?
1. Ability here is much higher
  2. Ability here is somewhat higher
  3. Ability here is about the same
  4. Ability here is somewhat lower
  5. Ability here is much lower
28. The parents in this school service area regard this school as primarily a "baby-sitting" agency.
1. Strongly agree
  2. Agree
  3. Unsure
  4. Disagree
  5. Strongly disagree
29. The parents in this school service area are deeply concerned that their children receive a top quality education.
1. Strongly agree
  2. Agree
  3. Unsure
  4. Disagree
  5. Strongly disagree
30. How many of the parents in this school service area expect their children to complete high school?
1. Almost all of the parents
  2. Most of the parents
  3. About half of the parents
  4. Some of the parents
  5. Almost none of the parents
31. How many of the parents in this school service area expect their children to complete college?
1. Almost all of the parents
  2. Most of the parents
  3. About half of the parents
  4. Some of the parents
  5. Almost none of the parents
32. How many of the parents in this school service area don't care if their children obtain low grades?
1. Almost all of the parents
  2. Most of the parents
  3. About half of the parents
  4. Some of the parents
  5. Almost none of the parents

33. How many of the parents in this school service area like feedback from the principal and teachers on how their children are doing in school?
  1. Almost all of the parents
  2. Most of the parents
  3. About half of the parents
  4. Some of the parents
  5. Almost none of the parents
  
34. What proportion of your teachers call on the parents of their pupils at least once during the year?
  1. Almost all of the teachers
  2. Most of the teachers
  3. About half of the teachers
  4. Some of the teachers
  5. Almost none of the teachers
  
35. What else is there about the community-school relationship that would help us better understand the nature of this school?

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