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ABSTRACT

This report summarizes results of ethnographic research and a survey on how home climate, school climate, and interaction between the two might affect learning and school behavior among students of different racial/ethnic groups, sex, and socioeconomic background; and provides guidelines for measuring and improving equity in multicultural schools. Based upon a study conducted among seventh graders of five different ethnic groups in several schools in Boston, Massachusetts, it is concluded that: (1) outcomes vary among different ethnic groups within the same school; (2) some schools are more equitable than others; (3) schools vary more than homes; and (4) higher ratings of school climates than home climates on a number of factors often lead to positive school outcomes (higher achievement and higher attendance). Use of a survey questionnaire developed for the study is suggested for educators who wish to determine general school climate and to measure the extent of equity in schools. Indicators of school outcomes and school climate are described, and ways in which selected school climate characteristics might be improved are discussed. A procedure presented for improving equity in multicultural schools considers such steps as initiative-taking; forming school improvement teams; developing a team work plan; setting clear purposes; collecting assessment data; analyzing data; developing a school improvement plan; implementing the plan; and evaluating results. (Author/MJL)

TDR Associates, Inc. Training/Development/Research

FINAL REPORT

A Study of Interaction Effects of School and Home Environments On Students of Varying Race/Ethnicity, Class, and Gender

Volume III

A Practitioners' Guide For Achieving Equity In Multicultural Schools

Prepared for the
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December, 1981

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FOREWORD

The report is presented in three volumes. Volume I introduces the study; explains its purposes and methods; presents a cross-case analysis of ethnographies on five racial/ethnic groups; reports on a questionnaire survey which builds on the ethnographies; and offers overall conclusions and implications for improved practice and future research. Volume II consists of the complete ethnographies of the five groups studied. Volume III, "A Practitioners' Guide For Achieving Equity In Multicultural Schools" summarizes the study findings, and presents a step-by-step process for multicultural school improvement.

Because this effort builds on prior work, it is not possible to adequately acknowledge here the many individuals who contributed indirectly to the study. Nevertheless, we wish to recognize those who participated directly, and identify their special contribution beyond the shared team effort. John D. Herzog (Co-Principal Investigator) directed the ethnographic study, supervised field staff, edited the fieldworkers' case writeups, and is the author of the introduction to the ethnographies and the cross-case analysis. Herbert J. Walberg (Co-Principal Investigator) conducted the survey data analyses with myself (Principal Investigator and Study Director) and Mary Hyde (Programmer), and he co-authored the survey report with me. I also wrote the Introduction and Conclusion to Volume I, and the Practitioners' Guide (Volume III). Sarah L. Lightfoot (Co-Principal Investigator) participated in critical conceptual, methodological, and interpretive phases of the study. Marjorie H. O'Reilly (Survey Coordinator) managed the survey questionnaire administration and data feedback to the participating schools. Marjorie K. Madoff administered the pilot testing of the survey questionnaire, and participated in its development. The fieldstaff for the ethnographic component, and the subjects of their case writeups are: Karen and Lester Holtzblatt, Jewish-American; Margaret McDonough and Pierce Butler, Irish-American; Seda Yaghoubian and Ara Ghazarians, Armenian-American; Nancy Marshall and Mark Handler, Portuguese-American; and V. Michael McKenzie, West Indian-American. And, last but not least, Joni Herson who typed the report and helped to coordinate the entire effort.

Special recognition and thanks are also extended to the many school personnel, students, and parents who participated in the study, and to Michael Cohen (NIE Project Officer) for his kind assistance and encouragement.
Although this was a group effort with individual specialities, I take full responsibility for any errors or misinterpretations of the complete study, beyond the sections of the report which I personally authored and edited.

William J. Genova
Principal Investigator and
Study Director

Abstract

This two-year study which began in August, 1979, was undertaken to explore how school and home "climates" might possibly interact to affect the learning and behavior of students of diverse racial/ethnic, national origin, gender, and socioeconomic backgrounds. School climate and home climate refer here to such psychological/social factors as the extent of involvement, expressiveness, goal direction, challenge, and order, which characterize such environments. Prior research has documented separate school climate and home climate effects on student learning and behavior. In this study the investigators set out to explore possible interaction effects--congruities and incongruities between such school climate and home climate factors, which may stimulate or frustrate learning and acceptable/productive behaviors in the school setting. The study included ethnographies of five racial/ethnic groups of seventh graders (N = 63) in five different communities, and a questionnaire survey of 1,290 seventh and eighth grade students in six racially/ethnically mixed middle schools in five different communities.

The major findings of the study are:

1. Inequity in school outcomes is confirmed--there are significant differences among racial/ethnic (and class and gender) groups in the sample in days absent, (standardized) reading achievement, grade point averages, and teacher academic and social ratings (but not in suspensions).

2. Some schools are more equitable than other schools--many of the school outcome levels for particular racial/ethnic (and class and gender) groups vary significantly, as do their ratings of their school climates, according to which school they attend.

3. Schools vary more than homes--adolescents who identify with particular racial/ethnic groups describe their home climates with striking similarity, yet markedly differently from other racial/ethnic groups. In contrast, students from the same racial/ethnic groups who attend different schools in different communities characterize their school climates quite differently. By socio-economic class and gender groups, students' ratings of their school climates vary much more than their ratings of their home climates.

4. Schools and homes both affect school outcome--the statistical significance and magnitude of the correlations are highest for independent home-climate and school-climate effects on school outcomes for all students, irrespective of racial/ethnic, socio-economic class, or gender groups.

5. Home-school discrepancies affect school outcomes--for particular racial/ethnic groups who rate their school climates higher than their home climates on specific variables, such "discrepancies" are correlated with positive school outcomes (e.g., lower absence and higher achievement) in 73% of such cases. For the remaining 27% of the discrepancies, negative school outcomes emerge (e.g., higher absence, low achievement) when the school is rated higher than the home. Though significant, these correlates are modest and varied, showing few meaningful patterns for any particular sub-group across schools.

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I. INTRODUCTION

A. Multicultural Schooling

This study is concerned with multicultural schooling--with teaching, learning, and social development in schools which serve students from varying racial/ethnic and national origin backgrounds. Historically, the democratic ideal of equal educational opportunity or equal educational attainment for all groups regardless of their racial/ethnic and national origin backgrounds has remained more aspiration than fact. Despite apparent gains in equity in America, especially in the past two decades, differential educational attainment remains among many minority and majority groups.

Many reasons have been put forth to explain this pervasive and continuing inequity. Some have argued that inequity is structured into the very fabric of industrialized competitive societies, and that schools serve merely to sort, label, and credential students for the marketplace according to existing differences, i.e., to perpetuate inequity. Others view minority/poor students as inherently deficient or inferior, thus making a pessimistic or fatalistic appraisal of their chances of success even with school reform. This study is rooted in a cultural differences perspective--a view that differential school success is best explained by differences in language, customs, values, norms, and attitudes which are characteristically associated with certain racial/ethnic, national origin, socioeconomic, and gender groupings.

B. The Role of School and Home "Climates"

Schools tend to reflect the values, norms, and attitudes of the mainstream culture. In American schools, the mainstream culture has largely reflected the white, middle-class, Protestant work ethic--emphasizing for

example self-control, subordination to authority, work achievement, punctuality, and order. Students from different racial and ethnic groups come from homes that may or may not stress these norms. Thus, culture and language differences among predominantly Anglo school staff, and Italian, Chicano, Puerto Rican, Portuguese, Asian, Indian, Black and other racial/ethnic groups can establish certain discrepancies between the home and the school with largely unexplored consequences.

This two-year study, which began in August, 1979, was undertaken to explore how school and home "climates" might possibly interact to affect the learning and behavior of students of diverse racial/ethnic, national origin, gender, and socioeconomic backgrounds. By school climate and home climate we refer to such psychological/social factors as the extent of involvement, expressiveness, goal direction, challenge, and order, which characterize such environments. Prior research has documented separate school climate and home climate effects on student learning and behavior. In this study we set out to explore possible interaction effects--congruities and incongruities between such school climate and home climate factors, which may stimulate or frustrate learning and acceptable/productive behaviors in the school setting.

For students whose school and home climates both show similar patterns regarding the same factors (e.g., high school and home involvement, rewards for expressiveness in school and home, etc.), their school and home climates are described here as congruent (coinciding, in agreement, alike). For students whose school and home climates are different (e.g., high school involvement expressiveness vs. low home involvement and expressiveness, etc.), their school and home climates are described as incongruent (at variance, conflicting, different). Little is known concerning which congruities and incongruities

between school and home environments might promote, and which might be counterproductive to, student learning and behavior.

C. This Guide

This Guide is based on the research study which is described in Section II. The Guide itself (Section III) lays out a step-by-step procedure for measuring and improving equity in multicultural schools. The Appendix includes TDR's school climate and home climate questionnaires, shown by item-to-variable assignment, and school climate norms.

II. THE RESEARCH STUDY

A. Study Design and Methodology

In the first phase of the study we assigned five male/female fieldworker teams to five (similar) racial/ethnic student groups--Armenian, Irish, Jewish, Portuguese, and West Indian. The fieldworkers recruited male and female seventh grade students to interview and observe, from four schools in four different communities which agreed to cooperate. Jewish students were recruited through two synagogues, as the two school systems approached were unwilling to "single out" any particular group of students for study.

The fieldworkers were given two major tasks. First, they were to participate in the development of a home climate questionnaire based on their understanding of how their student-subjects characterize their homes. To focus their work we reviewed with them our already developed school climate questionnaire, which we hoped to parallel in the home climate questionnaire. Their second task was to write ethnographies for their respective groups--case descriptions and analyses of how seventh graders of particular racial/ethnic and class backgrounds and genders view their home climates, and how these perceptions may be related to their school success.

Half way through the ethnographic study we developed a 147 item, 15 page questionnaire that contains sections on student background information, school climate, and home climate factors. We pilot tested and refined the instrument with the help of 155 students, performing statistical analyses of their responses and also eliciting their suggestions for improving it. We then administered the questionnaire to all seventh and eighth grade students in six racially/ethnically mixed middle schools in five different communities (N = 1,290 students).

B. Summary of Findings

In the ethnographic component of the study, which came first, our focus was on the home climates of five racial/ethnic groups. For each group the adolescent (and parents) studied were found to perceive their home climates in similar ways. In addition, their modal perceptions of our thirteen home climate variables differ dramatically and systematically group by group. Given these sharp differences in home climates, we predicted how certain groups would rate their home climates if they completed the home climate questionnaire, and we speculated on optimal school climates for children from each group.

Racial/ethnic group differences in home climate perceptions were found in the questionnaire survey results for seven of thirteen variables (with results for two more variables approaching significance). Though confirming our hypotheses, these differences were found in the ethnographic component. Similarly, there are correspondences between the (ethnographic) predicted and (survey) home climate ratings in only one-third of the cases where the racial/ethnic groups in the samples coincide. These disparities are understandable given the limiations of the four-item-per-variable scales used in the survey, compared to the extensive description and interpretation possible in the ethnographies. However, the survey results also indicate that students of the same racial/ethnic group who attend different schools in different communities show a fairly consistent pattern in how they characterize their home climates. Despite some variations within groups, these data suggest that students who identify themselves as belonging to a specific racial/ethnic group, in terms of "primary roots", share common racial/ethnic perceptions of their homes.

The same cannot be said for the home climates of different socio-economic class and gender groups. By class and gender there is much more within group variation than between group variation. This suggests that families in each socioeconomic class vary across the spectrum in the nature and quality of their home life, and that the modal home experiences of contemporary male and female adolescents are more alike than different.

The prediction from the ethnographies of racial/ethnic group differences in school outcome levels is also confirmed by the questionnaire survey results. For the ten largest groups[1] there are significant differences in days absent, (standardized) reading achievement, grade point averages, and teacher academic and social ratings (but not in suspensions). However, many of the school outcome levels of particular groups vary significantly, as do their school climate ratings, according to the school they attend. In addition, students of the same racial/ethnic group who attend different schools vary significantly in certain outcome levels, and in their ratings of their school climate. Such inter-school contrasts actually overshadow student racial/ethnic (and socioeconomic class and gender) differences in school outcome levels and school climate ratings.

In analyzing relationships among the (survey) home and school climate ratings and school outcome levels, the statistical significance and magnitude of the correlations are highest for independent home and school effects on school outcomes (thus supporting prior research). However, the results also show some home-school climate discrepancies correlated with certain school outcome levels with the ten largest racial/ethnic groups in the sample. For example, the highest correlation (.60**, or 36% of the variance) indicates that for Armenian students, significantly higher school

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[1]Armenian, Black, American, Portuguese, French, British, Irish, Greek, Irish-Italian, Italian.

Community than home Community ratings are related to higher reading achievement. Actually, of the 64 home/school discrepancies significantly correlated with school outcomes, 47 (73%) are associated with positive school outcomes (e.g., lower absence, higher achievement)--where the school is rated higher than the home. For the remaining 17 (of 64, or 27%), negative school outcomes emerge (e.g., higher absence, lower achievement) when the school is rated higher than the home.

C. Conclusions and Implications Drawn

To summarize, the major conclusions of the study are:

1. Inequity in school outcomes is confirmed--there are significant differences among racial/ethnic (and class and gender) groups in the sample in days absent, (standardized) reading achievement, grade point averages, and teacher academic and social ratings (but not in suspensions).

2. Some schools are more equitable than other schools--many of the school outcome levels for particular racial/ethnic (and class and gender) groups vary significantly, as do their ratings of their school climates, according to which school they attend.

3. Schools vary more than homes--adolescents who identify with particular racial/ethnic groups describe their home climates with striking similarity, yet markedly differently from other racial/ethnic groups. In contrast, students from the same racial/ethnic groups who attend different schools in different communities characterize their school climates quite differently. By socio-economic class and gender groups, students' ratings of their school climates vary much more than their ratings of their home climates.

4. Schools and homes both affect school outcome--the statistical significance and magnitude of the correlations are highest for independent home-climate and school-climate effects on school outcomes for all students, irrespective of racial/ethnic, socio-economic class, or gender groups.

5. Home-school discrepancies affect school outcomes--for particular racial/ethnic groups who rate their school climates higher than their home climates on specific variables, such "discrepancies" are correlated with positive school outcomes (e.g., lower absence and higher achievement) in 73% of such cases. For the remaining 27% of the discrepancies, negative school outcomes emerge (e.g., higher absence, lower achievement) when the school is rated higher than the home. Though significant, these correlates are modest and varied, showing few meaningful patterns for any particular sub-group across schools.

Conclusions 1,2, and 4 are the least surprising to us, as they confirm prior research and our experience in working with schools on school and racial/ethnic climate improvement. Conclusion 3 is somewhat surprising in the sharply distinctive "ethnic character" of home climates depicted by particular racial/ethnic groups, the sharp contrasts which characterize the home climates of different racial/ethnic groups, and the large within group variation which suggests that a full range of home-life quality is experienced by adolescents across socioeconomic class and gender groups.

Our biggest surprise is Conclusion 5, for which our data are least certain, but more tantalizing. We did expect to find home-school discrepancy effects on school outcomes, and even though we challenged a common bias which assumes that all such discrepancies are inherently counter-productive, we are surprised at the direction and extent of positive discrepancy effects that we found. To repeat, in approximately three-fourths of the cases in which the school is rated higher than the home on particular variables, such discrepancies are significantly correlated with positive school outcomes.

This suggests that if school climate levels are kept high on all dimensions, students from home climates with less Challenge, less Structure, less Cohesiveness, etc., may actually be stimulated by the resulting discrepancies, in most cases to higher levels of learning and social development, regardless of racial/ethnic, socioeconomic class, or gender group. At the same time, however, schools must be sensitive to the possibility that for particular groups, higher school-than-home climates on particular variables may work against learning and social development. For examples, students from homes with low Involvement and low Influenct may need special assistance and

counseling in order to respond positively to a school environment of high student Involvement and Influence.

Given the absence of clear patterns for particular racial/ethnic (or class or gender) groups in either the number or direction of home-school discrepancy effects, we wonder if distinctive discrepany patterns might emerge if studied in specific schools. We did find differential school effects in school outcomes and school climate according to students' race/ethnicity, class, and gender. Thus, it may be reasonable to expect similar school-specific patterns in home-school discrepancy effects for particular racial/ethnic, class, and gender groups. Unfortunately, the sample sizes matched for student background, home climate, school climate, and school outcome data are too small for such a school-by-school analysis by specific sub-groups.

Limitations, qualifications, and speculations aside, even a conservative interpretation of the study results, which confirm prior research, suggest that general school climate improvement will benefit most students irrespective of their backgrounds. The same can be said of home climate improvement, but as we stated at the outset our focus as interventionists is on improving conditions for learning in schools. The ethical and procedural dilemmas of intervention in homes are sufficiently sobering that we wish to make no recommendations on this matter at this time.

We do advocate, however, that while schools strive to improve their climates for all students, that they sharpen their awareness of possible home-school discrepancies which may inhibit learning and social development for particular students. Such scrutiny can begin with staff sharing of experiences and insights, or with a student survey similar to that conducted in this study. In our experience, the student survey is the preferred beginning because the data it can produce stand a better chance

of penetrating the veils of myth and taboo which often shroud possible sub-group differences in schools: they are often denied, and seldom discussed. A step-by-step procedure for conducting a complete survey-improvement project is the subject of the following section of this guide.

III. MEASURING AND IMPROVING EQUITY IN MULTICULTURAL SCHOOLS

A. Overview

The simplest way to get at general school climate, and to investigate possible sub-group inequities, would be to administer the school climate questionnaire plus selected student background questions, such as race/ethnicity, socioeconomic class and gender items. In the analysis, the overall student ratings for the thirteen school climate variables could be broken down by these student background characteristics. Similarly, important school outcome measures such as absences, suspensions, achievement test scores, grade point averages, etc., could also be broken down by the same student background characteristics.

By inspection, relatively low school outcome levels and school climate ratings for certain racial/ethnic, class, or gender groups can be identified, where they exist. If such inequities are found, the next step beyond general school climate improvement (where warranted from the data) would be a second-level investigation based primarily on experience and insight. To broaden such scrutiny and to insure follow-up action, we advocate the use of one or more (10-15 member) student-staff-parent improvement team(s) to manage the entire process.

For example, suppose that a student-staff-parent improvement team administered a student school-climate/school-outcome survey in a school, and found that of ten racial/ethnic groups comprising the student body, two systematically show the lowest school outcome levels and school climate ratings. Viewing this as inequity of attainment and opportunity, the next issue is to identify the sources of inequity of

opportunity for these two groups. In the absence of any precise methodology from this or other studies (e.g., ethnic discrepancy analysis of the survey results with home climate ratings), the investigation would next proceed via discussions among the team and student, parent, and other representatives of the sub-groups in question. If skillfully managed, such discussions often proceed through predictable stages such as venting frustrations, circular blaming, denial, and rationalization--to mutual problem-solving.

Before moving to a step-by-step procedure for measuring and improving equity in multicultural schools, however, we need to consider the subject of our inquiry: school outcomes and school climate.

B. School Outcomes

Equity of attainment can be measured by available information in most schools. Achievement test scores, teacher/course grades, and grade point averages are the more common school outcome measures. When these are broken down by students' race/ethnicity, socioeconomic class and gender, the question of equity of attainment (achievement) can be explored first by inspection of the mean (average) levels of achievement for each group. However, for a more precise determination, analyses of variance[2] for each sub-group comparison should be conducted to identify which (if any) groups are statistically different in their school outcome levels. If any particular group or groups are characterized by significantly lower levels of achievement on important school outcome measures, this constitutes inequity of attainment as defined here.

Students' attendance and suspension data can be analyzed here in the same way; by their racial/ethnic, socioeconomic class, and gender group.

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[2]Analysis of variance is a common procedure familiar to many secondary math teachers, who can assist in this phase of the project.

However, some may argue that student attendance and suspension may be viewed as school processes which affect school outcomes such as achievement. Whether they are treated as school outcomes or school processes is unimportant here. Since they may signal possible sub-group inequities, they are included here as important indices in any investigation of school equity for all groups.

In such analysis, schools have a wide variety of choices as to which outcome measures they wish to use, and how they define student sub-groups. Race/ethnicity can be defined globally as "Asian", "Black" or "White", or it can be defined more specifically by sub-group affiliation (e.g., Chinese, Vietnamese, Polynesian, etc.). A major consideration should be the numbers of particular sub-groups in a given school, to enable the appropriate statistical comparisons (generally 12-15 or more subjects). There is also a variety of socioeconomic class distinctions possible, such as those shown in the Appendix. If a school chooses to also measure school climate, and to compare sub-group ratings of school climate, the same sub-group designators should be used.

C. School Climate

School climate has a moderate to low--but still significant--relationship to school outcomes, and thus is considered here as an index of equity of opportunity. Efforts to improve school climate in the interest of better student equity are likely to improve other aspects of the school as well.

The key to identifying school-specific improvements in school climate is to evaluate each element of climate, and then to identify the reasons (causes and contributing factors) for the resulting assessments. It is extremely important to base improvements on a thorough diagnosis of the reasons for a poor climate, and possible sub-group inequities.

In the following discussion of school climate characteristics, some examples are given from actual school cases. These experiences come from widely varying schools, and thus their wholesale adoption is not suggested. They do, however, illustrate what can be done.

Community: The level of friendship and mutual support school members feel toward each other.

School size and sense of community are closely related, and large schools tend to be seen as more impersonal than small schools. Recognizing this situation, many larger schools have grouped students into smaller units termed "houses" or "clusters". In some schools, these smaller units are made up of members of one grade level, while in others, members from all grade levels are represented. Althought forming subunits allows for more of a sense of community within the units, it could result in isolation from the total school community. Some schools have ameliorated this problem by scheduling activities that mix subunits, such as athletic and social activities.

In other schools, regardless of size, many teachers conduct classes in a rather impersonal or unfriendly manner. This forces students and teachers to associate primarily with their peers, and results in a low level of community spirit. Some schools have improved their sense of community by increasing student-teacher interaction in after-school activities that foster more personal associations. Other schools have improved their sense of community through more meaningful total school-community adtivities.

Accessibility and Receptivity: The availability and openness of school members to conversation, and assistance about concerns.

In some schools, students feel that is is difficult to find teachers,

administrators, or guidance counselors who have time to provide assistance or are willing to talk about students' concerns. This may reflect general avoidance, or it may reveal other problems in the school.

For example, in one school, teachers, angry with the salary provisions of their new contract, adopted an attitude of minimal work. The principal, through extended negotiations with faculty, found ways of reducing corridor and lavatory patrol duties in exchange for increased time for teacher-student assistance outside the classroom.

In another school, the school-to-home bus schedule created a problem. Most students took the early bus, which left 10 minutes after the last class, and avoided the late bus, which left 90 minutes after the last class. With only 10 minutes available, only a few students could see teachers for extra help. The majority, thus frustrated, rated the teachers low on accessibility and receptivity. By delaying the early bus by 20 minutes, and advancing the late bus by 30 minutes, the situation was vastly improved.

Involvement: The extent of school members' interest and participation in learning, social, and other school activities.

The school climate characteristic of involvement has two basic attributes, degree and investment, which are manifested in three basic school involvement patterns.

- In some schools, there is little participation in out-of-classroom activities, and many students simply go through daily academic routines. Such schools are characterized by a general apathy, reflected in a "flat" school climate profile in which the ratings for the various school climate characteristics show little variation. In schools with an overall apathy, improvement usually does not occur.

- In other schools, there is high actual participation in a variety of school activities, accompanied by low psychological investment. In such schools, activities tend to be highly teacher-directed, and interest and enthusiasm can be improved by increasing student participation in planning and conducting school activities.

- Still other schools have high actual participation and high, genuine psychological investment. In these schools, students tend to be highly involved in plannand conducting many of the school's activities.

Equal Treatment: The uniformity of school members' opportunities and treatment in the school.

Equal teacher treatment focuses on equity in assigning student course marks, teacher assignments, and group status, irrespective of race or national origin. Schools with no regard for equal treatment typically have problems only with certain subgroups within the school. In some schools, certain minority students feel especially unequally treated. In other schools, female students or students in vocational programs feel mistreated. An effort must be made to identify which groups feel they are being differentially treated.

Once the most disaffected student groups have been identified, a representative sample can be interviewed in order to gain a more detailed understanding of the specific situations in which they perceive inequity. These students can also be included when the school develops and implements improvement ideas, which is in itself a step toward greater equity.

Groupings: The extent to which group menbership is a positive or negative experience in the school.

Forming groups is a natural human phenomenon that takes on added importance during adolescence. Thus, schools should not try to eliminate groups or cliques, but instead make it possible for flexible group membership, or not belonging to groups, to be acceptable.

Several schools concerned about frozen cliques have taken remedial action in the form of heterogeneous classroom and activity assignments, more public recognition of the accomplishments of students associated with lower

status groups, and diminished competition over class rank. But no appreciable improvement has been discerned. Either these interventions have been insufficient, or the phenomenon is particularly resistant to change, or both.

If groups or cliques cannot mix without conflict, group membership can be a negative experience. Schools concerned about negative groupings should probe carefully into the reasons why exclusive group membership may be especially functional or dysfunctional. It may well be that "deviant" groups, in the face of being relegated to a low status in the school as a whole, are forced into exclusivity as a way of gaining peer recognition. Low achieving students often group together, especially in a school with a focus on academic rewards. In those cases, such cliques may be opened up through efforts to raise the achievement of their members and to expand the school's reward structure beyond academic accomplishments.

Learning Orientation: The extent to which learning and acquiring academic, vocational, and interpersonal skills are emphasized in the school.

In many secondary schools, students believe that getting good marks is more important than learning. In one such school, it was decided that the school's reward system encouraged this attitude. In this school, so much was made of marks that students actually shoved each other to view the rank-in-class list posted in a display case within hours of each grading period. Also, elaborate drill sessions were conducted by teachers to prep students for the SAT and other college board tests.

Most of the pressure for good marks was traced to the families in this upwardly mobile town. Therefore, a parent-student-staff committee was formed to analyze and advise on the matter. The key element of its recommendation was a "learning contract" approach for individual students, coupled with a parent information program.

Expressiveness: The extent of originality and open expression of ideas and feelings among school members.

Schools have found many ways of improving the "originality and open expression of ideas and feelings among school members." More student and staff art displays in the corridors, more classroom discussion of issues and problems, and increased opportunities for participation and leadership in student government and clubs are examples. This school climate characteristic appears to be readily amenable to change, and school members have little difficulty in identifying and implementing improvement efforts in this area.

Goal Direction: The extent to which school members understand and accept what they are expected to accomplish, and are provided a framework for focusing their efforts.

Of all the school climate characteristics discussed here, goal direction is the most difficult for school members to comprehend. Two major factors contribute to this confusion. First, many students, and even many teachers, do not have an operational understanding of the term "goal." Second, many schools do not have widely acknowledged goal statements, and the existing goal statements are primarily ceremonial.

In most schools, expected accomplishments are articulated and understood only by certain school members. For example, almost any student can recite his or her schedule or explain the rules for absenteeism. But how many students can explain why they have to take American history or the reasons for studying foreign languages?

Given these ambiguities, very few schools have undertaken an effort to improve the school's goal direction. Nor have schools been given guidance in this area by researchers or policymakers. Volumes have been written on

specifying instructional goals and objectives, but few have seen that the school itself can--and should--develop institutional goals. Such an effort is very time consuming and requires special training and skill.

Challenge: The level of difficulty of school members' goals and tasks, and the pace of effort required.

Challenge is a school climate characteristic that is frequently and consistently perceived by both students and teachers as being deficient in many schools. Many students want more challenging courses, but feel that teachers are reluctant to press students too far for fear of rebellion. Teachers, on the other hand, blame a lessening of course requirements, increased "easy" electives, grade inflation, societal permissiveness, and a general decline of interest in and value placed on schooling. To complicate matters, many administrators and parents blame the teachers.

Almost every school would like to improve the level of challenge provided to students. A few others would like to improve the challenge presented to teachers, in recognition that the two are probably related. A critical first step to accomplish this goal is for staff, students, and parents each to come to accept shared blame for low student challenge in their school. Without this critical first step, circular blaming rather than improvement would probably continue.

Once a substantial portion of the faculty accepts shared blame and desires increased challenge to students and faculty, there is, in some schools, sufficient momentum to reexamine course and graduation requirements, conduct inservice workshops for teachers on increasing challenge to students through individual "learning contracts," more careful grading of homework assignments, more detailed guidance regarding course-level selection commensurate with abilities, and parent education about a supportive home environment.

Dealing with Problems: The extent of identifying, analyzing, and resolving school problems when they arise.

Schools that have improved their capacity to resolve problems when they arise have focused on communications and special task groups. Adequate communications among all members of the school are essential in identifying problems before they grow more serious, in developing a sense of belonging, and in letting school members know what is happening. In many schools, word spreads faster about problems than about solutions, leaving one to wonder if anyone is doing anything about them. This adversely affects morale, and lowers the sense of community.

If the burden of dealing with problems falls exclusively on the principal and assistant principal(s), there is a severe limit to the possible responses and their effectiveness. A few people can do only so much (especially administrators, who have innumerable other duties). Some schools have extended their problem-solving capability by forming special task groups to deal with problems and engage in future planning in such areas as curriculum and instruction, school governance and discipline, athletics and social affairs, guidance and counseling, and community relations. If the role of these groups is carefully defined, they can be empowered to take action in some areas and to make recommendations in others. As problems arise, the principal can channel them to these groups for resolution or advisement.

Order: The extent to which school rules, established to maintain favorable learning conditions, reflect established legal procedures and are accepted by school members.

Students' most frequent complaint in schools rated low on order is with the inconsistent application of rules and regulations. If some students are punished for certain offenses where others are not, or are, but to lesser

degrees, grave injustices are perceived. Such inconsistency undermines a student's (and teacher's) respect for authority in the school and, in some cases, contributes to disorder. If the inconsistency involves a "suspect" class of students (such as a disproportionally high black student suspension rate), intergroup conflict is encouraged.

In addition to consistently applied rules and regulations, student achievement levels and their participation in designing and conducting school activities affect the level of order in a school. These factors (also discussed under influence distribution) govern the extent to which students understand and accept that contributing to order sufficient for learning is in their best interest.

Options: The extent of choices available to school members regarding goals, courses, levels of challenge, and social opportunity.

Without sufficient choice, many students report feeling "boxed in" to a routine that can make school a rather mechanical experience. However, the extent of options, like sense of community, is governed largely by the size of the school: a large school has the potential for offering more options than a small school. The extent of options is also governed by the school budget, which typically is decided for a school by the district administration and board of education.

Within such constraints, however, schools have found ways to expand options as part of their efforts to improve their school climate. In some schools, additional courses have been planned and taught by teachers, students, or both together on a voluntary, unpaid basis. However, this strategy has generated conflict regarding "extra" work in schools with tight union contracts. In some schools, teachers have expanded the options within courses, developing

learning contracts with students for indivudualized areas of interest or difficulty levels. Other schools have concentrated on expanding athletic, social, and recreational activities, some of which involve holidays and vacations.

Influence Distribution: The extent to which school members contribute to decisions regarding rules, procedures, and options.

Broad participation of students in conducting the affairs of a school, especially at the secondary level, has a dual purpose. First, as developing adults, most students want and need opportunities to exercise self-direction, leadership, and responsibility. Such experiences are vital to personal and social development. It is, of necessity, a trial-and-error process in which staff and parents must tolerate occasional irresponsibility. Staff and parents must also acknowledge students' capacity for responsibility by providing opportunities for them to contribute to decisionmaking in appropriate areas.

The second purpose is to foster sufficient "ownership" of the goals of schooling. Shared power and influence are more likely to lead to the development of students who abide by the school rules and regulations, instead of "fighting the system."

Schools interested in increasing student influence can broaden the participation of students on committees, in designing classroom activities, and in developing and monitoring the governance systems.

D. Nine-Step Improvement Process

A great deal has been written regarding the difficulty of bringing about improvement in multicultural (racially mixed) schools in cities. Often

attempts at change fail because they are imposed from outside the school or because of inadequate support or resources. The procedures described here place the locus of change within a school and specify the nature of support and resources necessary. With or without assistance from consultants, these procedures have been followed successfully by many schools over the years.

Briefly stated, the nine setps for identifying and improving equity in multicultural schools are:

1. Take the Initiative. Someone in the school, whether student, teacher, administrator, school board member, or parent, must take the lead in initiating a school improvement effort. If a lasting impact is desired, the chances of success will be increased by working through the existing representative groups in the school: the student and faculty associations, the administration, the school board, and the parent association.

2. Form a Representative School Improvement Team. The improvement effort should be guided by an 8- to 12- member team of student, teacher, parent, community, and administrator representatives. To ensure maximum consideration of all important issues, the school improvement effort should broadly and genuinely represent the major formal and informal groupings of the whole school community.

3. Develop a Team Work Plan. A detailed work plan for the team, to be shared with the entire school community, should be developed. The work plan should include, at a minimum, tasks, responsibilities, and a timetable.

4. Set a Clear Purpose. The team should set for itself a clear purpose and outline procedures for collecting and analyzing data that will help the team achieve this purpose. The team may wish to study fully its school outcomes and 13 school climate characteristics previously discussed, and to select a purpose or purposes from among the options described in that discussion.

5. Collect Assessment Data. Some method of collecting school data must be developed and implemented. This could involve a questionnaire administered to school members and scored according to set procedures, to be examined in conjunction with important school outcome measures.

6. Analyze and Interpret Assessment Results. The school team can analyze its results singly, or in relation to the norms developed from the sample used in the study described in Section II. The team can follow up on questionnaires with interviews and observations to extend and refine its school diagnosis.

7. Develop a School Improvement Plan. Based on the results of the completed assessment, the team can formulate goals and action steps for school improvement.

8. Implement the School Improvement Plan. Once the plan has been ratified with the existing representative groups, it can be implemented according to the preplanned action steps.

9. Evaluate the Effort's Impact on the School. Progress in implementing the school improvement plan and its impact on improving the school should be evaluated periodically.

The time it takes a team to complete the nine steps will vary from school to school, but most schools should plan on about two years. In following these steps, the school improvement team should plan to devote at least two hours a week for the full two years if the effort is to have significant effect on the school. Whether or not the team members are paid for their time will vary according to the setting. The team should have a budget of $2,000 to $4,000 for materials and data processing, and at least one team member should be skilled in data processing and statistical analysis (or the team should have access to such a person). During the first year, the team should collect and analyze data regarding the school outcome and 13 school climate characteristics, and develop an improvement plan (steps 1 through 7) based on its findings. The second year (and beyond) should be devoted to implementing and evaluating the plan (steps 8 and 9).

Unless a school and the team are willing to make these minimal investments, it is recommended that the school not initiate the process described in this guide. Without the appropriate level of commitment, a school improvement team may fail to accomplish its goals or may bungle the job and antagonize the school community. Worse yet, the effort may serve to intensify intergroup or organizational tensions that may already exist in a school. The process described here is not a panacea--no one can guarantee success in the sensitive areas of equity of attainment and opportunity. But based on the success of other schools, and given a committed and supported team, school members should proceed with optimism, conditioned with a healthy respect for the risks. And

although it is unreasonable to expect instant, revolutionary change, they can reasonably expect modest, incremental improvements in many aspects of the school's operations.

Step 1: Take the Initiative

In initiating an effort aimed at improving equity in a multicultural school, someone must take the lead, and that person will have to find other people who are also enthusiastic about the idea. Some members of a school community will welcome a look at the climate and achievement levels of their school; others will consider it inappropriate, unnecessary, or potentially dangerous. Consider, for example, these situations. If students or parents try to initiate an improvement effort, some teachers and administrators may feel that the advocates are out to find fault with them. If administrators initiate the effort, teachers may suspect that a purge of some sort is intended. A typical form of resistance is to try to discredit the motives of the advocates of the effort.

To deal with these factors effectively, the advocates should ask themselves the following questions and take the following steps before attempting to initiate such an effort.

- Why an I interested in the school outcome levels and school climate of my school?

  Examine your own reasons for wanting a study of subgroup equity of your school. If you are interested in using an assessment to discredit another group in the school, or for other negative reasons, forget it. If you are genuinely interested in improving these aspects of your school, find others who share this interest.

- Who else might be interested in studying and improving these factors? Why?

- What are the potential benefits and risks of such an effort?

- Discuss the potential advantages and disadvantages of such an effort with members of the school's established representative groups (e.g., the student and faculty associations, the administration, the school board, the parent association).

- Do I really want to advocate a project, and who else should be involved?

If you decide to propose such an effort, enlist the cooperation of the existing representative groups. The broader the support for the effort, the more chance it will have to overcome resistance and to have a positive impact.

Step 2: Form a Representative School Improvement Team

Those who put together a school's improvement team will have to be sensitive to the particular needs and customs of their school.

First, try to select a team that will represent the various formal groupings in the school--students, teachers, parents, administrators, and support staff (such as custodians, cafeteria workers). In some areas, community representatives (such as business and industry leaders and clergy) might be invited to join. By all means, make certain that the team reflects the race and national origin composition of the school.

Once you decide on the groups that should be represented, turn to the elected representatives of each group for help in choosing the persons who might best represent them. In some schools, the elected representatives of the student association may, in reality, represent only the "best" students. Additional students might be chosen who will help widen the representativeness and credibility of the team. To the extent possible, select a team that will be broadly and genuinely representative of the whole school community. The size of the team should be relatively small--no more than 12-15 members.

Individuals who are interested in working on the school improvement team should have time, possess analytic and problem-solving skills, and be

known for being fairminded. Prospective team members should expect that approximately 2 hours a week will be required for most of the school year. Unless one team member understands data processing and statistical analysis, the team should have access to such a person.

Team members will work harder at their tasks if incentives are provided by the school. For example, students could receive course credit; that is, their work on the school improvement project could be recognized as equivalent to an elective course. Teachers could receive inservice credits. And both teachers and students could have a description of their work written up as part of their experience records. In addition, team members should be given visibility and recognition in the school community for their work.

A team leader should be selected. This person should convene meetings, set agendas, serve as team spokesperson, and coordinate the team's work plan.

Step 3: Develop a Team Work Plan

An effective team requires a detailed work plan and a division of labor. The steps presented here provide general guidance, but the team will need to lay out its own list of specific tasks to be done by certain team members within an agreed-upon timetable.

As a start, make up a calendar for the school year. Decide where you want to be by the end of the year and work backwards, writing in target dates next to the major tasks to be accomplished. Then, determine assignments and reporting procedures. The schedule for the team's meetings should be announced to the entire school. All team meetings should be open to the

public, and all members of the school community should be invited and encouraged to attend.

Make sure the work plan includes frequent "check-ins" with the larger school community. The ways of checking in will vary widely from school to school. Some schools are small and close-knit, and teams will have an easy time getting the word out informally to everyone. In larger, more impersonal schools, team members may find it necessary to be constantly reminding various groups about their activities. Whether close-knit or impersonal, no school community will cooperate with the school improvement team and help it to achieve its goals unless people know what is going on and see signs of the team's progress.

If the flow of information is all in one direction (from the team to the larger school community), the odds are that any plan will fail. The team must inform, but must also listen carefully to what people are saying about its work and about the climate and outcome levels of the school. The more the team can open its deliberations to all, and the more it can make itself influenced by the people it represents, the greater its prospects for success will be.

Step 4: Set a Clear Purpose

Team members must next:

- Develop a clear understanding of the purposes of the effort in their school.
- Develop or select appropriate data gathering instruments or procedures.
- Select the level of analysis that will meet their purposes.
- Choose an appropriate sample.

The school improvement team should set a clear purpose and develop steps that will help them to achieve that purpose. Once a common purpose is agreed upon, it is recommended that a questionnaire be given to a student sample and all staff, both for data collection and to begin to create general awareness of and interest in the effort. The reason for giving the questionnaire to all staff is to avoid the suspicion that often accompanies sampling in staff surveys.

The results of the surveys can then be pursued at four levels of analysis.

- The descriptive level of analysis depicts how members of the school community feel about the various aspects of their school outcomes and school climate. For this purpose, students and teachers "describe" the school as it affects them by rating questionnaire items.

- The comparative level of analysis includes descriptions, but adds to it by allowing three kinds of comparison; student and teacher perception comparisons (to identify areas of agreement or disagreement); student subgroup comparisons (e.g., by sex, race, achievement levels, program, and other student biographical items); and school-school comparisons.

- The diagnostic level of analysis identifies factors that are related to the performance of students in the school. For example, student marks, test scores, and absentee or suspension records could be related to student perceptions of school climate characteristics. This requires statistical, correlational analyses that might reveal, for example, that students with low marks or test scores perceive that they have few choices regarding courses, levels of challenge, or social opportunities. Such a correlation does not establish that low perceived options "cause" low achievement, or vice versa, but does suggest that they are somehow related. The nature of this relationship might be further revealed by interviewing and observing low-achieving students. Correlational analyses require a high level of technical expertise, for which the team will need qualified assistance.

Should the questionnaire be administered to everyone in the school or to only a sample of people chosen to be representative of everyone? The major considerations in deciding whether to use a sample or the entire school population are representativeness, cost, and school/community rela-

tions. Sampling is cheaper in dollar costs, but could create misunderstandings (or controversy) if not explained properly. Those who are chosen might wonder "why me," and those who are not chosen might wonder "why not me." Others might question the representativeness of the sample, especially those who might feel threatened by the results. It is probably best to choose a sample of students, but to administer the questionnaire to all teachers (considering their smaller numbers).

Students can be sampled in a variety of ways. You can, for example, select a sample to represent selected subgroups of students (such as boys, high achievers, or low achievers). Another way of selecting a sample is to assign every student a number and to select a sample from a table of random numbers. This statistical sampling technique is complex enough that you will want the assistance of someone familiar with it. Such a person can also help to determine the number of people required for your sample, especially if comparisons of subgroups are to be made.

Step 5: Collect Assessment Data

If you decide to use a questionnaire, you will need to schedule a time and a place for its administration, identify the people who will administer it, and reproduce an adequate number of questionnaires. Administer the questionnaires in quiet rooms to groups of no more than 40 people. Do NOT give questionnaires to people to take away to complete, for the return rate, even for teachers, typically is low with this procedure. Members of the school improvement team might be the most appropriate people to administer the questionnaire.

Step 6: Analyze and Interpret Assessment Results

School profiles such as those shown in Figures 1 and 2 can be drawn to display all of the factors investigated in your study, thereby showing the survey results graphically. This is done by plotting on a graph the normalized score of each factor to be derived, according to the following scoring procedures for the questionnaire processing.

Scoring of the completed questionnaires can be done by hand, or by data processing (key punching and computer). If your team has access to a key punch machine, a computer, and a person who is experienced in data processing and statistical analysis, data processing is much less time consuming. The scoring can be done by hand-- it just requires many person-hours of tedious work, easily subject to error. The steps shown below apply to both hand scoring and data processing.

1. Screen the questionnaires:

   Members of your team should inspect every page of every questionnaire. Questionnaires should be eliminated from the analysis that have greater than 20 percent of the items left blank, or given multiple responses. Also eliminate questionnaires with "set response" -- where all or most items are given the same response, such as all 4's.

2. Reverse negative item polarities:

   Roughly 40 percent of the questionnaire items are negative statements, to allow checking for set response, such as:

   "People in this school only look out for themselves."

   A "strongly agree" (number 4) response for this item would be an undesirable (low) rating of the school climate. In contrast, a "strongly agree" (number 4) response for a positively stated item such as "The students here have a lot of school spirit" would be a desirable (high) rating of the school climate.

FIGURE 1: STUDENT RATINGS OF SCHOOL X, AND SCHOOL ATTAINMENT LEVELS

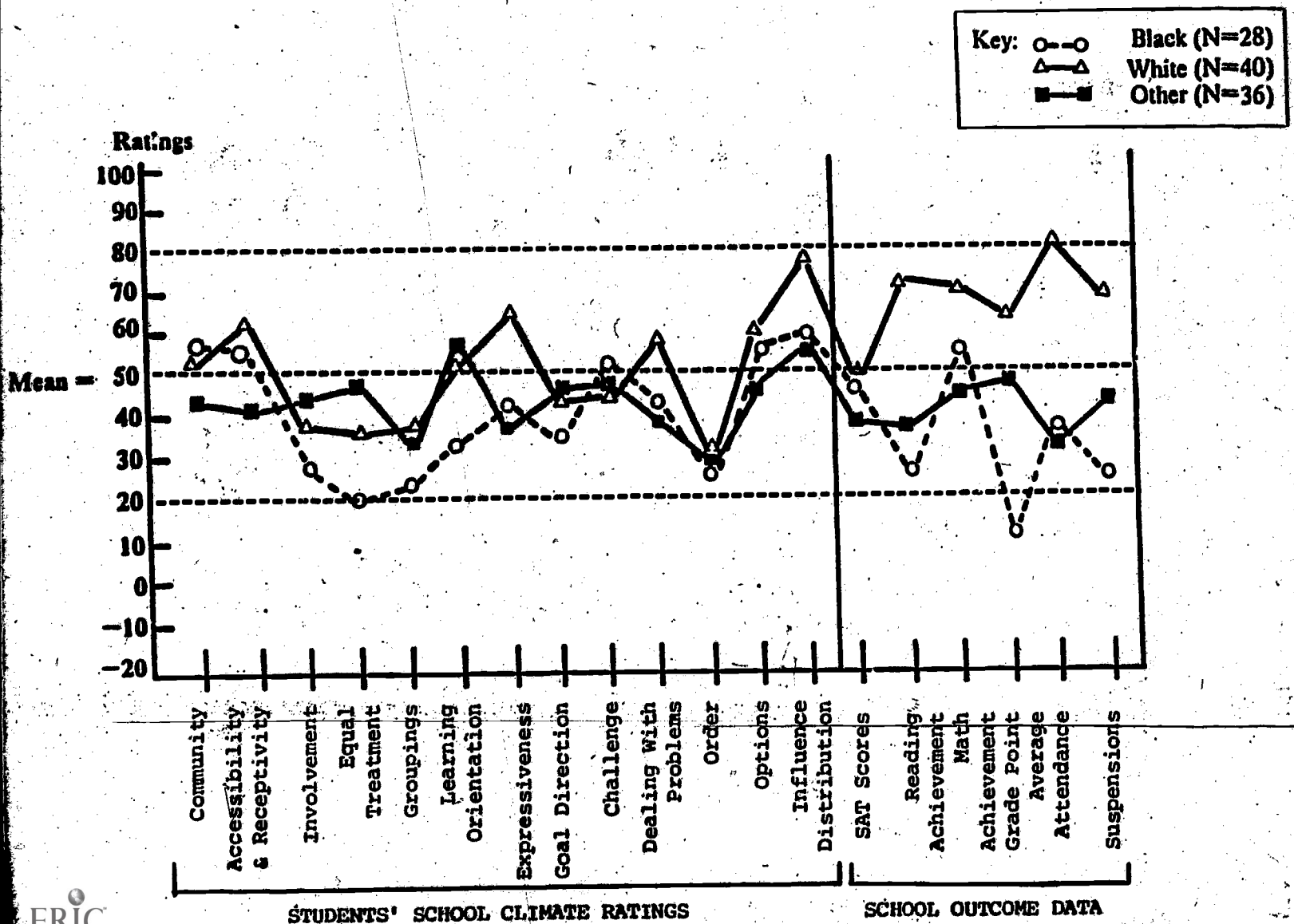
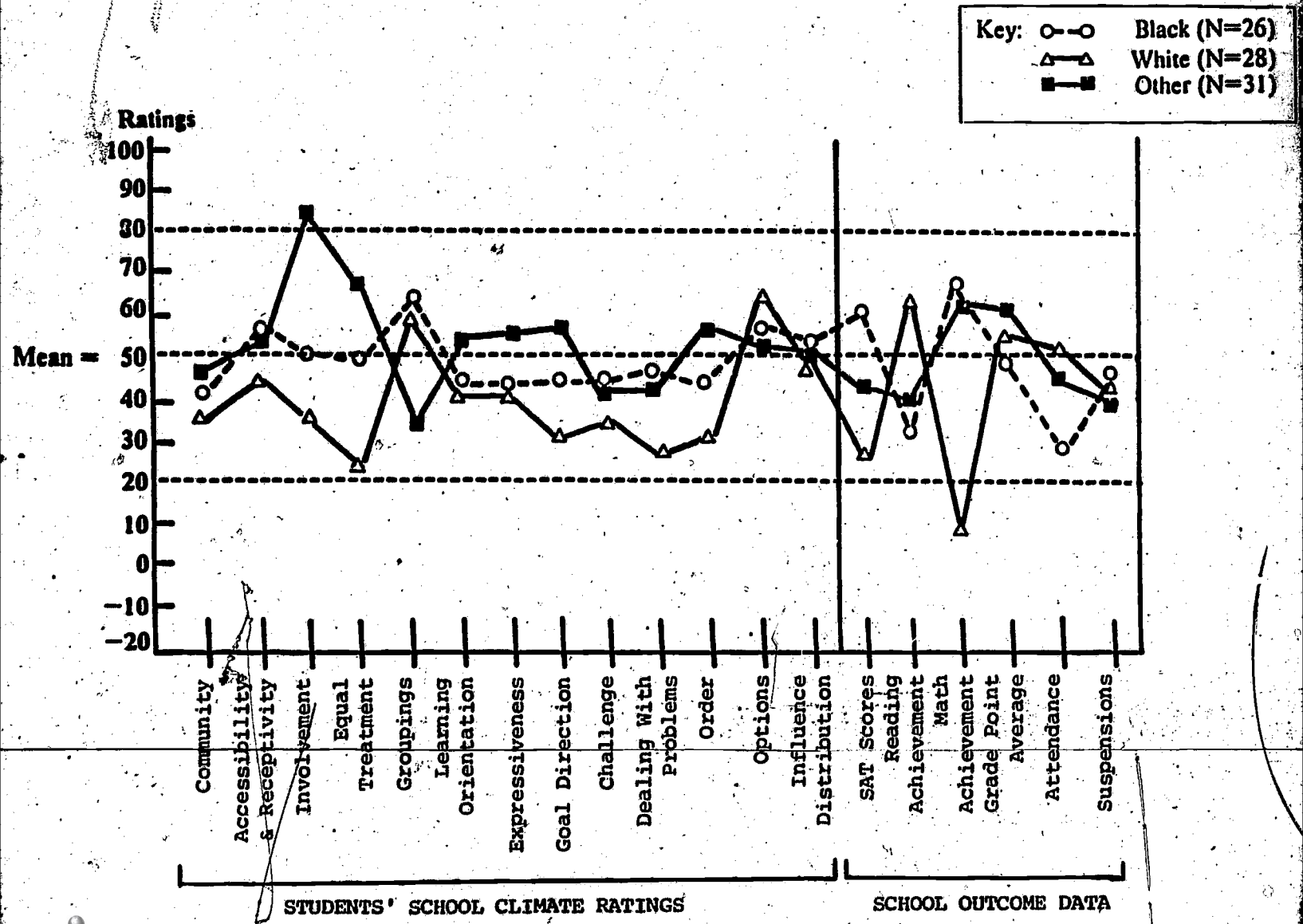


FIGURE 2: STUDENT RATINGS OF SCHOOL Y, AND SCHOOL ATTAINMENT LEVELS



To make all item responses additive to give thirteen school climate factor scores, reverse the polarities of all the negatively stated items that you used (the Appendix identifies negatively stated items). This is done by reversing the number ratings given for the negatively stated items.

In this way, a reversed rating of 1 for a negatively stated item can be added to a rating of 4 for a positively stated item to give a 5 for the two items combined, or an average rating of 2.5 (divided by 2 items).

If you reverse the polarities by hand, mark the reversed number (1-4) in the right margin next to the negative items. If done by data processing, have the actual questionnaire responses key punched. A computer program can be written to reverse the polarities on the negatively stated items used before they are added together.

Example of Reversed Polarity

Item: "People in this school only look out for themselves."

Actual Questionnaire Response.	Strongly Disagree	Disagree	Agree	Strongly Agree
	1	2	3	4
Reversed Polarity	4	3	2	1

Thus, for all negatively stated items:

4 = 1
3 = 2
2 = 3
1 = 4

3. Add item ratings to form factor scores:

Your next task is to add the ratings for the items that make up each integration practice and school climate factor variable. The item-to-factor assignments are listed in the Appendix.

For each completed questionnaire, add the ratings given to each item assigned to a factor (be sure you are adding the rating given for positive items, and the reversed rating for negative items). For example, if 3 items were used:

COMMUNITY	Item	Rating Given	Add
	1	2	2
	-14	3	2 (reverse)
	-27	1	4 (reverse)
		Total Rating for Community:	8

Next, add all the individual questionnaire ratings for each factor, and divide by the number of questionnaires, then divide by the number of items in the factor. For example:

$$\frac{\text{Sum of individual questionnaire ratings for community}}{\text{Number of individual questionnaires}} = \frac{1856}{100} = \frac{18.56}{3 \text{ items}} = 2.667$$

Thus, in this example, the school rating for community as it affects students is 2.667. You must calculate a similar school rating for all factors separately for the student and teacher questionnaires.

4. Convert your school's ratings to (normalized) scores that can be compared:

This step is necessary for interpreting your school's ratings. You take your school's rating for each factor derived in the preceding step, and put it into the formula:

$$Z \text{ (standard score)} = \frac{X \text{ (your school's rating)} - \text{study mean}}{\text{study standard deviation}}$$

The mean and standard deviation values to be used for each factor are listed in the Appendix. They derive from previous studies on school climate.

NOTE: It is extremely important that you use the right values in this formula.

Let's take the example given above for rating 2.667 for COMMUNITY regarding school climate for schools. The values in the formula would be:

$$Z = \frac{(2.667) - 2.493 \text{ (from the Appendix)}}{0.603 \text{ (from the Appendix)}}$$

$$Z = 0.289$$

Obtaining the Z value is only half the step in calculating the normal score of a variable, however. The final step is to put the Z value into the formula:

$$t \text{ (normal score)} = Z + 10 + 50$$

$$t = 0.289 \times 10 + 50$$

$$t + 52.89$$

The resulting value of 52.89 is slightly above average. Remember, the normalized rating has a mean value of 50.00 and a standard deviation of 10.00. Calculate the normalized ratings for all the variables in the same way, and plot these values graphically as shown in figures 1 and 2.

The same procedure can be used to normalize school outcome measures, such as achievement and attendance. However, a school would first have to calculate its own means and standard deviations for the entire student sample for each school outcome measure, and then use these values in deriving the Z scores for each student subgroup before converting to t values. Done in this way, the t values for the school outcome measures may also be plotted in graphic form as in figures 1 and 2.

As school improvement teams analyze their survey and school outcome results, they will discover that some findings merely confirm what is already known and that other factors offer clues to new insights into the school. By way of example, the school profiles shown in figures 1 and 2 display the factors to be investigated. In these figures, the student climate ratings and school outcome levels are shown by three racial categories (i.e., black, white, and other).

The schools represented in figures 1 and 2 show a marked contrast. The school in figure 1 is rated generally lowest by black students, whereas the school in figure 2 is rated generally lowest by white students. The black students represented in figure 1 give particularly low ratings to Involvement, Equal Treatment, Groupings and Order. They also score particularly low in reading achievement, grade point average, and attendance, but score near the mean in SAT scores and math achievement, and show low suspensions.

In contrast, white students represented in figure 2 generally rate their school lowest, and like the black students in figure 1, they rate Equal Treatment low. In contrast, they score low on SAT's and math achievement, yet they show moderately high reading achievement and near average grade point averages.

There are many more similarities and differences in the ratings/scores of the subgroups shown in figures 1 and 2. Additional graphs can be developed for other subgroup breakdowns, such as by gender, socioeconomic class, and other racial/ethnic categories.

The interpretation of a school's ratings and outcome scores can best be done by those familiar with the history and unique context of the school. Putting all clues together and discovering patterns is a challenging task of interpretation for the school improvement team that takes time and acquired skill.

Step 7: Develop a School Improvement Plan

By now, the school improvement team should be in agreement about the areas of their school that require improvement. They should also be in agreement about factors that contribute to positive or negative ratings for each area. The next task is to brainstorm ideas for reinforcing the positive features and improving the less positive features.

Brainstorming, as a technique, encourages maximum participation by letting everyone explain his or her ideas completely before evaluating those ideas. Premature evaluation might silence some team members who have the germs of good ideas. Excessive competition for acceptance of an idea by the team - excessive to the point where the compeition becomes more important

than identifying the best ideas--should clearly be avoided. When your team comes to evaluating the ideas generated, judge them in terms of importance and probable success in contributing to school improvement.

Teams tend naturally to be concerned only with improving areas that receive the lowest ratings and to neglect the moderately and highly rated areas. One simple way of reinforcing the more positively rated areas is to periodically inform the school community of the good job it is doing in these areas. This should be done in meetings and through school newspapers or newsletter articles, while the school team is discussing alternative ways of improving the areas rated less favorable, which can also be reported to the school community. Done forthrightly, such an effort should help to prepare school community members to accept the team's improvement plan when it is presented to them.

Prepare a brief (two- to three- page) statement of the goals and action steps of your plan to be distributed in the school and at open meetings held to discuss the plan. Members of the school improvement team can lead these discussions, accepting and recording reactions and suggestions and further explaining the rationale behind the plan. Often, many good suggestions are generated by this procedure. In conducting these meetings, team members should avoid being too defensive in the face of criticism or succumbing to the temptation to "hard sell" the plan.

After the open meetings, the team should discuss the reactions and suggestions and then revise the plan where it feels that revision is warranted. The revised plan should be written and presented to the established school groups for approval and support--at a minimum, the student and teacher associations and the school administration.

To be successful, then, the school improvement team should:

- Inform the school members of the survey and school outcome results and of the efforts of the school improvement team to develop improvement plans.
- Brainstorm alternative ways of reinforcing highly rated factors and improving the less favorable rated factors.
- Decide on which alternatives to follow, based on the team's estimate of its relative chances of success.
- Develop a written plan, in draft, that briefly describes the school improvement goals and action steps.
- Revise the draft plan based on reactions and suggestions of school members in open public meetings to discuss the plan.

Step 8: Implement the School Improvement Plan

Improvement plans can be as elaborate or as simple as the team feels is suitable to its manner of working and to the complexity of the improvements it is trying to promote. Whether elaborete or simple, improvement plans must be specific about people and times. Thus, improvement plans must be organized to answer the following questions.

- What? This comes first, of course, and it is a list of the improvements selected.
- Who? The team should look carefully at the skills and energies of its own members first. It may want to add members who possess special implementation skills (like handling conflict in groups). Some original members may want to drop off the team. In any event, the team will need to look carefully throughout the school community for indivuduals who can help it to implement the improvements selected. It is also essential to provide adequate time for people who were not part of the original team to become familiar with the goals, personnel, and style of the core team.
- When? This is the first major test of commitment to the team's plan. If team members resist specific work deadlines, the team should very carefully consider the reasons for resistance. Unless the team is fully committed to the plan, it cannot expect others to become involved and committed.

- Who will be responsible to whom? First, within the team: Is the leader of the team the person responsible for checking on the progress of individual members? Or is some other member appointed to fill that function? Or does the group divide into small subgroups for specific tasks, each with a task leader: Second, outside the team: When does the team report to the school community or to the individual or group that originally set it in motion?

- Reporting? How will the team report its progress--internally and externally? Some suggestions include: regularly scheduled show-and-tell meetings for the whole team; a wall-chart checklist; frequent progress checks with the team's leader or task group leaders; and a written report to the team leader. The form the reporting takes is less important than its regularity and thoroughness. When the team is involved in other school affairs, every meeting will be a major effort, and checking progress may become a sore subject. But if reporting is not regular and is not subjected to hardheaded questioning, the team will neither improve its own performance not enlist the support of the larger community.

Step 9: Evaluate the Effort's Impact on the School

Whether your school improves as a result of implementing the team's plans can be determined in several ways. No matter what method of evaluation is selected, every effort should be made to tailor it to the specific goals of the improvement plan.

One way to evaluate the impact of the effort is to readminister the same questionnaire used in collecting assessment data to the same or to different people 6 to 12 months after the improvement plan has been initiated. By comparing the two sets of ratings, changes in people's perceptions can be guaged. This can be done by simple inspection or by statistical analysis of the results, if this resource is available to your team. Questionnaire re-administration is the more precise way of guaging impact if your improvement plan is based on the factors measured by the questionnaire. Reanalysis of school outcome data will usually require 1 to 2 years (or more) to reflect improvements made.

If the improvement plan is based more on refinements gained through interviews and observations, it would be better to evaluate its impact by a new round of interviews and observations. For example, if your plan included increasing daily student attendance to improve the level of challenge presented to students, attendance trends would be charted along with some measure of the levels of student challenge.

If the school improvement team and the school community are satisfied with the improvements made in the school, the effort might be halted for a year or two. Once such an effort is abandoned, however, it is easily forgotten. The team may consider cycling back to step 1 and making the assessment and improvement of these school factors a continuous process. Nothing remains static, especially in organizations like schools that have a substantial turnover in their membership. Consistent with this turnover, it is recommended that a new school improvement team be formed to bring a fresh look and new energy to the considerable tasks involved.

Appendix A: Survey Questionnaire; Item-to-Variable Assignments and Item Polarities of the Home and School Climate Sections and Variable Means and Standard Deviations

HOME CLIMATE QUESTIONNAIRE

Final Survey Draft
April, 1981

RELATIONSHIPS

A. Sense of Cohesiveness

1. My family has a lot of fun together.

14. The people in my family get along with each other pretty well.

27. My home is a friendly place to come back to every day.

— 40. It seems like the people in my family are always finding fault with me.

B. Communication

— 2. It's hard for me to talk to other members of my family.

— 15. The other members of my family don't really understand me.

28. When I get in trouble I can discuss it with members of my family.

41. I can talk easily to the members of my family.

C. Involvement

3. Often the members of my family go out together.

— 16. The members of my family do very few things together.

29. Everyone in my family helps to take care of the house.

42. The members of my family enjoy playing games together.

D. Ethnicity

4. I know quite a bit about my family's roots.

— 17. The older members of my family tell us very little about the family's roots.

30. My family likes me to be friends with kids who have the same roots we have.

43. I feel proud to tell people about my family's roots.

E. Equity and Factions

— 5. When there's a fight in my family, I usually get blamed for it.

— 18. Sometimes people at my house yell at me when I haven't done anything wrong.

— 31. When something goes wrong in our family, the same person usually gets blamed.

— 44. My family expects too much of me for a person my age.

PERSONAL DEVELOPMENT

A. School Learning

6. My family would be upset if I got bad grades.

19. My family would be upset if I got into trouble in school

32. The people in my family keep after me to study a lot.

45. My parents encourage me to do extra things at school, like music, sports, and clubs.

B. Out-of-School Learning

7. My family encourages me to read a lot when I'm not at school.

— 20. The people in my family seldom teach me how to do new things around the house.

33. The people at my house want me to ask them questions when I don't understand something.

46. The people in my family think it's important to have activities or hobbies outside of school.

C. Aspirations and Identity

8. The people in my house think it's important for me to go to college.

21. I have a pretty good idea of what I want to do after school.

34. I know I must do well in school if I am to do well in life.

— 47. The other members of my family are not very interested in what kind of work I will do when I grow up.

C. Maturity

— 9. My family tries to protect me too much.

22. The other members of my family feel it's all right for me to be alone in the house.

35. My family allows me to make my own decisions about what clothes to wear.

48. My family has rules about when I have to be home.

ORGANIZATION

A. Dealing With Problems

— 10. You can never seem to find anything when you need it at my house.

23. If something breaks at my house, it is fixed or replaced quickly.

36. If we're having visitors to our house, everything is ready when they arrive.

— 49. At my house we fight a lot about what TV programs to watch.

B. Structure

11. My family has clear rules for everyone.

— 24. I am allowed to watch TV whenever I want to.

— 37. At home I am allowed to watch any TV program I want to.

50. At meals, we all have to wait until everyone is served before beginning to eat.

C. Influence

— 12. It's very hard to change the way my family does anything.

25. The members of my family usually accept ideas from each other.

38. The other people in my family seem very interested in my wishes and ideas.

51. I can think of several times when I was able to help make an important family decision.

D. External Relations

13. People come to members of my family for advice about their problems.

— 26. My family keeps mostly to itself.

39. Neighbors and relatives are always coming and going at our house.

52. Someone from my family is always active in the Parent-Teachers Association (PTA) at my school.

Domain, Variable, and Item Statistics for the 1977 Student School Climate Questionnaire

SCHOOL CLIMATE DOMAIN ONE -- RELATIONSHIPS

Relationships involve feelings and opinions about how students, teachers, administrators and parents get along with and support one another. Relationships include the following variables and questionnaire items:

A. COMMUNITY: Perceptions of the level of friendship and mutual support school members feel toward each other.

MEAN	VARIANCE	ITEM/ VARIABLE*	ITEM/ DOMAIN**		
2.41	.74	.53	.42	1.	Students would rather be in this school than in any other school.
2.61	.90	.63	.51	14.	The students here have a lot of school spirit.
2.51	.65	.59	.48	27.	People in this school only look out for themselves.
2.79	.76	.60	.46	40.	If I walked around school all day feeling bad about something, nobody would even notice.

B. ACCESSIBILITY AND RECEPTIVITY: Perceptions of the availability and openness of school members to conversation and assistance about concerns.

MEAN	VARIANCE	ITEM/ VARIABLE*	ITEM/ DOMAIN**		
2.56	.70	.64	.53	2.	You can get good advice in this school when you need it.
2.80	.66	.64	.53	15.	People here make you feel that you're wasting time when you ask for help.
1.96	.81	.49	.46	28.	Students seldom talk to the principal unless they're in trouble.
2.66	.56	.63	.56	41.	Most people here will take enough time to listen.

* Correlation of item with variable.

** Correlation of item with domain.

C. INVOLVEMENT: Perceptions of the extent of school members' interest and participation in learning, social, and other school activities.

MEAN	VARIANCE	ITEM/ VARIABLE*	ITEM/ DOMAIN**		
2.29	.67	.56	.43	3.	On most days I look forward to my classes.
2.76	.88	.59	.44	16.	Most students here would be upset if they came to school and found a lot of equipment destroyed.
2.07	.68	.61	.47	29.	Many students here would prefer to avoid school.
2.29	.62	.50	.36	42.	Few students who are able to stay after school ever do.

D. EQUAL TREATMENT: Perceptions of the uniformity of school members' opportunities and treatment in the school.

MEAN	VARIANCE	ITEM/ VARIABLE*	ITEM/ DOMAIN**		
2.69	.73	.60	.46	4.	Students here get the marks they earn.
2.93	.68	.53	.40	17.	Only the smarter students ever get the best teachers.
2.47	.61	.67	.58	30.	Students in this school are treated fairly.
2.00	.70	.45	.31	43.	Certain groups of students in this school are looked down on.

E. GROUPINGS: Perceptions of the extent to which group membership is a positive or negative experience in the school.

MEAN	VARIANCE	ITEM/ VARIABLE*	ITEM/ DOMAIN**		
2.47	.81	.52	.14	5.	You feel left out if you're not part of a group in this school.
2.69	.81	.64	.40	18.	You need to be in a group to be liked in this school.
3.01	.69	.52	.38	31.	There are too many fights between groups in this school.
1.90	.68	.59	.42	44.	People here tend to label you by the group you're in.

SCHOOL CLIMATE DOMAIN TWO -- PERSONAL DEVELOPMENT

Personal development involves feelings and opinions about the directions and conditions of learning in the school. Personal development includes the following variables and questionnaire items:

A. LEARNING ORIENTATION: Perceptions of the extent to which learning and acquiring academic, vocational, and interpersonal skills are emphasized in the school.

MEAN	VARIANCE	ITEM/ VARIABLE*	ITEM/ DOMAIN**		
2.18	.81	.51	.39	6.	Learning is more important than marks in this school.
2.74	.72	.70	.60	19.	Students here learn many things that will be useful to them after they leave this school.
2.58	.50	.65	.63	32.	When you come to this school you learn a lot.
2.51	.71	.55	.45	45.	This school teaches you how to deal with all kinds of people.

B. EXPRESSIVENESS: Perceptions of the extent of originality, and open expression of ideas and feelings among school members.

MEAN	VARIANCE	ITEM/ VARIABLE*	ITEM/ DOMAIN**		
2.58	.60	.62	.46	7.	Students are encouraged to discuss their own ideas freely in classes.
2.77	.69	.55	.37	20.	People in this school are afraid to speak out.
2.59	.62	.56	.44	33.	Students can be themselves in this school.
2.31	.66	.60	.60	46.	Learning is enjoyable in this school.

C. GOAL DIRECTION: Perceptions of the extent to which school members understand and accept what they are expected to accomplish, and provides a framework for focusing their efforts.

MEAN	VARIANCE	ITEM/ VARIABLE*	ITEM/ DOMAIN**		
2.52	.66	.56	.45	8.	No one really knows the goals of this school.
2.65	.50	.74	.66	21.	This school helps students to set goals for themselves.
2.46	.56	.70	.65	34.	Most students feel that this school helps them meet their own goals.
2.60	.52	.44	.40	47.	Students often work against what this school is trying to do.

D. CHALLENGE: Perceptions of the level of difficulty of school members' goals and tasks, and the pace of effort required.

MEAN	VARIANCE	ITEM/ VARIABLE*	ITEM/ DOMAIN**		
2.40	.67	.67	.49	9.	Students here do as little as they have to.
2.86	.62	.46	.18	22.	This school doesn't demand enough from the students.
2.81	.61	.57	.52	35.	No one in this school thinks the work is very important.
2.35	.60	.53	.35	48.	Most students work hard in this school only before tests are given.

SCHOOL CLIMATE DOMAIN THREE -- ORGANIZATION

Organization involves feelings and opinions about the way the school operates. Organization involves the following variables and questionnaire items:

A. DEALING WITH PROBLEMS: Perceptions of the extent of identifying, analyzing, and resolving school problems when they arise.

MEAN	VARIANCE	ITEM/ VARIABLE*	ITEM/ DOMAIN**		
2.67	.66	.51	.31	10.	People here usually avoid admitting that problems exist.
2.69	.65	.52	.33	23.	Students here talk openly about school problems.
2.83	.66	.59	.57	36.	In this school, nothing is ever done about problems.
2.30	.62	.56	.52	49.	The same old problems are never solved in this school.

B. ORDER: Perceptions of the extent to which school rules reflect established legal procedures, and are accepted by school members to maintain favorable learning conditions.

MEAN	VARIANCE	ITEM/ VARIABLE*	ITEM/ DOMAIN**		
2.90	.59	.51	.31	11.	Students know exactly what will happen when they break a rule.
2.42	.88	.53	.31	24.	School rules are broken so often they're considered a joke.
2.45	.75	.58	.59	37.	The school rules are fair and reasonable.
2.63	.58	.65	.45	50.	Everyone understands the rules in this school.

C. OPTIONS: Perceptions of the extent of choices available to school members regarding goals, courses, levels of challenge, and social opportunities, for example.

MEAN	VARIANCE	ITEM/ VARIABLE*	ITEM/ DOMAIN**		
2.62	.65	.37	.23	12.	The same students always end up together in the same classes.
2.73	.62	.69	.56	25.	This school has something to offer to students with many different interests.
3.03	.48	.59	.49	38.	Students can choose to belong to many clubs and activities in this school.
3.05	.62	.50	.38	51.	Students here have very few chances to make new friends.

D. INFLUENCE DISTRIBUTION: Perceptions of the extent to which school members contribute to decisions regarding rules, procedures, and options, for example.

MEAN	VARIANCE	ITEM/ VARIABLE*	ITEM/ DOMAIN**		
2.07	.72	.62	.48	13.	Students hlep make the rules in this school.
1.94	.78	.48	.29	26.	Students need permission to do almost anything in this school.
2.64	.73	.60	.52	39.	Students have little say in planning school activities.
2.62	.74	.63	.56	52.	Student government has no power in this school.

Raw Score Means and Standard Deviations To be Used As Norms

	MEAN	STANDARD DEVIATION
SCHOOL CLIMATE VARIABLES		
Community	2.48	.55
Accessibility & Receptivity	2.53	.52
Involvement	2.15	.51
Equal Treatment	2.67	.50
Groupings	2.47	.52
Learning Orienation	2.64	.53
Expressiveness	2.52	.52
Goal Direction	2.52	.49
Challenge	2.66	.48
Dealing With Problems	2.52	.50
Order	2.66	.53
Options	2.74	.50
Influence Distribution	2.15	.54
HOME CLIMATE VARIABLES		
Cohesiveness	3.01	.60
Communications	2.86	.66
Involvement	2.93	.58
Ethnicity	2.59	.54
Equity	2.63	.64
School Learning	3.00	.54
Out-of-School Learning	2.90	.53
Aspirations and Identity	3.13	.53
Maturity	2.86	.43
Dealing With Problems	2.82	.53
Structure	2.34	.53
Influence	2.65	.52
External Relations	2.48	.49