This paper summarizes a study that involved ethnographic research and a survey on how home climate, school climate, and interaction between the two might affect learning and behavior of students of different racial/ethnic groups, sex, and socioeconomic background. Major findings include: differences in student absences, academic achievement, and social ratings by race/ethnic group, socioeconomic class, sex, and school; similarities in home climate perceptions within ethnic groups; differences in school climate perceptions among students attending different schools; independent school and home climate effects (disregarding race/ethnic group, class, or sex) on school outcomes; and variously favorable or unfavorable effects of discrepancies between home and school climate perceptions on school outcomes, depending on the groups and factors being considered. The importance of improving student outcomes by general school climate improvement is emphasized. (MJL)
EXECUTIVE SUMMARY

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

Prepared for the
National Institute of Education
Contract No. 400-79-0076

Prepared by:
TDR Associates, Inc.
December, 1981

This study was supported by the National Institute of Education, contract #400-79-0076. The opinion expressed herein do not necessarily reflect the position or policy of the NIE and no official endorsement by that agency should be inferred.

385 Elliot Street, Newton, Massachusetts 02164 / (617) 969-0651
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 Tghoubian 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 socioeconomic 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, socioeconomic 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.
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 groups.

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 pre-
dominantly 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 background. 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.), the 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 and 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.

STUDY DESIGN AND METHODOLOGY

In the first phase of the study we assigned five male/female field-worker 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).

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 are less dramatic than those 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 limitations 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 their "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 groups¹ 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 within 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 Community than home Community 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), when the school is rated higher than the home. For the remaining 17 (of 64, or 27%), negative school outcomes emerge (e.g., higher absence, 

¹Armenian, Black, American, Portuguese, French, British, Irish, Greek, Irish-Italian.
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 socioeconomic 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, socioeconomic class, and 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 in 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 example, students from homes with low Involvement and low Influence may need special assistance and counseling in responding 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 of direction of home-school discrepancy effects, we wonder if distinctive discrepancy 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 the present 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 the 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 questioning of sub-group differences in schools; they are often denied, and seldom discussed.

The simplest way to measure school climate, and to investigate possible sub-group inequities, would be to administer a 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 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 satisfaction, the next issue to be addressed is possible 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 can proceed through predictable stages such as venting frustrations, circular blaming, denial, and rationalization—to mutual problem-solving. From here, the course of events will be highly site-specific, ranging from effective to ineffective diagnosis/action.