FORMAL AND INFORMAL APPROACHES TO SCHOOL CLIMATE IMPROVEMENT,
A DESCRIPTIVE FIELD STUDY

by

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Recently a variety of national reports have been completed which call for school reform. Additionally, there has been an abundance of research which attempts to identify the characteristics of effective schools. Throughout the literature on school reform and effectiveness, school climate is consistently identified as an important factor in effective schools. However, questions concerning how schools improve their climate and what the effects and obstacles of such efforts are remain unanswered.

School climate improvement efforts tend to fall into two major categories which can be referred to as either formal systematic approaches or informal non-systematic approaches. Formal approaches exist where the developer of the approach states specific steps and procedures which are followed by a school to improve its climate. Informal approaches are also being used by schools where the principal and staff identify and implement various actions which are undertaken to improve the school's climate for learning.

This study identified and described both a formal and an informal approach to school climate and determined the effects and obstacles
encountered with each approach. Two secondary schools using each type of approach were studied and compared. The procedures and activities used by each of the four schools under study were described. The outcomes and obstacles encountered in each school's climate improvement process were identified.

The findings of the study were that all four schools in the study had positive outcomes regardless of the approach used. Common obstacles occurred in all four schools. They included lack of staff time to address school concerns, some staff did not support the school's efforts and students and parents were slow to respond positively to the staff's efforts.
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CHAPTER 1
BACKGROUND OF THE STUDY

During the past several years educational researchers have devoted an ever increasing amount of attention to the issue of effective schools. At least two occurrences have contributed to this increased interest. In 1966 James S. Coleman conducted a study, the conclusions of which implied that "there is little ... schools can do to compensate for the effects of non-school factors on student achievement," i.e., home and socioeconomic status (Robinson, 1983:iii). This, together with the many national reports on the status of American education, has stimulated substantial research efforts which have "focused on the identification and analysis of instructionally effective schools" (Robinson, 1983:iii).

According to an Educational Research Service report "despite the strong emphasis we in this Nation have placed on educating our children, many students are passing through our educational system without adequately mastering important skills or developing constructive attitudes" (Robinson, 1983:iii). This conclusion is based on several recent national studies. The National Commission on Excellence in Education recently completed 18 months of study and has made their findings public in the document entitled A Nation at Risk (1983). This report warns that "we have in effect been committing an act of unthinkable unilateral educational disarmament" (1983:5). To support this statement the report cites various statistics which describe the declining academic emphasis in American schools.
This recent wave of concern is not the first that has been directed toward the American educational system. Many previous studies and reports have similarly called for a revamping of the American educational system. Among them are "Quackery in the Public Schools", Lynn, 1950; "Educational Wastelands", Bestor, 1953; "The Diminished Mind", Smith, 1954; "The Underachieving School", Holt, 1969; "Crises in the Classroom", Silberman, 1970; "How to Change your School", Trump, 1978; "The Graves of Academe", Mitchell, 1981; "How Children Fail", Holt, 1982; and "Alternative Schools", Kozol, 1982. Admiral Hyman Rickover (1963) also called for a revamping of American schools twenty years ago. The list of reforms cited by Rickover was similar to the list of reforms cited in "A Nation at Risk": higher qualifications for teachers, raising standards, and increasing instructional time.

If the same concerns and recommendations have been made for twenty to thirty years, one might ask what is new with these recent studies and reports. This more recent research makes three major contributions to improve schools.

1. Even though different studies identify slightly different characteristics of effective schools, there are several major common determinants of effective schools. These include strong instructional leadership, an orderly school climate, high expectations, emphasis on basic skills, and frequent assessment of student progress (Robinson, 1983:63).

2. The literature has many contributors who state that the research cannot be reduced to simple recipes identifying how to improve
schools. Stewart Purkey and Marshall Smith, as well as others (Averch, 1981; Brookover, 1979; Cohen, 1983; Cuban, 1983; Perrone, 1983) conclude that there is no single set of variables that will produce an effective school (Purkey and Smith, 1983:436).

3. In addition, the current literature emphasizes that schools are complex environments comprised of interacting factors that combine to create an effective or ineffective climate for learning (Robinson, 1983:68). The climate of a school is consistently mentioned in the effective school literature as an important factor in developing good schools.

In their review of the effective school literature, Purkey and Smith state that

••• public discourse on effective schools is dominated by literature reviews and scholarly editorials. These have captured educators' and the public's fancy by reducing a disparate literature to simple recipes for school improvement ••• we find it (the research on effective schools) weak in many respects, most notably in its tendency to present narrow, often simplistic recipes for school improvement derived from nonexperimental data. (Purkey and Smith, 1983:427)

Stuart Purkey and Marshall Smith further believe that the variables of effective schools can be described as either organizational/structural variables or process variables. They see schools as "nested layers" in which the outer layer (school) sets the context of the adjacent layer (classroom). Organization and structural variables together with process variables form what Purkey and Smith call the "climate and culture of the school" (1983, 443).

The literature not only calls attention to the complexity of schools, but consistently the studies of effective schools cite the
importance of the school climate, i.e., culture, ideology, atmosphere, environment or social conditions (Brookover, 1979; Roberts and Smith, 1982; Cohen, 1983; Purkey & Smith, 1983; Robinson, 1983; Sale & Jones, 1983). As Goodlad states, the climate of thought has changed since he began the research for his book entitled "A Place Called School" (1984). "The publication of Rutter's excellent study of twelve secondary schools in London, England, has demonstrated the potential usefulness of studying the ethos (climate) of schools" (Goodlad, 1984:17).

In their review of the literature on effective schools, Purkey and Smith argue that school factors can promote learning in the classroom. They believe that by studying academically effective schools, characteristics can be identified that together create a school culture conducive to student achievement. However, schools must abandon their reliance on "facile solutions and the assumption that fundamental change can be brought about from the top down" (1983:448). A more promising notion offered by Purkey and Smith is to view the school as "functioning social systems with distinctive cultures" (1983:448).

After observing and studying secondary schools in the United States, Goolad stated that

... the ecological perspective that so appealed to us at the beginning of the study is even more appealing after our long journey through the contextual data, largely because it appears to help explain why some seemingly endemic problems of schooling have remained impervious to change. (1983:466)

According to Epstein, "School effects research and school evaluations have been preoccupied with the measurement of academic achievement" (1982:1). Joyce Epstein states that the emphasis on achievement has been seriously challenged by sociologists for over two
decades and that other outcomes are also important for school success (1982). Stephen Hamilton further believes that the internal social processes within a school, such as how people feel and interact, are also important in assessing school effectiveness (1983).

School climate is consistently identified as one of the major factors considered in the identification of an effective school; however, more information is needed on how schools improve climate, i.e., there is "little discussion on how schools might be altered to become more effective" (Purkey and Smith, 1983:430). Following their review of the literature of effective schools, Purkey and Smith list a variety of research questions for further study. Among these is a call for a fuller investigation of the process by which schools increase, decrease or maintain effectiveness. They also query, "How are improvements made?" and suggest that "information is lacking on the procedures followed, the obstacles encountered, and the results (both the intended and unintended) obtained" (1983:448).

Thus, there seems to be agreement in the literature that there is a need for school reform, but there are questions concerning which reforms should be made and how the reforms should be implemented.

Statement of the Problem

The research of effective schools consistently identifies climate as an important aspect in determining school effectiveness. Consequently, schools are undertaking programs to improve their climate. As school climate improvement projects are being undertaken, there are several unanswered questions. Specifically, how do schools improve
climate and what are the obstacles and effects of such efforts? In reference to specific recommended ways to obtain effective schools, Purkey and Smith state, "...researchers and scholars reviewing the literature on effective schools either do not know what to recommend or they think that specific recommendations on how to alter schools to become more effective are not necessary" (1983:430). This observation is equally relevant to the issue of how to improve school climate.

For school climate improvement efforts to have a positive and stabilizing effect on a school, a great deal more must be known about the process and the implications of different approaches which are being utilized to improve school climate. This study proposes to examine those issues.

Purpose of the Study

The issue of school climate improvement is very complex. Associated with school climate are such complicated issues as the change process, dynamics of human behavior, and the complexity of human interaction in a social environment. Clearly, the school's environment and its influence on student learning can be extremely important. In spite of the complicating variables, studies of school climate improvement must be undertaken if schools are to benefit from the efforts of others who have implemented school climate improvement efforts.

For the purpose of this study two distinct approaches to improve school climate were identified. These two approaches were based on a
review of the literature on school climate and the writer's efforts to
identify school climate improvement efforts which are being undertaken.

The approaches examined in this study are classified as either
"formal" or "informal" approaches to improve school climate. The formal
approach is defined as a prescribed set of steps or actions which are
developed by a person outside the school which are followed in the
recommended sequence. An informal approach is defined as an
unsystematic approach where the principal, or other significant person
in the school, establishes a focus on climate and develops and
implements activities which address the perceived needs of the school.

The purpose of this study was to describe two approaches which were
undertaken to improve school climate in specific secondary schools and
to identify the obstacles and effects of each approach in the schools
studied.

Based on Kelley's (1980) recommended steps for planning a school
climate improvement program, general questions for analysis of climate
improvement efforts were generated. They include:

1. Why did the schools in the study undertake a school climate
improvement effort?

2. How were climate needs determined?

3. What were the goals of the school's climate improvement effort?

4. What process, steps or actions were taken to improve the
school's climate?

5. What were the effects of the climate improvement effort?

6. What obstacles were encountered in the climate improvement
effort?
7. Were the school's efforts successful, and how was success determined?

8. What recommendations can be made from this study which will be helpful to the schools under study, as well as to other schools considering school climate improvement efforts?

This study should help schools to:

1. Identify and select an approach to improve school climate.
2. Identify steps to take in implementing one or more of the climate improvement approaches.
3. Be aware of possible obstacles to each climate improvement approach.
4. Be able to project possible outcomes of climate improvement approaches.

Significance of the Study

During the last several years many educational researchers have concluded that schools can make a difference in students' learning and that schools, in fact, do have an influence on learning that extends beyond the socio-economic background of the student (Cohen, 1983). As a result of the emphasis on effective schools, there is increasing pressure for school reform. For example, many schools or school districts are increasing standards, expanding the amount of time spent on the basic subjects, and increasing homework assignments. However, questions need to be answered concerning how these changes will be received and whether they alone will increase a school's effectiveness.
It has been shown that change in schools is slow and difficult. It has further been shown that improvements in schools are most effectively implemented at the local school level (Goodlad, 1984; Price and Gowronski, 1981). Schools are complex social organizations which are composed of groups and sub-groups, all of which will have varying degrees of influence on a school. Prior to implementing changes in a school, it would seem appropriate for the initiator of the change to consider the school's climate for change. Specifically determination should be made of a school's readiness for change, as well as how a change might be received by the individuals who work in and those who are served by the school. Joyce Epstein (1982) and others (Brookover, 1981; Kelly, 1982) have identified that both product and process assessment are important in the improvement of schools. Product assessment refers to data such as test scores, attendance, and drop out rates; process assessment refers to how things are done and how people feel and what they believe. The climate or culture of a school reflects these process variables. If schools are to move forward, a great deal must be known about how to influence such process variables (Purkey and Smith, 1983).

A description of two approaches to school climate improvement, and the effects and obstacles of those climate improvement effort should be beneficial to all school officials who plan to implement school climate improvement programs. Answers to the proposed research questions could also be helpful to the Virginia Department of Juvenile Justice and Criminal Prevention which has provided a grant to the
Virginia State Department of Education to implement school climate improvement projects in seven selected secondary schools in Virginia.

Definition of Terms

School climate:
"The climate of a social environment is formed by the norms, beliefs, and attitudes reflected in the conditions, events, and practices of a particular environment" (Kelly, 1980:2).

Basic Assumptions

The development of descriptions of school climate improvement programs were based on the following assumptions.

1. School learning climate is an important variable in providing an effective school.

2. School climate improvement programs are being undertaken in an attempt to increase a school's effectiveness.

3. The effectiveness of school climate improvement programs will vary by school.

4. Through a descriptive study of school climate improvement programs, general conclusions about the effects and obstacles of each school climate improvement approach under study can be drawn.

Limitations of the Study

The study was limited to the identification of at least two discrete processes which were being implemented to improve school climate. The study identifies two schools in which each process had been used and examined the effects and obstacles encountered in each
selected climate improvement program. Specific conclusions and recommendations of the study apply to the schools under study and may not be generalizable to other schools. General conclusions drawn from the study of the specific school climate improvement process should only alert educators to possible effects and obstacles which may occur in the use of a similar approach to school climate improvement.

Organization of the Study

Chapter 1 provides a background description of the proposed study of school climate projects, their effects and obstacles. Chapter 2 reviews the literature on school climate. Chapter 3 describes the methodology used in conducting the study. Chapter 4 presents the findings of the study, and Chapter 5 contains the summary, findings, conclusions, and recommendations of the study.
CHAPTER 2
REVIEW OF LITERATURE

The review of research and relevant literature concerning the topic of school climate improvement is limited to three major categories: (1) relating school climate to the improvement of schools; (2) defining, identifying and describing school climate improvement processes and projects; (3) determining procedures for school climate improvement.

The first section of the literature review establishes a relationship between current studies, which cite the major problems in secondary schools; and, research on effective schools, which shows that the school climate is an important factor in improving school effectiveness. The second section of the literature review defines school climate and cites support for addressing the issue of school climate. The third section of the literature review identifies processes or procedures which can be considered in determining how to improve school climate.

School Climate and Effective Schools

During the past eighteen months several national reports and studies have been published concerning the status of American schools. Collectively these studies warn that the educational process in America must be upgraded.

Preceding the initiation and during the time that these studies were being conducted, other research was underway which has attempted to identify the characteristics of effective schools. Together these
activities have created momentum (within state departments, school districts and local schools) to improve education. At the same time these studies also have stimulated debate on both the urgency to improve schools and the processes to upgrade educational programs and services.

A Nation at Risk is the report prepared by The National Commission on Excellence in Education and is one of the most recent major national studies of schooling that has stimulated debate on school improvement. The report cites several facts to substantiate its conclusion that "our Nation is at risk". Among the indicators cited in the report are the following:

1. International comparisons of student achievement completed a decade ago, reveal that on 19 academic tests American students were never first or second, and in comparison to other industrialized nations, were last seven times.
2. Some 23 million American adults are functionally illiterate.
3. Functional illiteracy among minority youth may run as high as 40%.
4. Average achievement of high school students on most standardized tests is now lower than 26 years ago when Sputnik was launched.
5. Over half the population of gifted students do not match their tested ability with comparable achievement in school.
6. The College Board's Scholastic Aptitude Tests (SAT) demonstrate a virtually unbroken decline from 1963 to 1980.
7. Both the number and proportion of students demonstrating superior achievement on the SATs (i.e., those with scores of 650 or higher) have also dramatically declined.
8. Many 17-year-olds do not possess the 'higher order' intellectual skills we should expect of them. Nearly 40% cannot draw inferences from written material.
9. Average test achievement of students graduating from college is also lower.
10. Business and military leaders complain that they are required to spend millions of dollars on costly remedial education and training programs. (Gardner, 1983:8-9)
The report further states that "these deficiencies come at a time when the demand for highly skilled workers in new fields is accelerating rapidly" (Gardner, 1983:10). The report states:

Each generation of Americans has outstripped its parents in education literacy, and in educational attainment. For the first time in the history of our country, the educational skills of one generation will not surpass, will not equal, will not even approach, those of their parents. (Gardner, 1983:11)

The report continues with other similar points to demonstrate that our "Nation is at risk" (Gardner, 1983:5-11).

The Carnegie Foundation's report, entitled High School, cites slightly less dramatic points but draws a similar conclusion "that the time for renewing education has arrived" (Boyer, 1983:1).

Recognizing both the critical importance of the "home" influence and the value of a good beginning in school, the trustees of the Carnegie Foundation "agreed that the upper years of schooling are strategically important, too" (Boyer 1983:x1). The purpose of the Carnegie report was to look "... at teachers, at students, at what is being taught, searching for ways to strengthen the academic quality of the public schools" (Boyer 1983:xii). A team of 25 educators was selected to visit 15 high schools. Each school was visited for 20 school days.

Among the many observations of the Carnegie report were the following:

3. Teacher expectations of students varied widely" (1983:147). In looking at international comparisons, Boyer cites various studies that show the poor comparison of American students to students in other industrialized countries. (Boyer, 1983:36)

However, Boyer also cites international studies where student population is controlled, i.e., top 5% and 10% of students. In such studies the American students compare more favorably. The report concludes that the elite among high school seniors did not differ considerably in their performance from their age mates from France, England or Germany and that international comparisons are somewhat risky. (Boyer, 1983:36)

According to the Carnegie report The Iowa Tests of Educational Achievement show a steady decline, between 1962 and 1977, for grades 9 to 12. This same test shows a slight increase in composite scores since 1978 (Boyer 1983:32). Similar declines in SAT scores are also cited (Boyer, 1983:22-23). Ernest Boyer cautions the reader about drawing a final conclusions based on such measures, citing the limited purpose of such tests. In citing what Boyer terms a "more reliable gauge", results of The National Assessment of Educational Progress are reported. This test was given to students in 10 subjects in 1971, 1975 and 1980. "It turns out that seventeen year olds were doing about as well in their total reading ability as they were 10 years earlier" (Boyer, 1983:26-27). However there was a slight decline in "inferential comprehension". The author of the report, Boyer concludes that "apparently many students can decode words but have difficulty understanding whole passages" (1983:26-27).

Ernest Boyer devotes an entire section of the Carnegie Report to describing "a troubled institution". In addition to drawing conclusions
about the troubled state of American schools, Boyer cites the frustrations of teaching. "In sum, the teachers' world is often frustrating, frequently demeaning, and sometimes dangerous." Specific referral is made to the short supply of materials, the isolation that teachers feel, the threat of physical violence, lack of rewards and disrespect, etc. In 1981 "more than one-third (36%) of the high school teachers said they would not go into teaching if they had it to do over again" (1983:158-159).

One of the most enlightening points of the Carnegie Report is that student course selections are diverse and lack an academic focus. Boyer cites several examples of student's transcripts which reflect the lack of a core academic curriculum. The conclusion from a review of students' records is to ask, "Where is the pattern?" (Boyer, 1983:83). There seems to be little academic emphasis and no visible core to the transcripts reviewed by Boyer.

Another study receiving considerable attention is Mortimer Adler's Paideia Proposal, which calls for a core curriculum for all students based on three goals: (1) Acquision of Organized Knowledge, (2) Development of Intellectual Skills and (3) Enlarged Understanding of Ideas and Values (Adler, 1982:23).

Other studies have also been conducted by the Twentieth Century Fund, the College Entrance Examination Board, National Science Foundation and Education Commission of the States.

According to Odden, these studies make similar recommendations and include the following (1983:311-312):
1. More intense academic work, increased graduation requirements, focus on higher order thinking skills and more emphasis on science, math and technology.
2. Better teachers and improved compensation plans.
3. Better management of schools, including strengthening instructional skills of principals.
4. Greater accountability.
5. More time on task.
6. More and better use of technology.

The above recommendations are "the hardware of education" and Odden calls attention to the absence of "any mention of the software of educational excellence, i.e. the strategies that will move education from where it is to where the reformers would like it to be" (Odden, 1983:312).

According to Odden, the research on effective schools has made it clear that the individual school is the proper unit for educational renewal. Centralized standards and requirements may be necessary, but so is decentralized implementation. This simultaneously tight and loose approach is crucial to the success of any reform strategy. Each effective school is bound together by a belief structure, a value system, and a consensual—not a hierarchy—governance structure. (Odden, 1983:312)

John Goodlad calls for a similar approach in his work A Place Called School by suggesting that developing the capacity of each school to change and improve may not only be the best, but may also be the only, way to reform education (Goodlad, 1983:466-470; Goodlad, 1984:19, 34-35).

The Effective School

For the last several years educators and researchers have been attempting to respond to the concerns expressed by critics on the status of American education. This movement was and still is attempting to
describe the characteristics of effective schools. The literature is filled with articles and reports which include an ever-expanding list of descriptors of good schools.

There are some common categories under which the characteristics of effective schools can be organized. These include (1) strong instructional leadership, (2) a climate or atmosphere that supports and is conducive to learning, (3) an environment where the expectations are high, (4) school-wide emphasis on basic skills and instructional practices, and (5) an ongoing evaluation and monitoring system (Rowan, 1983:24).

Among the most widely and frequently cited characteristics of effective schools are those contained in the list developed by Ron Edmonds. These are (1) instructional leadership, (2) an instructional focus that is understood by the teaching staff, (3) a climate that is safe and conducive to learning, (4) high expectations, and (5) use of standard measures of achievement (Edmonds, 1981:15-18).

In their analysis of the effective school literature, Purkey and Smith list slightly over 100 sources which they reviewed. In fact the studies on effective schools are becoming so extensive that the studies themselves are being classified according to such areas as how the study was conducted, i.e. comparison approach, case study approach, and evaluation approach (Purkey and Smith, 1983).

Both the major categories and the cautions of the effective schools studies have been cited. In reviewing the literature on effective schools several conclusions can be drawn.
1. As the studies of effective schools expands, the lists of descriptors of effective schools expands.

2. The characteristics of effective schools will vary depending on the approach used to study school effectiveness.

3. The more specific the descriptors, the longer and more varied the list becomes.

4. There is no clear description on how to develop an effective school.

In their review of the research of effective schools, Rowan, Bossert and Dwyer state that "there are tractable aspects of school organization and culture that affect instructional outcomes" (1983:25), that research needs to continue to "investigate how to make schools more effective" (1983:25) and that "only about 50% of the variance in residuals is due to school factors while the remaining 50% is due to random error" (1983:27). They warn practitioners who are preparing to embark on school improvement programs to look closely at both classroom and management variables and "to give careful thought to how school-level structures can be designed to support effective instruction" (1983:30). In stating their implications for future research, they state "... There is also a need to view organizational effectiveness as a multidimensional phenomenon and to analyze how structures that enhance effectiveness in one domain affect organizational structures and outcomes in other domains" (1983:30).

In the review of research on school improvement, Mackenzie formulates several conclusions regarding the relationship between the characteristics of effective schools and school climate (1983:5-17).
1. In a summary of the characteristics of effective schools, each item tends to embrace a great many specifics about the school environment. (Mackenzie, 1983:8)

2. When effective schools are examined . . ., what emerges is not a checklist of specific ingredients but a 'syndrome' or 'culture' of mutually reinforcing expectations and activities (Purkey & Smith 1982). (1983:8)

3. The amount of agreement on the principal factors in school effectiveness is so striking that the question of what is important in school effectiveness may now be less significant than the question of what can be changed for the least costs and the most results. (Mackenzie, 1983:14)

4. We know what we need to do to teach effectively. There is much less clarity about how to do it. (Mackenzie, 1983:14)

After completing the study, entitled A Place Called School, Goodlad stated that

The ecological perspective that so appealed to us at the outset of the study is even more appealing after our long journey through the contextual data, largely because it appears to help explain why some seemingly endemic problems of schooling have remained impervious to change. (Goodlad, 1983:466)

In addition, Goodlad believes that

the interactions of individuals and other elements in and around schools are extremely complicated and strategies . . . that ignore these interactions and the rationales governing them are unlikely to have more than minimal impact on the culture of the school. (Goodlad, 1983:466)

To further emphasize the importance of the school's climate/culture, Goodlad says that the curriculum in schools can appear similar and yet the academic achievement of the school can vary.

"Indeed the range of these presumed-to-be-central aspects of schooling was markedly less overall than in such characteristics as classroom climate, school climate, staff relationships, and school/home relations" (1983:469). John Goodlad further states that "Our findings reveal that schools differ in their ambiance . . . but in the how and what of
teaching, a school is a school is a school . . . ." The technology of teaching, lecturing, monitoring, quizzing, and so on "did not change, but Goodlad found "more variation in the classroom climate or atmosphere surrounding this technology" (1983:469).

Most of the current national studies of schooling conclude that American schools are in need of reform, and while specific characteristics of good schools vary, there are some broad characteristics that educators need to consider in making reform efforts. While it is less clear what a school leader should do specifically to make a school effective, it is widely stated in the literature that the school climate is an important but complicated aspect that must be considered in any attempt to reform schools. Like other recommendations for developing effective schools, the issue of school climate improvement seems to lack specific recommendations of how to improve climate or discussion of the effects and obstacles of such efforts.

School Climate - What & Why

To emphasize the importance of school climate, Epstein begins the book entitled *The Quality of School Life* by relating a story of a young man who says to his mother,

Ma, I hate school. No one likes me there - the teachers don't like me, the kids don't like me. And I don't like them. I can't do the work. I'm just not going. The perplexed mother said in response Son, stop this nonsense. You must go to school - after all you're the principal! (1981:xii)

Joyce Epstein states that when the principal does not want to go to school, many people notice; however, similar messages received from
students are generally ignored. In her book Epstein further states that "student reactions are messages about the school climate and can provide useful information to studies of school effects, school assessment programs, and plans for school reform" (1981:x1).

Ernest Boyer calls attention to the stale climate of schools when he cites the following reaction to school by a young female student:

The classes are okay, I guess. Most of the time I find them pretty boring. But then I suppose that's the way school classes are suppose to be. What I like most about the place is the chance to be with my friends. It's nice to be a part of a group. I don't mean one of the clubs or groups the school runs. They're for the grinds. But an informal group of your own friends.

Usually we don't do too much. I mean, we just hang around together when we can in class and at lunch, and sometimes meet after school, though most of us work . . . . This year I've been working at McDonald's so I can buy some new cloths and a stereo set. The work isn't all that hard or exciting, but it makes me feel on my own and that I'm an adult person, that I'm doing something useful. In school, you never feel that way. Not ever" (1983:202).

In his book, Inside High School, Cusick referred to the student sub-culture.

In sum, the students' active and interested involvement centered not around teacher initiated, academic issues or even around the issues that were nationally centered. Instead they concerned themselves with the procedures of fulfilling institutional demands, the cafeteria food, and their private group interactions. In general what they did in school, they did with their friends. For instance, if in class a teacher asked them to divide into groups and discuss some matter, they scurried around and found their good friends with whom they talked not about anything academic, but about their out of school activities . . . . " (1973:64)

Following the above observation, Cusick asked a female student, "Do kids seem to spend a lot of time together?". In reply the student said, "Yes, that's true. That's what we do, we're not very interested in
school . . . There isn't much (academically) to be interested in" (1973:64).

Ernest Boyer, in *High School*, shares a teacher's perspective who confessed his bias: "There's something almost primitive about adolescents. The more freedom you give them, the wilder their behavior gets." In another interview a principal, stated that "... there's a fear of adolescents in this country. Few adults understand them, and most find them hard to like. What we do feel is that they must be controlled." Ernest Boyer continues and calls the way that students behave and interact "the hidden curriculum" (1983:204-205).

It is interesting to note that while Boyer and Cusick both describe identical student perceptions, the conclusions were made ten years apart and based on observations in different settings.

Joyce Epstein cites studies (Borg:1979, Johnson & Johnson:1979, Hoge and Luce:1979) which show that the relationship between patterns of behavior and student motivation and achievement can be moderated by the classroom context in which they occur. Epstein concludes that "Such findings underscore the need to measure classroom learning environments and to focus on their determinants and impacts" (1981:59). Joyce Epstein states that

Although previous research on classrooms has tended to focus narrowly on direct instructional activities and on the teacher as leader, investigators are beginning to recognize the need for more sophisticated conceptions of the classroom as a social context from which specific instructional activities derive their meaning." (Epstein, 1981:59)

What is being described by Epstein, Cusick and Boyer is the school climate or culture. For the purpose of this study the term school
Climate has been defined as "formed by the norms, beliefs, and attitudes reflected in the conditions, events, and practices of a particular environment (a school)" (Kelly, 1980:2). The culture of a school has been described by Deal and Kennedy as "an informal understanding of the way we do things around here . . . the shared values and beliefs" (1983:14). They further state that many principals "spend time building cohesive school cultures" without really labeling their actions as such. They cite a variety of actions that can be taken to improve the school culture. They suggest that the principal:

1. Get to know the school culture; ask students, staff and citizens what the school stands for; observe events and interactions, both informal and structured, to see who plays which roles, who are the heroes?
2. Determine how the culture might encourage or undermine educational performance; how is time spent; what is emphasized in the school; what issues create conflict and how is it handled; are stories of the school positive or negative; are meetings lethargic or do they provide opportunities for important values to be discussed?
3. Plan occasions where people can come to grips with values that need to be reexamined or changed; arrange meetings to celebrate heroes; express appreciation; share positive stories about the school, etc. (Deal and Kennedy, 1983:15).

Strong school cultures can improve education by providing clear expectations to staff and students about what is expected and being sure that they know how their actions are related to school-wide efforts. "Strong cultures provide the internal cohesion that makes it easier for teachers to teach and students to learn" (Deal & Kennedy, 1983:15).

The social/cultural approach to the study of schools comes from the basic understanding that human beings take on different patterns of behavior and different life styles and accept different patterns of achievement when they find themselves in different settings (Eggleston,
1977:15). Using the climate or culture as a basis, Cusick believes that schools can unwittingly tip the balance away from learning. Philip Cusick observes the following as patterns to support this statement:

1. Classes tend to be dominated by teachers, leaving students in the role of spectators.
2. Student attempts to express personal concerns in class are usually ignored.
3. Correct and perceptive comments made by students are often missed by teachers.
4. The inattentiveness by staff to student needs results in a need to "maintain order" (Cusick, 1973:319).

After conducting several studies where classroom observations were made, Sarason identifies a similar set of staff-student relationships. Specifically:

1. The constitution was invariably determined by the teacher.
2. The teacher never solicited opinions of students about "a constitutional issue."
3. Constitutional issues addressed what students could and could not do, not what staff could or could not do. These observations resulted in the formation of assumptions that teachers all too frequently make. Such assumptions are: teachers know best, children want and expect adults to set the rules, children should be governed by what the teacher believes is right or wrong, the teacher's ethics are different from and better than the ethics of students, children should not be given too much responsibility, etc. What also amazed Sarason is that "Teachers thought about children in precisely the same way that teachers say that school administrators think about teachers" (Sarason, 1982:216-217).

Philip Cusick states that the "organization of high schools does not encourage, depend on, or even need, one-to-one personal interaction. It does not reward teachers for trying to reach students individually. In fact, the structure makes it difficult to even do so" (Cusick, 1973:76). Further in classrooms "when students fail to get involved, teachers make more of an effort to direct, take command, articulate and structure the class" (Cusick, 1973:215).
James Garbarino & Asp (1981:110) refer to Moos in describing an optimal social environment as "a combination of warm supportative relationships, an emphasis on specific directions of personal growth, and a reasonably clear, orderly, and well structured milieu . . ." which has high expectations for performance (Moos 1976:313-326).

In reviewing the observations of Boyer, Cusick, Epstein and Sarason, it is tragically apparent that secondary schools are structured and operate in such a way that it is difficult to provide a warm and supportive social environment as defined by Moos. To compound the problem of improving school climate, most studies of educational improvement do not even consider the importance of the climate. Gordon Calwelti states that the many national reports "give little attention to school climate, a concept . . . that is crucial in motivating students to learn" (Calwelti, 1984:3). Stephen Hamilton says that "the formal curriculum of academic knowledge and skills has a counterpart 'hidden curriculum' of values and behavior, which is taught implicitly by the social systems of schools and classrooms" (1983:313). He further warns that research and studies of schools that focus only on the academic results without being attentive to the social factors are limited in value and that schools must hear this message if they are going to improve (Hamilton, 1983:313). Joyce Epstein cites a similar concern in stating that

... school effects research and school evaluation have been preoccupied with the measurement of academic success ... which is only one goal. Research has also ignored student reports about what schools are doing. Student reports about school environments can describe whether students perceive what adults think is happening in schools . . . . Most
studies of school effects have neglected to use types of measures devised by social scientists. (Epstein, 1981:1) In reviewing the importance of school climate Hamilton refers to a variety of sociologically oriented studies of the interactions in schools to draw several propositions. Most of the studies cited by Hamilton draw conclusions similar to those of Sarason, Epstein, Boyer, and Cusick. Specifically there is a self-fulfilling prophecy at play in schools where successful students are called upon more often, are treated differently in class, and have higher expectations demanded of them than less successful students or students from a lower socio-economic status (Leakock, 1969; Rist, 1970; Seaver, 1973). Further, "participation in classroom lessons involves the integration of academic knowledge and social and interaction skills" (Mehan, 1979; Florio, 1978; Green & Smith, 1983) (Hamilton, 1983:323).

Based on the research reviewed by Hamilton, several propositions are formulated for further study. Among the propositions are the following.

1. Children learn more than academics in school.
2. The prominence of peer interactions in schools is a response to the structure and climate of schools.
3. Marked differences in student behavior and school climate among students of similar backgrounds can be attributed to the beliefs and practices of teachers and administrators and how they interact to form a social system.
4. Competence as a student requires the ability to understand and participate in the complex system of classroom interaction, as well as knowledge of subject matter.
5. Distinctive structures encourage different types of interactions among students and teachers that are consistent with different educational goals.
6. Classroom activity is quite complex and depends on subtle forms of communication and a host of teacher skills and sensitivities beyond academic knowledge and instructional techniques.
7. The socialization function of schools operates differently for students of different races and classes. (Hamilton, 1983:313-332)

Stephen Hamilton concludes that the academic and socialization aspects of school can not be understood independently of each other; they are interdependent. "If schools are to be made more effective, we must understand both their academic and socialization functions and the interactions between the two" (1983:332).

Kelly provides some cautions to those interested in improving school climate (1980:36-39):

1. Efforts at improving levels of satisfaction (morale) are not necessarily accompanied by increases in productivity or achievement.
2. Increases in either satisfaction or productivity for one audience or group can result in decreases in satisfaction or productivity for another group.
3. Environments have changing characteristics and changes in the population of major groups which "inhabit" the environment. Thus a practice or condition which is appropriate at one time may be inappropriate or even counterproductive at another time.
4. Because environments differ from one another, and because the conditions in a single environment change over time, practices selected for use should not be assumed to be optimal until implemented and tested in the specific setting.
5. Interventions designed to change conditions within an environment and thus to change levels of either or both satisfaction and productivity will have intended and unintended effects. Therefore all interventions should be planned and evaluated by examination of the results that occur, as well as by examination of the results that are intended.
6. Options within a setting, in contrast to uniform and monolithic practices, are more likely to produce maximum levels of both productivity and satisfaction when expectations are clear. Too many options, however, lead to confusion and to an increased probability of lowered levels of either or both satisfaction and productivity. (Kelly, 1980:36-39)
Studies of School Climate

Research supporting the importance of school climate has been presented in earlier sections of this chapter. However, most studies completed and documented to date, simply reinforce the significance of school climate. There appears to be very little research describing school climate improvement interventions, their effects and obstacles. The following studies are cited to demonstrate a research base for the continued study of school climate:

1. Michael Rutter studied 12 urban schools in England and concluded that the "ethos" or climate had a significant effect on student behavior, including troublesome behavior and achievement (1979).

2. Wilbur Brookover (1979) studied 91 randomly-selected elementary schools in Michigan. "School learning climate" explained differences in achievement as well as did racial composition of the school or socio-economic level of pupils.

3. A State of Washington "Safe Schools Task Force" spent two years studying causes of vandalism, theft, crimes against persons, etc. They concluded that "an invigorating school climate--one that provides high levels of student and staff satisfaction and commitment ... is the most important element in reducing school crime" (1980).

4. Laurence Lezotte concludes, in School Learning Climate and Student Achievement that the school climate has a significant impact on achievement (1982).

Research conducted by Wright and Jesness in nine California middle schools using the Quality of School Life Scale (QSL), concluded that
"contributions of schools to QSL scores is independent of the demographic, family, personality, and ability characteristics of students. Student attitudes are an important component of the social climate of the school" (Epstein, 1983:21-43).

In a study by Mitchell, three questionnaires were administered to 2933 students in eleven high schools in an urban area of New York State. The results indicated that

••• press for achievement seemed to be associated with a cluster of variables which together define a condition of strong school spirit or morale ••• and aspirations for college training was significantly related to press for achievement even with socioeconomic status and scholastic aptitude partialled out. (Mitchell, 1967, ERIC)

In a study of 20,345 students, 1029 teachers and 20 principals, conducted by McDill in 20 high schools, in the state of Maryland, relationships were shown to exist between the informal social systems of the schools and the effects of such variations on the academic attitudes and behavior of students. "The study concludes that the educational and social environment of the school does have a moderate effect on the academic behavior of students" (McDill, 1966 & 1969).

In a recent study the interactions among student personality, school climate and socially deviant behavior were examined by Wasson and Dionne (1982). A survey was administered to 483 students in three rural high schools in eastern Canada. Data were gathered on students' stimulus-seeking behavior, their self reported deviant behavior in school, and whether the school's climate facilitated self development and growth and whether it pressed for stability and bureaucratic control. Examination of the data using regression analysis and analysis
of variance showed that high stimulus-seekers engaged in more deviant behavior than did low stimulus-seekers, regardless of the type of school climate. However, they did so less often when they perceived the school climate to facilitate self development (1982).

Some interesting, but expected, results were obtained in a study of eight high schools in California by Stallings and Mohlman. Using observation, questionnaires and review of records, including absences from school, the following findings emerged:

1. In schools where policies and rules were clearer and more consistently enforced, teacher morale was higher and there were fewer classroom intrusions, less litter, less vandalism, a lower absence rate, less class misbehavior and more time spent on task.
2. Teacher morale was higher and classroom misbehavior was less evident in schools with more administrative support and fewer burdensome duties.
3. Buildings with more collaborative and respectful principals had higher teacher morale and students perceived teachers and students as more friendly.
4. Training programs had more impact in schools where the principal was perceived as supportive.
5. In school where the policies and rules were clear and consistent, more teachers changed their classroom behavior as recommended by the principal.
6. In schools where staff implemented the teachings of a training program, students spent more time on task. (Stallings, 1981, ERIC)

In an earlier study of leadership behavior and school climate conducted by Wiggins (1969) in 35 elementary schools with 715 teachers in California, there was little support for the original hypothesis that there exists a significant relationship between leader behavior characteristics of elementary schools and the organizational climates of their schools. While this finding is consistent with the many studies of leadership and school climate, it certainly raises a question
regarding the importance of strong leadership in effective schools and
the finding that leader behavior seemed to have little or mixed
relationship to the climate of schools. Upon reanalysis of the data by
Wiggins, it was proposed that one plausible explanation was the fact
that teacher perception of school climate was compared to principal
perception of leader behavior characteristics. These findings indicate
the presence of a compelling organizational climate stability even when
principals were replaced (Wiggins, 1969:ERIC).

In a study by Henderson (1982) examining the perceptions of
teachers about characteristics in their work that relate to satisfaction
of psychological needs, it was found that different work groups had
different levels of satisfaction. More positive feelings of
satisfaction were expressed by the following groups: females, employees
between the ages of 35 and 45, and tenured staff. The author concludes
that administrators must be aware of the following:

1. Different perspectives by different employee groups
   may be brought to the work environment.
2. To plan change requires an understanding of the
   nature and level of expectations of the staff.
3. Job satisfaction does not occur in a vacuum.
   (Henderson, 1982:ERIC)

Thomas Goodman (1965) attempted to describe differences and
similarities between schools serving adolescents in depressed
socioeconomic areas of large cities and those serving privileged areas
of the same cities. From this study, Goodman concluded that little
allowance was being made in the school programs studied to compensate
for the difference in the makeup, outlook and motivation of youth in
depressed versus privileged socioeconomic area schools (Goodman, 1965:ERIC).

From a review of the research on effective schools and the studies of school climate, it is clear that school climate is an important factor to consider in planning school improvement. A review of the literature identifies some cautions and some factors to consider when considering school climate issues. There is, however, little, if any, research which describes both school climate improvement efforts and effects and obstacles encountered in such efforts.

Complexity of Climate

Alvin Toffler (1975), describes post-industrialized countries as becoming increasingly more complex socially. He states that

... there are more sub-cultures, more intense groups, more definable political differences and regional differences instead of (the melting pot) melting away, are growing more complex. The technological nations are socially more diverse. As society grows more differentiated, the balance between work "production" and "liasion" shifts and more energy must go into the liasion component. More and more energy must go into the process of information exchange in order to maintain equilibrium. (Toffler, 1975:30)

Toffler calls for the use of more feedback systems and emphasizes the importance of employing people who can get along well with others. He states that

... we need to look at long range future alternatives as part of our transition to our super-industrialized society
... we cannot escape the future by turning our backs on it. Foresight is uniquely human and it is essential for survival. Without this ability to imagine alternative tomorrows and to select among them, there could be no culture. (Toffler, 1975:106)
Toffler concludes by calling on this ability to be used by all members of society, not by merely a few specialists (1975:106).

To accept Toffler's challenge calls not only for the continued analysis of such complex issues as school climate, but also to begin considering how new information can be used to change schools. Philip Cusick asks if schools can become friendlier places and "can . . . (a teacher) . . . actually use the group structure for instructional purposes?" (1973:120). Ernest Boyer adds, "if the quality of American education is to improve, top down planning will not do. Teachers and administrators in the public schools must be full partners in the process" (1983:266). Some would also add that students and parents must also be contributors to school improvement efforts.

James Garbarino and Asp call attention to the group pressures in schools that influence either positive or negative behavior in schools. They state that "this is social force at work randomly. The essence of rationality is to put those forces to work in a presocial manner through social engineering" (1981:100). The question for educators is: How? Perhaps through the analysis of school climate improvement projects, some answers can be developed.

James Garbarino and Asp state that

. . . Since ability is secondary to motivation, schools can be effective in shaping the level of success among students. The problem is to identify ethically acceptable and socially possible sources of strength. The key to secondary schooling is to harness the motivation of the present (the competition for peer recognition) and the motivation of the future (the transition to adulthood) and to bring them to bear on the academic performance of students. (Garbarino, 1981:91)
Obtaining information from "teachers about their perceptions of the work environment can be an important first step in determining the extent to which a school or school system is ready to implement an educational innovation" (1981:76) according to Epstein. Periodic environmental assessment provides feedback on the current status of the social organization. Comparing student and staff perceptions can identify areas where change can improve the school. However, before embarking on a program to change the school, administrators, teachers, students, or parents need to determine not only the areas that need to change, but also to assess the readiness for change. There is a need to continually assess the ongoing effects of the changes being implemented (Kelly, 1980:70).

To quote from Kelly:

An observer of American education during the past quarter century might find it strange that few concentrated efforts by practitioners and researchers have been undertaken to determine the relationship between satisfaction and productivity in schools. After all, there is general agreement that school environments should be productive and satisfying for those who are influenced by those environments. (Kelly, 1980:69)

A number of efforts have been aimed at improving the levels of satisfaction felt by educators, students, and parents or patrons. There has also been a multitude of efforts aimed at improving the levels of achievement attained by students or the levels of productivity shown by educators and by schools as organizations. Often these efforts have been undertaken with the assumption that improvement in one dimension will be accompanied by improvement in the other, i.e., increases in satisfaction or morale will be accompanied by increases in productivity.
or achievement. Research findings, however, do not confirm predictability of this assumption. Both may increase, but it is equally (or even more) probable that one will increase and the other will decrease or that both will decline.

Given the importance of balancing improvement in both achievement and satisfaction, what processes can be used to improve school climate?

Procedures Used to Address School Climate

Different approaches have been used to address school climate. These approaches are classified in five categories for convenience and are described briefly below.

Instrumentation Approach

This approach uses survey-questionnaire type instruments to determine perceptions of personnel (staff, students, parents) connected with the school. There is a wide variety of surveys that have been developed and different surveys emphasize different areas. This approach is diagnostic in nature and attempts to identify perceived strengths and needs of the school. The concept of survey feedback also serves as a basis for using this approach. This concept assumes that if individuals are given data about how others in their group think, feel, or perceive a given situation, then those persons will be more inclined to address identified issues.

Intervention Strategies

Intervention strategies can be either internal or external. An example of an external intervention is to use a group of peers or
consultants to visit a school site and through a planned process, collect and feedback data that will serve as a base for school improvement. An internal intervention includes the use of an internal support team. Such teams are sometimes referred to as "climate watchers" or "building leadership teams" (Brookover, 1982). Other terms applied to such groups are collegial teams or development support teams (Fox, 1973).

**Goal Setting Approach**

This approach uses some system, usually the bureaucracy, to identify goals that will be addressed by staff. These goals can be developed by leaders in the organization or by employees within the system. A top-down or a bottom-up approach can be used, or both approaches can be implemented together. To improve school climate, the organization might ask schools to develop goals/objectives and plans to provide a specific type of school climate.

**Leadership Approach**

This approach simply requires the school leader to emphasize the school climate and to develop and implement activities that will improve the climate of the school. To successfully implement this approach, the leader should model behavior that will reflect the types of improvements desired.

**Combination Approach**

This involves a combination of two or more of the approaches described above.
Inservice training may appear to be an appropriate classification for describing school climate improvement projects. However, inservice training is a strategy or process which may be appropriate at some stage in implementing any of the various approaches to school climate improvement. For the purpose of this study, inservice training or staff development is defined as a process for expanding knowledge, developing skills, or building understanding. If the personnel involved in school climate improvement projects need training or development as defined, then inservice should be considered as an integral part of the overall plan to improve climate. Before deciding to use an inservice process, climate leaders need to identify the specific training needs; that is, to identify the specific knowledge, skills or understandings that are in need of development in order for the school climate project to be effective. The specific training needs will vary with the different needs of different groups or individuals.

According to Fox, several steps should be considered before deciding which approach to school climate improvement will be utilized. These steps include:

1. Develop an understanding of school climate and its components.
2. Determine the role of the school administrator in the school climate improvement process. This should be decided by considering the administrators' concept of school climate, their strengths and deficiencies.
3. Consider the individual school's climate issues; i.e., What is the climate problem and who is contributing to it?
4. Develop a specific set of climate objectives and develop a plan to accomplish the objectives. Include in the plan the approach or approaches which will be utilized, who will perform what roles, what inservice or staff development is needed and for whom.
5. Determine what data are needed before, during and following the school climate improvement program and what, if any, follow-up will help sustain the improvements which are planned (Fox, 1973:xii).

**Instruments for Data Collection**

Collection of data can be undertaken as the major component of the school climate improvement program. Survey feedback or other data collection approaches can be undertaken to support or guide actions to improve school climate.

Edgar Kelly (1980:7-13) describes a variety of instruments which are most frequently utilized in school climate improvement projects or studies. Among the instruments available are the following:

1. Organizational Climate Description Questionnaire (OCDQ): This instrument was developed by Halpin and Croft and is designed to measure staff climate (morale). There are 64 items organized in 8 categories: four (disengagement, hinderance, esprit, and intimacy) measure the characteristics of the faculty as a group. Four others (aloftness, production emphasis, thrust, and consideration) measure the faculty perception of the principal as a leader. This instrument is primarily a morale instrument and is primarily designed for use in elementary schools.

Syracuse Indexes: There are four tools developed by George Stern which have been used mostly for research and school climate diagnosis. Instruments which have been developed and validated are: Elementary and Secondary School Indexes (ESI), High School Characteristics Index (HSCI), Classroom Climate Index (CEI), and
Organizational Climate Index (OCI). The OCI has been revised to a short version consisting of 80 items which assess the following factors:

1. intellectual climate
2. achievement standards
3. personal dignity
4. organizational effectiveness
5. orderliness
6. impulse control

Edgar Kelly states that "These six factors . . . yield two major dimensions of school climate as perceived by staff-development press and task effectiveness" (1980:10).

The other three instruments in the Syracuse Index, HSCI, CEI, and ESI, are used to assess student perceptions of climate. Categories assessed in these instruments are:

1. intellectual climate
2. expressiveness
3. group social life
4. personal dignity
5. achievement standards
6. control
7. peer group dominance.

Edgar Kelly lists several factors to consider in using the Syracuse instruments: They measure climate that is defined as stressing both satisfaction and productivity. " . . . weaknesses include difficulty in using the instruments for measurement of real and ideal perceptions"
Edgar Kelly recommends that the instruments be used for needs assessment. A final weakness listed by Kelly is the problem of sending data to Syracuse University for scoring and obtaining expert interpretation.

4. Social Climate Scales: These consist of twelve instruments developed by Rudolf Moos. They are described as a series of scales which make it possible to measure the "personalities" of the environment, to evaluate the impact of different interventions, and to compare the judgements of staff. Each scale is composed of 90 to 100 true-false questions which cover three dimensions of the social environment:

1. the nature and intensity of personal relationships
2. personal growth and self-enhancement influences
3. system maintenance and change dimensions

Relationship dimensions include affiliation and teacher support, while personal growth and self-enhancement influences include task orientation and competition. The system maintenance and change dimension assess rule clarity, teacher control and innovation. Two scales are available: The Work Environment Scale (WES), which is used to assess perceptions of faculties, and Classroom Climate Scale (CES) which is used to assess perceptions of secondary students (Kelly, 1980:12).

The Colorado Program

Another, more formal, approach to school climate improvement has been developed and utilized in Colorado and New Mexico. This approach is called the "Mini-Audit Process" and was developed by Gene Howard.
There are eight steps in the mini-audit process:

1. Raising the level of faculty, student, and parent awareness.
2. Forming the school climate improvement committee (SCIC).
3. Collecting base line data.
4. Assessing the school's climate.
5. Brainstorming and prioritizing.
6. Forming task forces.
7. Managing the task forces.

Under Howard's plan an external team visits the school to collect data from staff members regarding their view of the positive aspects of the school. A structured interview is used to collect data and a questionnaire is available to use with the process. The data are tabulated and presented to the staff during a staff meeting which is held on the second day of the process. This process sets a positive tone by demonstrating that there are positive aspects about the school. During the feedback session, three areas of school climate are addressed: program determinants, process determinants and material determinants. Variables associated with each determinant area are listed below.

**Program determinants:**

1. Active learning/experiential education
2. Individualized expectations and rewards
3. Varied learning environments with flexible curriculum and extracurricular opportunities
4. Personal support systems

5. Rules cooperatively determined

**Process determinants:**

6. Problem-solving, decision-making and working with conflict

7. Improvement in school goals and planning

8. Effective communications

9. Independence with responsibility

10. Effective teaching/learning strategies

**Material determinants:**

11. Access to adequate resources

12. Suitability of plant and grounds

The positive comments gathered from the staff are organized in one of the above categories. During the staff meeting other positive comments are requested and placed in one of the determinant categories. After reviewing the determinants and comments, the staff is requested to identify determinant areas that they believe, when addressed, will further enhance a positive school climate. Through a structured group process, two or three determinants are identified to receive attention from the staff and task forces are organized to work on the identified determinants. Each task force formulates plans to address issues identified in the school and a building leadership team is organized to work with the principal to give overall leadership to school improvement programs that the task forces decide to implement. The building leadership team is also responsible for determining which efforts are needed to sustain and evaluate the school climate improvement process (Howard, 1980).
Another Approach to Improve Climate

A less formal approach to school climate improvement is described by Richard Sagor (1981) in the December issue of Educational Leadership. The approach is entitled "A Day In The Life," and involves the use of volunteer staff members who shadow an assigned student for eight days. Sagor admits that the process is not scientific, but it does allow for the collection of information about how students spend their days in school. The specific steps are listed below:

1. Develop and distribute to staff a flyer proposing the shadowing processes and identifying some issues to consider. Such issues may include the following type questions: "Are six classes a day too much for students? Is there too much, too little, or an appropriate amount of social time? Are there dramatic differences in classes? Why do some students feel frustrated?"

2. Based on the description of the shadowing process, ask for staff to volunteer to observe students.

3. Match observers with students.

4. Carry out the observations for eight consecutive days.

5. Ask observers to help plan a staff meeting where the observation experiences are shared.

6. Conduct the staff meeting with a panel of non-observers who ask questions of the observers. The student subjects also participate in the meeting.

7. After the discussion of the observations, seek staff involvement in the identification of needs and in designing solutions to meet the needs (Sagor, 1981:190-193).
Summary of Approaches

There are many different approaches to consider in determining how to improve schools. The literature on school effectiveness and school change is extensive and even contradictory. In summary, Kelly (1981:183) states that

We do not know all that we might wish to know about how to access and improve school climate. We do know, however, that schools can make a difference in what happens to the people who work and study in school environments. We do know, too, that focusing on any single climate dimension, such as satisfaction, or any particular audience, such as teachers, is a less than adequate approach to the design and implementation of school environments committed to the welfare of all participants.

To audit school climate requires sound planning that is comprehensive in scope and includes subplans that speak to the purposes of school environments for major audiences and for the climate dimensions of human satisfaction and human productivity. To do less is to be less professional than we can be or can become. (Kelly, 1983:183)

Summary

Current studies of American secondary education consistently cite the declining standards in secondary education and call for school reform. Among the best known of these studies are: A Nation at Risk (1983), High School (1983), and A Place Called School (1983). During the same time period that these studies were conducted, research efforts were underway to identify characteristics of effective schools. The literature on effective school research indicates that school climate is an important factor in developing an effective school. Many authors however, continue to express concern about how one develops an effective school (Purkey and Smith, 1983).
This literature review has attempted to demonstrate not only the importance of school climate, but also the need for research on how schools improve their climate and what effects and obstacles occur when such efforts are undertaken. Finally the literature has described some of the efforts which have been undertaken to address school climate. Specifically, there are a variety of instruments available to assess school climate and an increasing number of recommendations about how to improve school climate. There is however, little research on the effects and obstacles encountered when one or more of these approaches are utilized to improve climate. The purpose of this study was to fill that void.
CHAPTER 3
RESEARCH METHODOLOGY

Chapter 3 includes a statement of the problem and a list of the research questions for the study as well as a description of the research design. The chapter describes the schools selected for the study and distinguishes between a formal and an informal approach to school climate improvement. The procedures used to conduct the study, to develop the instruments and to analyze the data are also described in this chapter.

Statement of the Problem

Consistently school climate is identified in the literature as an important factor in developing effective schools. Research is needed to describe how schools improve climate and to identify the effects and obstacles of climate improvement efforts.

Description of Research Approach

This investigation is an ex post facto descriptive field study of the school climate improvement efforts of two groups of schools. Each group in the study consisted of two schools. The first group of schools utilized a formal approach to improve school climate. The second group of schools used an informal approach to improve school climate. A description of each school's efforts is provided and the effects and obstacles of each school's efforts are identified. Comparisons among the staff perceptions of the climate efforts in each school are made by the use of simple descriptive statistics.
Research Questions

Through a study of both a formal and an informal approach to school climate improvement, the following questions were addressed.

1. Why did the schools in the study undertake a school climate improvement effort?
2. How were climate needs determined?
3. What were the goals of the school's climate improvement effort?
4. What process, steps or actions were taken to improve the school's climate?
5. What were the effects of the climate improvement effort?
6. What obstacles were encountered in the climate improvement effort?
7. Were the school's efforts successful, and how was success determined?
8. What recommendations can be made from this study which will be helpful to the schools under study, as well as to other schools considering school climate improvement efforts?

Distinction Between a Formal and an Informal Approach

For the purpose of this study, a distinction was made between a formal and an informal approach to school climate improvement. A formal approach follows a prescribed set of steps or procedures and has a prescribed structure or organizational format for implementing the climate improvement effort. The procedures and structure are established by someone outside of the school and the school adopts and
follows the prescribed plan. An informal approach occurs when the principal of the school or another significant person associated with the school determines that the school would benefit from a school climate improvement effort. The actions taken by the school climate leader are developed and implemented within the school and are not based on any prescribed set of actions or any pre-designed organizational format. The steps, actions or processes followed in the informal approach are creatively determined within the school and are determined naturally, as opposed to being prescribed.

Selection of Schools

In order to conduct the study schools had to be identified which used a formal and an informal approach to school climate. To conduct the study the selected schools also had to have some common elements. The schools identified for this study served middle school age students—grades six, seven, eight, and/or nine. All four schools were located in cities with a population of over 50,000 people and served a low to middle socio-economic population. The two schools which used a formal approach to address school climate were located in Pennsylvania and the two schools which used the informal approach to address school climate were located in Virginia.

In order to identify schools which had conducted school climate improvement programs and to classify the school's efforts as either formal or informal, contact was made with a variety of professional persons who had knowledge of school climate improvement projects. Initially, in December of 1983, contact was made with Mr. Ronald Collier
from the Virginia State Department of Juvenile Justice and Criminal Prevention to discuss different school climate improvement programs. The Researcher had knowledge of this Department's interest in school climate improvement because of a past working relationship with Mr. Collier. Mr. Collier was interested in implementing school climate improvement programs in Virginia and had asked the writer to visit schools which were undertaking school climate improvement efforts and to make a report to a conference on the visit.

From information provided by the Department of Juvenile Justice and Criminal Prevention additional telephone contacts were made with school climate leaders in Colorado, New Mexico, Pennsylvania and Virginia. These telephone contacts were made in January and February, 1984. Following these discussions, schools which had undertaken school climate improvement efforts and the approaches each had used were identified.

In February and March 1984, advice concerning which schools had implemented the most and least formal approaches was requested from Dr. Thomas Ollendick, Professor at Virginia Tech who was acquainted with several school climate improvement programs and from Mr. Ron Collier, Department of Juvenile Justice and Criminal Prevention. Both had also visited different schools which had implemented school climate improvement projects. Both Dr. Ollendick and Mr. Collier agreed that the Pennsylvania State Department of Education had implemented a formal approach to school climate.

To identify schools that implemented an informal approach, additional advice was requested in March 1984, from Dr. Emmett
Shufflebarger of the Virginia State Department of Education. For convenience schools located close to Virginia Tech were identified. Dr. Shufflebarger was asked to identify schools in Virginia which had implemented their own approach to improve school climate. Dr. Shufflebarger was considered an appropriate source for guidance in this area because he had also worked with The Department of Juvenile Justice and Criminal Prevention to consider implementing climate improvement programs in several Virginia schools.

After identifying schools in both Pennsylvania and Virginia which had been recommended as schools implementing school climate improvement projects, telephone contact was made with each school's principal to review the approach the school had used to improve climate and to seek permission to visit the school to conduct the study. Sampling and selection procedures and limitations were discussed and approved by the researcher's doctoral committee in March, 1984 before site visits were undertaken.

A description of each school studied is provided below.

Description of Schools

For the purpose of the study school names were not used to maintain confidentiality. The Pennsylvania schools (which used a formal approach) are referred to as "Kline School" and "Jones School." The Virginia schools (which used an informal approach) are referred to as "Main School" and "Smith School." Table 1 summarizes descriptive data for each school.
Table 1

Summary of School Demographic Data

<table>
<thead>
<tr>
<th>Data</th>
<th>Kline</th>
<th>Jones</th>
<th>Main</th>
<th>Smith</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades Served</td>
<td>7-9</td>
<td>6-8</td>
<td>6-8</td>
<td>7-9</td>
</tr>
<tr>
<td>Number of Students</td>
<td>620</td>
<td>530</td>
<td>867</td>
<td>700</td>
</tr>
<tr>
<td>Number of Staff</td>
<td>46</td>
<td>38</td>
<td>58</td>
<td>46</td>
</tr>
<tr>
<td>Administrators</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Socio-Economic Status</td>
<td>Low/L-Mid.</td>
<td>Low/L-Mid.</td>
<td>Low/Mid.</td>
<td>Low/Mid.</td>
</tr>
<tr>
<td>Student Minority Population</td>
<td>80%</td>
<td>43%</td>
<td>35%</td>
<td>31%</td>
</tr>
<tr>
<td>Student Attendance 1980</td>
<td>90%</td>
<td>92%</td>
<td>94%</td>
<td>90%</td>
</tr>
<tr>
<td>Student Attendance 1983</td>
<td>89%</td>
<td>93%</td>
<td>94%</td>
<td>95%</td>
</tr>
</tbody>
</table>

School achievement data is reported on the School Summary Form (Appendix E).
Kline School

Kline School was located in the center of a city in Eastern Pennsylvania. The principal referred to the school as an "inner city school." The school served approximately 620 students in grades seven through nine. There are approximately 45 faculty members, a full time principal, one assistant principal and a librarian. About 80% of the student body was comprised of minority students, mostly Spanish-speaking.

The school offered a varied curriculum, including a choice of general or college preparatory programs in the ninth grade. Adequate industrial arts and home economics facilities existed and were heavily utilized. The building was old, but both the library and cafeteria have been renovated and modernized. When the school climate program began in 1980-1981, truancy and absenteeism were generally considered a problem. In 1980-81 there were 4,172 "unlawful" days of absence and 887 days of unexcused absences. There was an average absenteeism rate of 11 percent or 69 students per day. There were 314 days of faculty absences during the 1980-81 school year, or 7 days per teacher as an average.

Prior to the climate program initiation (1979), the eighth grade Educational Quality Assessment (EQA) scores were very low. Students scored at the first percentile in mathematics and knowledge of human accomplishments. Students scored at the fifth percentile in basic skills of reading and writing, mathematics, information usage and career awareness.

A staff questionnaire was administered in 1979 and showed that 58% of the teachers expressed dissatisfaction with their relationships with parents and 68% felt that students were not interested in learning.
Jones School

Jones School was a neighborhood school located in the west end of a city located in Eastern Pennsylvania. It was not considered an inner city school in the strict sense of the term, because it was not located in the center of the city. The school served students in grades six, seven, and eight. Approximately 530 students attend the school and the average daily attendance was 520 in the 1980-81 school year when there were 562 students. Approximately 38% of the school population was black, 57% was white and 5% was Hispanic. The middle school had 36 teachers, including a librarian, 11 aides, one guidance person, a principal and an assistant principal.

The school offered a varied curriculum, including a choice of academic electives and clubs. Adequate industrial arts and home economics programs existed and both were heavily utilized. The school was an older building, but some renovation had been completed and a newer addition provided an attractive facility.

Prior to the implementation of the school climate program student discipline was generally considered to be a problem by the faculty. In 1980-81 the school reported 73 out-of-school suspensions and 94 in-school suspensions. Assaults on teachers numbered three with five assaults on students being reported. Other discipline problems included: cutting class, smoking, leaving school or class without permission, disrespectful acts, destroying school property, carrying a weapon, drugs, and threatening a teacher or student.
Based on the educational Quality Assessment (EQA) (1980-81) the eighth grade students scored at the tenth percentile statewide in mathematics and writing achievement. They also scored at the fifteenth percentile on understanding others and reading. Students scored thirty-fifth percentile on self esteem and eightieth percentile on creative activities.

Based on a 1980-81 staff survey, 27% of the staff expressed dissatisfaction with their relationships with parents and 65% felt that students were not interested in learning. Seventy-six percent of the staff mentioned that there was a problem because parents took little or no interest in their children's school work. Eighty-seven percent felt that students had poor study habits.

**Main School**

Main School was located in a city located in central Virginia and was the newest physical plant of the four schools included in this study. The plant was constructed in 1966 with an addition of 14 classrooms in 1975. The school served a student population of 867 students. Of the 867 students 65% were white and 35% black. The school reported that 26% of their students came from low income families. The school was experiencing a slight student decline of approximately 3.5% per year. The school served a mixed community of low to upper-middle socio-economic families.

There were forty-four instructional staff members, seven aides, three counselors, five special education teachers, four reading teachers and two librarians.
The school offered a varied instructional program and provided for both the needs of accelerated students as well as remedial students. Elective classes were also offered in vocational education and fine arts.

In 1980-81 students scored in the mid-range of the standardized achievement test. Specifically students in the sixth grade had a composite score in the sixty first percentile on the S.R.A. achievement test. The seventh grade scored at the fifty-seventh percentile and the eighth grade scored at the fifty-first percentile. There was a 4.1% drop-out rate reported in 1980-81 and the student attendance was reported as 94.27% in the same year.

Disciplinary referrals were reported by grade. These data were not available for the 1980-81 school year, but were available for the subsequent year. In 1981-82 there were 233 disciplinary referrals of sixth graders or 1.29 referrals per day, 626 referrals of seventh graders or 3.48 referrals per day and there were 474 seventh grade referrals or 2.63 per day. The school staff felt that student discipline was an increasing problem and student suspensions were increasing.

**Smith School**

Smith School was located in a city in southwest Virginia. The school serves 700 students in grades seven, eight and nine. There were 43 faculty members, including one librarian and two guidance staff. The school served a low middle to middle socio-economic community. Of the 522 students, 156 were black and 8 were of another race.
The school was an older building and provided a varied curriculum including both classes for college bound students as well as classes for general and remedial students. Adequate industrial and home economics facilities were available and both facilities were fully utilized.

Prior to the implementation of the school climate program, referred to as the "We Care Program," standardized test scores showed student performance to be in the 25th to 35th percentile. Formal survey data of the staff and community perceptions of the school in 1980-81 were not available; however several staff commented that prior to the climate program, there was a "great deal of vandalism" and there was the belief that student self-perception was very low. In addition, the principal stated that there were a lot of discipline referrals and the school leadership wanted to find a program that would help them "turn the school around."

A Description of the Models/Approaches

The Pennsylvania Model - A Formal Approach to School Climate Improvement - Kline School and Jones School

Kline School and Jones School

Description. The Pennsylvania School Climate Improvement Project was a joint effort by the Pennsylvania Commission on Crime and Delinquency and the State Department of Education. The model was used with two schools which are identified as Kline School and Jones School. The purpose of the program was to "bring about increased student achievement and improved student behavior" (Moyer, 1982:Summary). The developers of the process stated that:
School climate improvement is a dynamic process; ... The content of the process is left to the collective wisdom of the administration, faculty, students, and parents of each school. The more effective the process, the more divergent the outcomes of individual climate improvement projects. (Moyer, 1982:i)

While the structure and application of the process was consistent across schools using the Pennsylvania model, the model recognized differences in schools and expected projects and outcomes across schools to differ. The overall intent of the model was to develop in school staffs the capability to renew the school by identifying needs and applying a specific problem solving strategy to address the unique needs of the school.

The model is presented in Appendix A. The developers of the model also developed an operational definition of school climate. Components of the operational definition of climate were organized into four areas. These components are listed in Appendix B.

The Pennsylvania school climate model was designed to create a process of continuous school renewal. The goals of the project included the following (Dumaresq and Blust, 1984:1):

1. Development of an orderly school climate.
2. Increased opportunities for positive faculty and student involvement.
3. Increased interest and commitment to a broader range of academic and social tasks.
4. Development of a self-sustaining mechanism so that faculty, students and parents can continue to refine and improve the organization in subsequent years.

The stated first year goals of the project were as follows (Moyer, 1982:Summary):
1. Improved school climate.
2. New internal organization within the school.
3. Observed improvement in student behavior.
4. More parent and community support.

The Pennsylvania climate improvement project was based on a five step organizational change process. The five steps were:

1. Entry
2. Diagnosis
3. Skill Acquisition
4. Implementation and Evaluation
5. Institutionalization

The five step process was intended to enable each school to increase its adaptability and respond more effectively to the changing demands of its total environment. The second strategy of the program was to provide each faculty with the knowledge and assistance to choose, adopt, and implement the best educational products available from national research to meet their assessed needs.

Fourteen basic principles were stated to guide the program. These were:

1. There must be support from the top for the change effort to be successful.
2. There must be a clear results orientation. Specifically, concrete results must be achieved early.
3. There must be a change in individual behaviors before school norms, expectations and commitment will change. The training process must focus on the people in the school actively engaged in solving school problems while learning new skills to improve their personal and group effectiveness.
4. There must be a school wide team building event to initiate the process.
5. The initial focus of the process is on building school capacity to be self-improving and to use all of its resources in a positive way.
6. The school must be able to make use of the best educational products available.
7. The school community must be able to use their consultants to help them through the beginning and middle of the process.
8. There must be widespread involvement of the entire school community.
9. Organizational arrangements must be made to help implement the process. Planned change most often fails in the implementation stage. Issues such as planning, time for implementation, role clarification and non-involvement must be addressed.
10. Change occurs through a planned systematic process.
11. There must be a clear set of priorities."
12. The process must be flexible and able to be adaptable to each school's unique environment.
13. Issues must be addressed in doable, small pieces.
14. There must be a system to maintain the ongoing effort. (Dumaresq and Blust, 1984:16-18)

The specific steps of the Pennsylvania Climate Improvement Model are outlined in Table 2 (Dumaresq and Blust, 1984:28).

Implementation. In 1981 the Pennsylvania program was initiated by first identifying five school districts which were invited to participate in the climate improvement program. The districts were chosen because they had schools with symptoms which indicated problems existed in the schools. Such symptoms included low student achievement, high drop-out rate and high incidences of discipline referrals. The state consultants first contacted the superintendents of the five identified districts to explain the proposed program and to determine if each superintendent was interested in asking schools if they wished to participate in the program. Of the five superintendents, three expressed interest in inviting secondary principals to consider the proposal.
Table 2
Summary of the Planned Change Strategies

<table>
<thead>
<tr>
<th>Entry</th>
<th>Diagnosis</th>
<th>Skill Acquisition</th>
<th>Implementation</th>
<th>Evaluation and Institutionalization</th>
</tr>
</thead>
</table>
| - Identify school selection criteria. | - All faculty and percentage of students interviewed to assess needs.  
- School climate instrument completed by faculty administrators and students.  
- Symptom data gathered related to attendance, student achievement, delinquency and behavior. | - Leadership training provided to administrators and core faculty.  
- School faculty training on prioritizing goals, problem solving, decision making and action planning.  
- Learnings reinforced that change can occur and collaborative planning should be data based.  
- Organizational change was the focus of the school climate efforts using the concept of task forces and a school-wide steering committee. | - Teachers used problem solving, prioritizing and group consensus building skills to implement targets for change.  
- A participatory decision making model was integrated into the school.  
- A steering committee was formed to supervise and monitor task force work.  
- New products and procedures were adapted/adopted into school setting through task force structures.  
- Consultants make interventions during the implementation phase. | - Project employees served as process evaluators and helped monitor the process and measure the results.  
- Teachers collected data on the results of changes to steer the course of the process and to measure the results.  
- Process was institutionalized and diagnostic phase repeated. |

(Dumaresq and Blust, 1984:28)
A meeting was held with central office instructional staff and secondary principals in the three districts to explain the program and to identify one school in each district to implement the program. In each district at least one principal expressed interest in participating in the program.

The next step involved meeting with the staff of each school to determine if at least two-thirds of the staff would agree to participate in the program. A closed ballot vote of all staff was conducted to make the decision to continue with the program. In two schools, there was a 2/3 vote by the staff to implement the program.

The next step involved completing the staff survey and interviews to assess climate needs in the two schools finally identified to participate in the program. School data on achievement, drop-out rate and disciplinary referrals were also collected.

**Treatment.** A training program consisting of two components was implemented. The first component involved a four day leadership training program for the principal and two faculty from each staff who were selected by the principal. Concepts presented in the leadership training program included the following: team building, supervision and achieving results, leadership styles, situational leadership, dealing with resistance, running effective meetings, problem solving processes, a decision making procedure, action planning and organizational planned change.

The second component of the training involved the entire instructional staff in a two day training process. The components of
the staff training consisted of the following: prioritizing goals, developing a collaborative problem solving process, agreeing to a school-wide decision making process, understanding planned change concepts, developing action plans, dealing with resistance to change and data based problem clarification.

The staff training was highly experiential in format. Specifically school needs were addressed in the training and the proposed models and strategies for change were applied to each school's uniquely identified needs. The developers acknowledged that the model could have some difficulty in being replicated; however their intentions were to provide the school staff with training and support to become self-renewing. The steps and structure of the program were developed with the intent of being replicated, but the issues addressed in each school and the procedures used to address the issues were expected to vary across schools.

As part of the training, school task forces were organized to address identified needs and a school steering committee composed of six volunteer staff was organized to provide overall leadership and direction to the school climate improvement effort. The task forces and steering committee continued to operate throughout the next several years and both were in operation in the 1983-84 school year. The principal did not have to be a member of the steering committee and membership on the committee rotated with each person serving either a six month or a one year term. Therefore, every six months or each year, two members would be replaced by two new persons. The task forces would
continue to meet and address each identified issue until the identified need had been met. Each school continued annually to identify new needs and to form new task forces to address the newly identified needs.

The Virginia Schools -
An Informal Approach to School Climate Improvement

Main School

Description. This school did not adopt any specific climate improvement program, but variety of programs were reviewed. A record of the steps taken to address climate issues was not maintained and the researcher had to depend on information from personal interviews to record the steps which were taken by the school to implement its program.

Programs such as "Teacher Effectiveness Training"; William Glasser's, "School's Without Failure"; and William Purkey's, "Creating Inviting Learning Environments", were reviewed. Several consultants visited the school district to provide inservice to staff who were interested in improving the learning environment for students.

Implementation. The Main School implemented a climate process following several events. Employees of the local Juvenile Court system had discussed their concerns about truancy and suspensions with the district's central office staff. In addition, a local women's community group expressed an interest in providing support for a positive learning environment in the school district.

The community group offered financial assistance to support staff training for schools interested in improving school climate. The school
division responded by accepting the group's offer, but identified a stronger concern for developing a positive climate in the middle schools. There were concerns about the increasing number of suspensions and there was an interest in reducing the drop-out rate. As a result of the community group's interest and the school's concerns for improving discipline, an effort was initiated to search for programs and techniques which could be implemented to enhance the schools learning environment.

Representatives of the community group, school district central office instructional staff and school principals met to discuss how they could work together to enhance the learning climate for students. Several middle school principals expressed interest in searching for ways to improve school climate and efforts were initiated to search for programs and consultants to assist the district in their effort to address school climate.

**Treatment.** In December of 1980 an inservice retreat was held for interested school staff. William Purkey conducted the session and described ways to create a more inviting learning climate for students. Other school concerns were identified, including how to reduce student alienation, vandalism, and truancy and how to develop positive relationships. Following the retreat the school principal asked for staff volunteers to continue to work with him to identify ways to create a more inviting climate for students. This leadership group had additional consultants visit with them to discuss ways to address school environment issues. The principal could not recall the names of the
consultants. The school did form a school committee to provide leadership to the school climate improvement effort. The group identified school needs and asked other staff to join them by becoming members of different task force groups to address different needs. Among the activities addressed were the following:

1. How to enhance the physical setting through the use of plants, flowers and posters.

2. How to involve support staff more directly in the school and how to make the cafeteria a more pleasant place.

3. How to use student reward and recognition programs to promote positive accomplishments in the school.

The Leadership Committee was still in operation in 1983-84, three years after its implementation. In addition task force groups were still meeting to address school issues.

Smith School

Description. In the second school using an informal approach, the school referred to its climate improvement process as the "We Care Program." In fact, the term "school climate" was seldom, if ever, used to refer to the efforts at the school to improve the environment for students. The effort at the school was initiated in 1979-80 by the former principal and current principal who, at that time, was the assistant principal of the school. The school's process appears to be an example of a school improvement program that was entirely initiated and maintained within the school and its success appears to be, in part, attributed to the commitment of the staff and the strong leadership of
the school's administrators. There were no formal records available and
the description of the program and process was based on personal
interviews with the principal and two staff members.

Implementation. When the past principal and assistant principal
first came to the school in 1979 they described symptoms of poor school
climate, "great deal of vandalism, low student and staff esteem, and
many discipline referrals." The administration was determined to find a
way to "turn the school around." In the initial stages the two
administrators met with the staff to identify problems in the school.
They attempted to solicit staff perceptions of the school's problems
through an informal staff meeting. There were no records of the staff
discussion and a structured process was not followed. The principal
recalled that one overriding concern from the staff was the need to
develop a caring attitude by students toward school. Thus, the school
termed their effort the "We Care Program" and attempted to influence
students to care about school by modeling caring behavior themselves.

Treatment. A variety of activities were implemented by different
staff members. Included in the many activities were the following:

1. Development of a handbook for students which outlined student
behavioral expectations.

2. Community members were invited to the school to discuss school
issues and to interact informally to discuss how to improve the school.

3. A faculty advisory committee was established to assist the
administration in identifying needs and in creating solutions to meet
the identified needs.
4. The school staff tightened student discipline.
5. The staff participated in a variety of training programs on teacher attitude, expectations, teaching styles and learning styles.
6. Incentive programs were implemented to recognize and reward students, i.e. student of the month, citizen of the week, free passes to games and coupons for free products furnished by business establishments. The rewards were given to students for good behavior and/or achievement.
7. Telephone calling to parents was encouraged, especially when a student did well.
8. An "Adopt a Kid Program" was implemented by several staff members.

The current principal reported that they did not use a formal needs assessment process or questionnaires to identify needs or to evaluate program efforts. The staff did formalize one effort when the guidance department organized the "Adopt A Kid Program." In this program each teacher was given a list of four or five students with whom they could work well and who were identified by the guidance staff as students who would benefit from additional personal attention. Students were matched with staff who were perceived as being able to work well with the assigned students. This program was one that was administratively directed; however, most staff saw the positive merits of the effort and participated willingly according to staff interviewed.

The principal attempted to maintain an "open door" policy and encouraged the staff to visit her and to suggest different techniques
and strategies to promote an environment where the "We Care" attitude would prevail. When suggestions were made, the principal would review them. The principal would select different suggestions to present to the staff for implementation.

When asked why the staff accepted the "We Care Program" and willingly participated in the many new efforts, the principal answered, I think a lot of it has to do with the personality of the person who is doing it. . . . The former principal was a very dynamic man. I think that he cared about people and he cared that this school was the best in the City. I cared too, we were so close in philosophy, we were a good team. It just happened that way. It wouldn't happen again in a million years, but in this one case, it was so unique that I guess our enthusiasm and our interest in school was seen by the teachers. They saw that we genuinely cared about the students, I think that came through clearly. We were committed to the whole thing. We worked long hours and we worked hard. . . . We showed the entire school that we cared. I don't think it will work unless the administration is committed. . . . In addition we have a very unique staff here. . . . I feel that everybody here thinks so creatively and innovatively, that we are able to do a lot. (Interview with principal Smith School May 3, 1984)

Summary of Formal and Informal Processes

As described, the Pennsylvania approach to school climate was very structured when compared to the informal process used at Smith School. The Pennsylvania model had a specific set of steps that were followed in sequence and a specific training program that was designed to develop the capability in a school staff to self-renew itself by identifying and addressing school needs. The process used to improve school climate at Gill School was a self-developed approach, but was based on ideas and suggestions from outside consultants who were considered to be experts in the area of school climate improvement. The Gill School did use some
of the same structure that was used in the Pennsylvania model, specifically the school used a school leadership committee and formed task forces to address needs that were identified by the leadership committee. A formal needs assessment was not completed and the staff volunteered to participate in the program whereas in the Pennsylvania school, all staff participated in the training after two-thirds of the staff agreed by secret ballot to participate in the effort. The process used at Smith School was also developed at the school and evolved as a result of dedicated educators who attempted to "turn the school around." A formal plan was not developed at the Smith School and external assistance was not utilized except for district provided inservice. Table 3 summarizes the common elements of each of the four schools included in this study.

Procedures for the Study

The literature on school climate improvement was reviewed to confirm the importance of school climate in developing effective schools and to define and describe different approaches to improve school climate. This review included both a search of ERIC and Dissertation Abstracts, plus a review of the current literature, i.e., published books and articles on subjects related to school climate.

Initial contact was made by telephone with personnel in the Virginia Department of Education and with personnel in the Department of Juvenile Justice and Criminal Prevention (D.J.C.P.) to identify schools
Table 3

Elements of School's Climate Improvement Effort

<table>
<thead>
<tr>
<th>Elements</th>
<th>Kline</th>
<th>Jones</th>
<th>Main</th>
<th>Smith</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Internally initiated?</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>2. Externally initiated?</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>3. Training on climate?</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>4. Steering committee?</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>5. Established climate goals?</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>6. Followed planned steps?</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>7. Formed assumptions/principles?</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>8. Participation optional?</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>9. Task forces used?</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>10. Problems identified internally or externally?</td>
<td>internally</td>
<td>internally</td>
<td>internally</td>
<td>internally</td>
</tr>
<tr>
<td>11. Solutions identified internally or externally?</td>
<td>internally</td>
<td>internally</td>
<td>internally</td>
<td>internally</td>
</tr>
</tbody>
</table>
implementing climate improvement programs and to identify other persons who might be familiar with school climate improvement projects which were being implemented.

Telephone contact was made with leaders of school climate improvement programs identified by the Virginia State Department of Education and the Department of Juvenile Justice and Criminal Prevention to determine the approaches being used to improve school climate and to determine if the activities had been completed.

From the referrals and telephone contacts two different approaches to school climate improvement were identified and described. The most formal approach was identified by asking the referring professionals to identify the schools which were using the most formal approach. Two schools which were using the most formal approach were identified as were two schools which were using the less formal approaches. Two criteria for school selection were used. The schools selected had to have implemented one of the school climate improvement processes under study and the described process must have been completed.

In March and April of 1984, contact was made with individuals responsible for the school climate improvement program in the selected schools to seek permission to conduct the proposed study. Telephone contact was made with a staff person in the Pennsylvania Department of Education and the principals of all four schools.

Instruments for collecting data in the four schools were developed. The instruments included: a Questionnaire For Interviewed Staff, a Checklist of Climate Conditions, a Structured Interview Guide, Summary
of School Data Form and Staff Questionnaire. Two similar questionnaires were developed—a short form for staff and a longer version for interviewees. The Checklist of Climate Conditions was based on an operational definition of school climate and assessed which conditions were addressed and the degree of perceived change for each condition. Each instrument and the rationale for its development is explained later in this chapter under the section entitled "Instrumentation." All instruments were developed to provide data for describing each school's climate improvement effort and to identify the effects and obstacles encountered in each effort.

A visit was made to each identified school during the last week of April and the first week of May 1984. The questionnaire, checklist and structured interview were completed by the school principal and two teachers from the staff who had been employed for at least three years in the school under study and who were involved in the initial planning of the school climate improvement project.

Responses to each structured interview question were recorded and reported for each school studied.

An abbreviated questionnaire, similar to the questionnaire given to the principal and the two selected staff members, was also given to at least twenty percent of the staff who were free from teaching duties during the visit.

Responses to all questions were recorded and reported for each individual interviewed in each school studied.
A matrix was utilized to record the positive responses to items on each questionnaire. Responses from individuals within a school and responses across schools were compared. From an analysis of the responses, the effects and obstacles encountered in each climate improvement approach under study were identified. In addition responses to questions concerning the extent of school climate improvement and changes in satisfaction and productivity were reported.

Instrumentation

Five different instruments were used to collect data for the study. Instruments included: Questionnaire For Interviewed Staff, Structured Interview Guide, Climate Condition Checklist, Summary of School Data Form and Staff Questionnaire. Each of the five instruments is described below. The instruments are located in Appendix C.

Questionnaire For Interviewed Staff

This 21 item questionnaire was completed by the principal and two instructional staff members. The questions were based on the 10 areas that Kelly (1980) suggested should be considered in planning a school climate improvement program. These areas were:

1. Initiating the climate process.
2. Identifying climate needs.
3. Setting goals for climate improvement.
4. Implementing the climate program.
5. Addressing obstacles in the climate improvement effort.
6. Identifying outcomes of the climate improvement program.
7. Evaluating the climate program.
8. Providing external assistance to schools.
9. Determining follow-up actions to the climate effort.
10. Determining recommendations for further school improvement.

Questions used in the "Questionnaire For Interviewed Staff" were structured so that respondents could answer each question positively or negatively.

This instrument served the following purposes.
1. To determine the number of areas that each school addressed which were suggested by Kelly in planning school climate improvement efforts.
2. To determine if there were any discrepancies among staff in identifying areas which were addressed by the school in its climate improvement efforts.
3. To assess if the interviewed staff perceived any outcomes and obstacles and to compare their perception with the perception of a larger sample of the staff who responded to similar items included on a shorter questionnaire.

The data collected with this instrument allowed both a within and an across school comparison. The across school comparison determined if schools using either a formal or an informal approach to improve climate followed Kelly's suggested considerations in implementing their climate effort. The within school comparisons were to determine if there were common or mixed perceptions of the schools efforts and therefore to assess the extent of agreement within the staff on climate issues.
The principal and two teachers selected by the principal completed this instrument. The principal was asked to select two teachers who had been in the school for three years and who could discuss the climate process objectively. To adjust for possible bias in selecting the interviewees a larger sample of the total staff was identified by the writer to respond to similar questions included in the staff questionnaire.

**Structured Interview Guide**

The structured interview was completed by the school principal and the same two staff members who completed the "Questionnaire For Interviewed Staff." The "Structured Interview Guide" consisted of 28 questions that paralleled the 21 items in the "Interviewee Questionnaire" and were based on the 10 areas that Kelly (1980) recommended schools consider in implementing school climate efforts. The 28 items were included in the interview rather than the questionnaire because each item required an explanation rather than a scaled response.

The purpose of the structured interview was to collect data to describe the steps, actions and/or activities that the school followed in implementing the climate improvement effort and to describe both the effects and obstacles encountered in the school's efforts.

**Checklist of Climate Conditions**

This instrument was based on an operational definition of school climate that was developed for the study. The operational definition consisted of 43 conditions that collectively describe school climate.
The 43 conditions were organized under three categories, program determinants, process determinants and general climate factors. The operational definition is found in Appendix D. The operational definition was based on the following sources, Brookover (1982), Fox (1973), Howard (1980).

The interviewed staff were asked to complete this instrument and to designate the following for each climate condition.

1. Was the identified condition identified in the school's definition of climate?

2. Was the specific climate condition identified as a need in the school for either students or staff?

3. Was the specific condition one that was addressed in the school's efforts to improve climate?

4. Was there any perceived change among in the climate conditions for either students or staff as perceived by the interviewees?

5. Were there any obstacles identified in addressing any specific climate condition?

The "Checklist of Climate Conditions" served the following purposes.

1. To determine which climate issues were addressed for students and for staff.

2. To assess the respondents perception of the degree of change in climate determinant areas; i.e. general climate, process and program determinants.
3. To determine if climate determinants used to operationally define school climate were addressed, by schools that followed either a formal or an informal approach to improve climate.

**Summary of School Data Form**

This instrument was completed by the school principal and provided base line data to describe the schools' performance over a four year period (1980-1984). The following information was requested: achievement test results, student drop-out rate, percent of student attendance, number of disciplinary referrals, incidents of vandalism. This data was requested because it is the type data most frequently reported by schools.

The purpose of the instrument was to determine if improvements occurred in any of the areas in which data were collected during the time that the climate improvement effort had been implemented. The assumption was made that while a causative relationship could not be assumed, positive improvement might have been a reflection of the climate improvement effort.

**Staff Questionnaire**

This instrument consisted of 11 items that related to questions concerning climate program effects and obstacles. The instrument was designed to parallel the items in the "Questionnaire For Interviewed Staff." The instrument was completed by a minimum of 20% of the instructional staff in each school who were free from instructional duties during the cite visit. Table 4 reflects data on the
Table 4
Description of Sampled Population for Each School

<table>
<thead>
<tr>
<th>Item</th>
<th>Kline School</th>
<th>Jones School</th>
<th>Main School</th>
<th>Smith School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Staff</td>
<td>46</td>
<td>38</td>
<td>54</td>
<td>46</td>
</tr>
<tr>
<td>Sample Size</td>
<td>11</td>
<td>8</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>Percent of Staff Sampled</td>
<td>23%</td>
<td>21%</td>
<td>31%</td>
<td>30%</td>
</tr>
<tr>
<td>Mean No. Years in School</td>
<td>10.18</td>
<td>10.00</td>
<td>5.47</td>
<td>12.57</td>
</tr>
<tr>
<td>Mean No. Years in Educ.</td>
<td>17.18</td>
<td>16.28</td>
<td>13.11</td>
<td>16.85</td>
</tr>
</tbody>
</table>
characteristics of the sampled populations of each staff. The respondents who completed this instrument were selected unsystematically by requesting staff to complete the instrument when they were free from instruction. To minimize bias, the Researcher visited through the building during a morning and an afternoon period of the day and sought staff who were not teaching. This selected sample technique was chosen so that instructional time would not be interrupted.

The 11 items on the questionnaire asked questions concerning the staff's perception of the success of the program. Items related to issues such as: clarity of goals, degree of climate change, change in satisfaction/productivity and obstacles encountered. The data collected from this instrument were compared to data collected from the Questionnaire for Interviewed Staff.

The purpose of the instrument was to seek a larger percentage of the school's population to assess their perception of the school's climate improvement effort, its effects and obstacles.

Pilot Testing of the Instruments

Each instrument was pilot tested at a school where there had been a focus on school climate for the past three years. The purpose of the field test effort was to determine if the questions were clear and if the questions solicited the necessary data to answer each of the eight research questions in the study.

This effort assisted in language clarification and confirmed that the items would provide the necessary data to complete the study.
The pilot effort also confirmed that discrepancies in staff perceptions could be identified from the items in the instruments and that the data collected could provide sufficient information to describe the schools approach to climate improvement and to identify both the effects and obstacles encountered in the school's efforts.

In summary the pilot testing effort confirmed that the instruments accomplished their intended purposes. It did however, demonstrate the need for a larger sample to respond to questions concerning the outcomes and obstacles of the climate effort. Consequently, after completing the pilot test the "Staff Questionnaire" was developed.

Visitation to Schools

During the last week of April and the first week of May, 1984, each of the four schools included in the study were visited by the researcher. One day was spent in each school collecting the data and conducting the structured interviews.

Methods Used to Analyze the Data

The data collected in the structured interview were recorded verbatim from respondents. The results of the questionnaires were tabulated by group within each school and were analyzed by frequency of positive and negative replies. The data were statistically reported by the use of descriptive statistics (frequency, means, percentages).

Summary data were simply recorded and presented for each school. The data collected from the Checklist of Climate Conditions were reported by school. The mean scores of the degree of change for each
climate category were presented by school for each group; i.e., staff and students.

A within-school synthesis of all data was completed to describe the effects and obstacles encountered in each school's climate improvement effort. Comparisons among schools were not attempted; however general conclusions of the school's common experiences were identified.

Summary

The literature review confirmed the need to study school climate improvement efforts. The literature on school climate served as a foundation for the design of data collection instruments. The instrument development process was reviewed in Chapter 3. The pilot study effort confirmed that the instruments did allow for data collection which could be used to describe the climate improvement effort and to describe both the effects and obstacles of such efforts. Chapter 3 also reiterated the statement of the problem, described the research design and provided a description of both the formal and informal process used to improve climate. The chapter also provided a description of the schools studied and the methods used to analyze the data.
CHAPTER 4

PRESENTATION OF DATA AND FINDINGS OF THE STUDY

Introduction

School climate improvement efforts are usually undertaken to improve the school's learning and working environment. The more formal approaches attempt to improve the school by helping a school staff to develop the capability to continually renew itself. By developing the capability to renew itself, a school staff can constantly assess school needs and develop strategies to improve the school. Renewal is an on-going process—"a quality which must be built into the management behavior itself" (Byers, 1984:47). School systems have attempted various processes to develop such self-renewing capabilities and school climate improvement can be classified as another such process.

Findings of The Study

The purpose of the study was to describe the use of both a formal and an informal approach to school climate improvement and to identify the effects and obstacles encountered in each school's efforts. Two schools using a formal approach to school climate improvement were selected for the study, as were two schools using an informal approach. Eight research questions were to be answered by the study. The primary data source for answering the eight questions was the Structured Interview Guide which was completed by the school principal and two staff members. Data from four other instruments (Staff Questionnaire, Questionnaire, for interviewed staff, Summary of School
Data Form and Climate Condition Checklist) were used to answer questions which dealt with the effects, obstacles and success of the climate improvement efforts. The Staff Questionnaire also served as a confirmation of the principal's perception of the climate effort.

Each research question is stated below. Responses are reported by school and organized by the data source; i.e., instrument used.

**Question 1. Why did the school undertake a school climate improvement effort?**

**Data Source - Structured Interview**

**Kline School - Formal Approach.** In the late sixties and early seventies the school had a high turn-over rate, there were major discipline problems, racial tension existed, achievement scores were very low--tenth percentile--and the principal wanted to take some action to "give the staff some handle on how to get this school on its feet, academically and otherwise." After hearing the representative from the state department describe the proposed climate improvement effort, 87% of the staff voted to participate in the climate improvement effort in 1980.

**Jones School - Formal Approach.** The principal was interested in the State's plan because he perceived "some rather serious communication problems on the staff." He stated that the faculty was a "real 8:30 to 3:30 faculty." According to a staff member the staff "was not doing the job together and getting the most out of the kids we had . . . I think the whole thing was to try to bring the faculty together."
Main School - Informal Approach. The school administration as well as the juvenile court authorities were concerned with truancy, high drop-out rate and increasing suspensions from school. The Junior League, a community group, offered assistance and support to improve the school's environment for students.

Smith School - Informal Approach. The principal stated that "there was a great deal of vandalism and low self esteem . . . a lot of discipline problems and we wanted to find a philosophy that we thought would turn the school around. . . . That is why we instituted the 'We Care Program' which is basically a climate improvement program."

Another staff member said "we realized that . . . there are those (youngsters) who sometimes fall through the cracks." Another staff member said that she felt that the principal "saw so many good things going on in fragmented little groups of teachers and students."

Differences - Formal and Informal Approach. Three of the four schools studied undertook a school climate improvement program because of student related concerns, truancy, discipline, achievement. One school, which used the formal approach to improve school climate, participated in the program to improve staff relations. Even with this stated difference, this school ultimately desired to improve their program for students. In summary all four schools implemented climate improvement efforts to improve the school's program for students and the choice of using a formal or an informal approach to improve school climate was unrelated to the stated school's motivation for addressing climate.
Question 2. How were climate needs determined?

Data Source - Structured Interview

Kline School and Jones School. The staff of each school completed a questionnaire and the State's plan called for the staff to participate in a two day in-service. During the inservice session, the staff participated in a brainstorming process to identify school needs. After the needs were identified, the staff voted to select the most important needs which were to be addressed first.

Main School. A leadership committee was organized by using volunteers from among the staff who had participated in an inservice activity on developing a more inviting school. This committee identified school needs by discussing school concerns. Through consensus decision-making within the leadership committee school needs were identified and goals were established.

Smith School. The principal stated "Basically we had a lot of meetings. . . . We brought community members in for discussions." The school served refreshments and openly discussed school concerns. The school administration utilized a staff advisory group to identifying needs perceived by the staff. The staff also had the opportunity to list school needs or concerns at the end of the year. The lists were given to the principal. The principal would decide which issues to address and which suggestions to bring to the staff's attention. Issues were addressed during faculty meetings.

Differences - Formal and Informal Approach. The two schools that used a formal approach to improve climate implemented a structured group
process to identify school needs and to select priority issues to address. One school using an informal approach invited staff members to participate in a training program on invitational learning and from that group a committee of interested staff met with the principal to identify school needs. In the second school using an informal approach to improve climate the principal held numerous meetings with staff, students and parents to identify school concerns. A school staff advisory group was formed to determine which needs were to be addressed.

In summary, the two schools which used a formal approach to improve school climate used an identical process to identify needs. The process used in the formal approach differed from the one used by schools using an informal approach to improve climate. The two schools that used an informal approach also used different processes to identify needs. Two common elements across all four schools were (1) the use of a staff committee to provide overall leadership and support to the school principal in guiding the climate improvement effort and (2) the needs of each school were internally identified.

**Question 3. What were the goals of the school's climate improvement effort?**

**Data Source - Structured Interview**

**Kline School:** A. To improve the image of the school in the community.

B. To improve the image of the school in the minds of the staff and students.
C. To improve the academic achievement of students.

**Jones School:**
A. To improve faculty morale and staff cohesiveness.
B. To improve student discipline and attitude/morale.
C. To develop and implement a student reward system.
D. To improve parent and community perceptions of the school.

**Main School:**
A. To improve student self-esteem.
B. To make the school more attractive.
C. To improve student/staff relations.
D. To increase student leadership and achievement.

**Smith School:**
A. To change attitudes toward the school.
B. To have all members of the school community working together.
C. To promote a positive environment where students could be successful.

**Differences - Formal and Informal Approach.** All four schools had established goals. The school goals in each school focused on improving the image of the school, improving the learning environment for students and improving relationships in the school among staff and students. Specific goal statements did vary among the schools but the goals of each school addressed common issues, improving relationships, morale, image etc.
Question 4. What process, steps, or actions were taken to improve the school climate?

Data Source - Structured Interview

The specific steps followed to implement school climate improvement programs in each of the four schools were described in Chapter 3. The different actions which were undertaken in each school to improve the climate are provided below.

Kline School. The principal asked students to assume responsibilities such as reading morning announcements and volunteering to assist the staff. Students worked in the office during a study period. "Spirit Days" were organized by the principal and sponsoring teachers where athletes were honored and their parents were given flowers. Teachers organized student recognition activities where award assemblies and incentive rewards (sweatshirts and T-shirts) were given to students. Newspaper reporters were invited to the school by the staff to write about the various school activities and to recognize student accomplishments. Movies with a caring type theme were shown one afternoon each week by the staff. The school built a large box for valentines. The principal stated that "you wouldn't think that junior high kids would go that 'whack-o' on valentines--1500 valentines. Even I get valentines."

The ideas for improving the school originated from staff members who served on different task force groups that were organized to address different needs.

Jones School. School task forces formed across clique lines of teachers which changed the informal relations which had existed in the
building. According to the principal "The whole process forced people to work together, to depend on each other to accomplish certain tasks. A "Sunshine Committee" was formed to organize a variety of staff social functions. The first social activity was a Christmas party organized by the Sunshine Committee. The principal reported that it took the first six months to "get the group going" Rewards were given to students for certain accomplishments, such as, a free pencil for returning the report card. Efforts were made to seek more student involvement in school activities. Examples include students performing plays and planning various activities, i.e., award assemblies. Different staff committees were responsible for organizing the assemblies and reward systems. Inservice sessions were requested by the principal and provided by the central office to the staff on such topics as "questioning techniques," "classroom management" and "effective teaching processes."

In addition to the above, teachers took slide pictures of school activities and parents were invited to the school to view the slides. Teachers also made frequent telephone calls to parents to praise students and to let parents know that everything was going well. Newspaper reporters were invited to the school to provide news coverage of the many positive activities in the school.

Main School: Efforts were made by the staff to involve students in making the school attractive. Flowerbeds were planted in front of the school and signs were changed to be more inviting. As an example, most schools have a sign that states that "All visitors must report to the office." At Main School the sign says "Welcome to the school, we invite
you to register in the office." Rewards and recognition activities were also used with staff and students. At the suggestion of the leadership committee, the principal had a telephone installed in a private room for staff use and name tags were given to support staff so that students would know the names of the support staff.

**Smith School.** The principal established an open door policy. Student recognition and reward activities were implemented as was the "Adopt a Kid Program. Inservice was provided for the staff and community meetings were held. Discipline was emphasized and a student handbook on school rules was developed. The staff was asked by the principal to increase telephone contacts with parents, especially when students could be complimented. A teacher advisory committee was organized to identify needs and to create ways to develop a more caring attitude within the building.

**Differences - Formal and Informal Approach.** The schools that used a formal approach followed a specific organizational plan to provide staff leadership to identified school concerns. Specifically there was a formal staff steering committee and staff task forces were organized to address issues. The length of staff membership on the school steering committee was established and membership rotated. Even the system for identifying school priorities was formalized through a voting system.

The schools that used an informal system did not follow an established structure, but they did form a staff steering or advisory committee. A different organizational structure was used by the schools
employing a formal approach to improve climate as compared to those schools using an informal approach. The types of activities used in all four schools were very similar in that they were all designed to promote positive aspects in the school, rewards, recognition, attractive physical settings. Another common element was that in all four schools the ideas for promoting positive aspects of the school were created and implemented by the teachers in the school.

Question 5. What were the effects or outcomes of the climate improvement process?

Data Source - Structured Interview, Staff and Interviewee Questionnaire

The questionnaires had several questions which were used to assist in identifying the effects of the climate improvement efforts. Specifically:

1. Describe how satisfaction and productivity have changed.
2. How did the staff respond to the climate improvement effort?
3. Did satisfaction change?
4. Did productivity change?
5. Among which groups did satisfaction or productivity change?

Staff responses to these questions are also summarized in Table 5.

Kline School

Interview Responses. The principal stated that "the teachers are able to cope much better with their frustrations . . . indicated by the reduced rate of absences. . . (Data were not provided.) Academically we have
Table 5

Increases In Satisfaction and Productivity*

<table>
<thead>
<tr>
<th>School</th>
<th>Population (N)</th>
<th>Kline</th>
<th>Jones</th>
<th>Main</th>
<th>Smith</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>11</td>
<td>8</td>
<td>17</td>
<td>14</td>
</tr>
</tbody>
</table>

1. Percent of respondents giving positive comments on improved relationships/satisfaction
   - Kline: 54%
   - Jones: 50%
   - Main: 29%
   - Smith: 85%

2. Percent of respondents giving positive comments on productivity
   - Kline: 63%
   - Jones: 50%
   - Main: 47%
   - Smith: 35%

3. Percent of respondents indicating that staff:
   a. Responded positively to the school effort
   - Kline: 100%
   - Jones: 87%
   - Main: 70%
   - Smith: 78%
   b. Responded negatively to the school effort
   - Kline: 0%
   - Jones: 0%
   - Main: 0%
   - Smith: 0%
   c. Responded neutrally to the school effort
   - Kline: 0%
   - Jones: 13%
   - Main: 23%
   - Smith: 21%

4. Percent of surveyed staff:
   a. Reporting satisfaction change for staff
   - Kline: 90%
   - Jones: 100%
   - Main: 70%
   - Smith: 50%
   b. Reporting productivity change for staff
   - Kline: 90%
   - Jones: 87%
   - Main: 41%
   - Smith: 50%
   c. Reporting satisfaction change for students
   - Kline: 27%
   - Jones: 62%
   - Main: 76%
   - Smith: 64%
   d. Reporting productivity change for students
   - Kline: 36%
   - Jones: 37%
   - Main: 76%
   - Smith: 78%

*This table reflects the percent of staff members completing the staff questionnaire who responded positively to questions concerning satisfaction and productivity.
made some steps as can be seen from the test results. (Scores increased from the 26% to 34% to the 34% to 46% in four years, 1980-84.) The kids will now tell you that this is a good school."

A teacher stated that "The recognition in the community, . . . the (positive) image of the school . . . . everyone was afraid to come down here . . . but now . . . they know they can step into the school and not be mugged."

**Staff Questionnaire Responses.** Six of the 11 staff responding (54%) indicated increased staff involvement. Statements included:

"The staff is more involved in school activities."
"More staff cohesiveness."
"Committed staff to unity."
"The staff feels that the mechanisms for positive change are in place."

Seven responses (63%) indicated productivity increased. Comments included the following:

"Productivity increased by involving staff on task forces to address issues."
"More is getting done."
"Finally starting to improve academics."

Two respondents (18%) indicated discipline had improved. Statements included the following.

"Discipline referrals are for less severe problems."
"Improved discipline among most students."

Ten of the 11 staff who were surveyed or 90% said that satisfaction and productivity had increased for staff.

All 11 of those surveyed (100%) said that the staff responded positively to the climate improvement effort and there were no indications that either satisfaction or productivity had declined.
Jones School

Interview Responses. The principal stated "the greatly improved faculty morale . . . student reward and recognition and . . . student/teacher after school activities."

A teacher stated the following: "more social activities, . . . in-school suspension program . . . uniform discipline procedures . . . rewards for kids . . . social activities for kids . . . open library before and after school."

A second staff member said that relationships within the staff had improved.

Staff Questionnaire Responses. Four of the eight respondents (50%) said relations in the school had improved. Comments included the following:

"Staff has learned to work well together, more pleasant atmosphere."
"The school has problems, but it is a good place for kids."
"More people supporting each other."

Four respondents (50%) said productivity had increased. Comments such as the following were made.

"Staff initiates more activities."
"Many of the projects work and remain in force."

All eight of those surveyed (100%) said staff satisfaction had changed and 87% said staff productivity had changed.

Five respondents (62%) said student satisfaction improved.

Seven of the eight respondents (87%) stated that the staff responded positively to the school's climate improvement effort and one (13%) indicated the staff held a neutral response.
There was no indication by the staff that either satisfaction or productivity had changed negatively.

**Main School**

**Interview Responses.** The principal stated that the school had experienced steady gains in achievement and minor improvement in student attendance. He felt that there were fewer discipline referrals and most of the referrals were now for minor offenses and were intended to assist the student with problems such as neglect or abuse.

**Staff Questionnaire Responses.** Eight of the 17 respondents (47%) made positive comments about increased productivity in the school. Examples of the comments are listed below.

"Students work to beautify the school."
"Students seem more responsible, teachers stay on task more."
"More staff attend school functions."
"There are more students on the honor roll."

Five of the surveyed staff (29%) made positive comments about the improved relationships in the school.

"More positive attitudes, students are more active in school."
"More staff are aware of the environmental effects of a classroom."
"Student recognition programs encourage more student effort."
"Teachers can approach the administration."
"Students feel comfortable, not pressured."

Thirteen staff members or 76% of those surveyed stated that both satisfaction and productivity improved for students.

Twelve of those surveyed (70%) said that satisfaction of the staff increased, while 7 or 41% said that staff productivity changed.
Twelve of the surveyed staff or 70% said that the staff responded positively to the school's efforts and 4 or 23% said that the staff response was neutral. One person did not respond to the question.

All comments and responses from the staff indicated positive gains in the school.

Smith School

**Interview Responses.** The principal stated that the outcomes had definitely been positive. There were fewer discipline referrals and the type of incidents were less severe. There was also a perception that there was less vandalism and lower suspension rates. The principal also felt that the staff was now pulling in a common direction.

A teacher said that substitutes were now willing to work in the building and he had noticed fewer fights.

A second staff member said that students now knew what was expected and were more aware of not being able to participate in school functions if they broke school rules. She also said "students are much more orderly."

**Staff Questionnaire Responses.** Twelve of the 14 surveyed staff members (85%) made positive comments concerning improved relationships in the school. Examples are cited below.

"Students are more aware of their worth, more rapport between staff and students.
"Self esteem improved."
"Improved attitude by students, happier students."
"Feeling exist that students are cared for."
"Specific students are identified and cared for by specific staff."
"Students go out of their way to please if they know you care for them."
"Closer interaction between home and school."

Five of the surveyed staff (35%) made comments indicating that productivity in the school had improved. Examples are cited below.

"More time on task by staff and students."
"Grades improved."
"Some student improvement, grades are going up and student output has increased."

Seven of those surveyed (50%) indicated that staff satisfaction and productivity improved and 9 or 64% indicated that students were more satisfied. Eleven of the surveyed staff (78%) indicated that student productivity had improved.

Of the 14 persons surveyed, 11 or 78% said that the staff response to the school's efforts were positive and 3 or 21% indicated that the staff response was neutral.

There was no indication that any negative effects occurred from the school's efforts.

**Differences - Formal and Informal Approach**

All four schools reported both increases in satisfaction and productivity. In the schools using a formal approach a larger percent of the surveyed staff stated that their colleagues responded positively to the climate improvement process. However, none of the schools reported that the staffs responded negatively to the efforts. All four schools reported positive outcomes from their climate improvement efforts and any specific outcome differences between schools appeared to be related to different activities in the schools rather than the approach used to improve climate.
Question 6. What obstacles were encountered in the climate improvement process?

Source of Data: Staff Questionnaire

Responses to this question are grouped into one of four of the following categories. Table 6 summarizes all responses.

1. Lack of time.

2. Communication, too much involvement - too many people interacting.

3. Lack of staff, student or parent "buy-in."

4. Lack of resources.

Kline School Comments.

Tendency to address more problems than could be handled.
Trying to involve everyone positively.
Lack of parental involvement.
There was some initial confusion on the role of the steering committee.
Lack of time to meet on task forces.
Failure of students to buy in.
Communication, some apathy on the part of a few teachers.
Decreased teacher enthusiasm because the students are slow to respond.
Ninety-nine percent of the work is done by the staff.

Jones School Comments.

Staff feel they have input, but many will not speak up.
Length of time for change to occur, disappointment with not getting faster results.
Apathy on the part of some staff.
After a period of time staff gets tired of process.
Staff got tired due to lack of positive feedback on projects.
Students do not show appreciation.
The people from the State did not listen to several negative things about the program. This alienated some staff who would be for climate improvement.
Negative attitudes, lack of vision, large paper load.
Table 6

Summary of Obstacles*

<table>
<thead>
<tr>
<th>Category</th>
<th>Kline N=11</th>
<th>Jones N=8</th>
<th>Main N=17</th>
<th>Smith N=14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of Time</td>
<td>5 (45%)</td>
<td>3 (37%)</td>
<td>2 (11%)</td>
<td>2 (14%)</td>
</tr>
<tr>
<td>Communication</td>
<td>4 (36%)</td>
<td>5 (62%)</td>
<td>1 (05%)</td>
<td>2 (14%)</td>
</tr>
<tr>
<td>Lack of student/parent &quot;buy-in&quot;</td>
<td>6 (54%)</td>
<td>4 (50%)</td>
<td>5 (29%)</td>
<td>2 (14%)</td>
</tr>
<tr>
<td>Lack of resources</td>
<td>1 (09%)</td>
<td>0 (00%)</td>
<td>1 (05%)</td>
<td>1 (07%)</td>
</tr>
</tbody>
</table>

*Responses indicate number of staff who completed the staff questionnaire who made comments in the designated category.
Main School Comments.

Too little time and requires a lot of energy.
Small percent of staff reluctant to accept change.
Too many objectives forced on staff.
Some staff believe that 'invitational learning' is artificial.
Apathy on the part of some staff and students.
Need more parent participation.
Money to continue the programs.

Smith School Comments.

Negative student attitude.
More students than desired.
Getting immediate feedback, results.
Communication.
No clerical assistance.
Stretching self too thin.
Self-image of students.

Differences - Formal and Informal Approach. All four schools reported that obstacles occurred regardless of the approach used. In the two schools using a formal approach to improve climate, a larger percent of the staff surveyed reported that time was a problem. Common obstacles occurred in all four schools regardless of the approach used. Obstacles encountered were insufficient time, lack of student/parent "buy-in," difficulties in communication and small groups of staff who did not support the program. While all of these obstacles were present in each school, the percent of staff reporting the obstacles did vary and schools using a formal approach did have a larger percent of their staff reporting the common obstacles (Reference Table 6).

Question 7. Were the school's efforts successful and how was success determined?

Source of Data: Interview, Staff Questionnaire

Responses to interview questions are reported to answer this question.
Responses to the staff questionnaire are summarized in Table 7.

**Kline School Interview Responses.** The principal felt that the program had been successful and referred to increased achievement on standardized achievement tests less severe student offenses, (38 students accounted for the 160 suspensions in 1983-84). He further stated that "When you measure buildings, you have to depend on what substitutes say . . . . They want to come here. At one time that was not the case."

A teacher stated that

People really see what has been done, . . . They feel good about their accomplishments, . . . and I will tell you something else that's great - the fact that we get a lot of compliments from substitutes who come in the building, or people from outside the building that can see the difference from the past couple years - and that really makes you want to work a little harder - that does work.

**Jones School Interview Responses.** The principal felt that the program had been successful and stated that the goals had been attained and that "the staff get along better with each other."

A staff member stated "yes," the program had been a success and she could see a "positive behavioral change in the building."

**Main School Interview Responses.** The principal felt that the program had been successful and reported rising achievement, more time on task and decreasing student discipline problems. A teacher stated that "success for me is the measure of the positive atmosphere that you feel, . . . I think anybody can feel, when they walk into the school."

**Smith School Interview Response.** The principal stated that she felt the program had been successful because "we have a happy student body . . . . a well behaved student body."
Table 7
Summary of Staff Questionnaire

<table>
<thead>
<tr>
<th>Question</th>
<th>Kline (11)</th>
<th>Jones (8)</th>
<th>Main (17)</th>
<th>Smith (14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Was the concept of school climate understood by the staff?</td>
<td>4.00</td>
<td>3.87</td>
<td>3.82</td>
<td>3.71</td>
</tr>
<tr>
<td>2. Were the goals of the program identified?</td>
<td>3.80</td>
<td>4.00</td>
<td>3.80</td>
<td>3.71</td>
</tr>
<tr>
<td>3. Was the program successful?</td>
<td>3.30</td>
<td>3.62</td>
<td>3.29</td>
<td>3.42</td>
</tr>
<tr>
<td>4. Did the school climate change?</td>
<td>3.36</td>
<td>3.50</td>
<td>3.61</td>
<td>3.07</td>
</tr>
<tr>
<td>5. Did satisfaction change?</td>
<td>3.00</td>
<td>3.10</td>
<td>3.62</td>
<td>3.07</td>
</tr>
<tr>
<td>6. Did productivity change?</td>
<td>3.36</td>
<td>3.37</td>
<td>3.43</td>
<td>3.28</td>
</tr>
</tbody>
</table>

Responses were provided by staff members who completed the staff questionnaire.

Response Key:

No = 1
Little = 2
Some = 3
Yes = 4
A staff member said

Our attendance is better, there's been a reduction in the drop-outs, I think academically our students are doing better • • • yes, I consider this the best behaved student body in the city. I teach five classes, 150 students and I have had to write up only two students this year."

Perhaps the best indicator of the success of program used in Smith School was the fact that their concept had been adopted by the school district and formalized under the program called "Share and Care."

Responses From Questionnaire for Interviewed Staff and Staff Questionnaire

Each staff member interviewed also completed a questionnaire which asked interviewed staff if the climate in the school changed and did either satisfaction or productivity change. Responses are provided in Table 9. The responses by the staff to the question "Was the program successful?" are reported in Table 8.

The staff who were interviewed also provided comments to the question concerning which groups in the school showed a change in either satisfaction or productivity. In summary, there was agreement in all schools that the primary groups affected were staff and students.

Differences - Formal and Informal Approach. A comparison of Tables 7 and 9, shows that the mean scores as reported by the principals and interviewees were slightly higher than the general staff responses at both Jones School and Smith School. The differences in the mean scores ranged from .50 to .93. However, the mean scores to all questions regarding climate improvement and changes in satisfaction and productivity were all in the positive range. The reports from the
Table 8

Responses to question "Was the program successful?"*

<table>
<thead>
<tr>
<th>School</th>
<th>N</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kline</td>
<td>11</td>
<td>3.30</td>
</tr>
<tr>
<td>Jones</td>
<td>8</td>
<td>3.62</td>
</tr>
<tr>
<td>Main</td>
<td>17</td>
<td>3.29</td>
</tr>
<tr>
<td>Smith</td>
<td>14</td>
<td>3.42</td>
</tr>
</tbody>
</table>

*Responses were provided by staff members who completed the staff questionnaire

Response Key

No = 1
Little = 2
Same = 3
Yes = 4
Table 9
Questionnaire by Interviewed Staff*

N = 3

<table>
<thead>
<tr>
<th>School:</th>
<th>Kline</th>
<th>Jones</th>
<th>Main</th>
<th>Smith</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Did the school climate</td>
<td>3.00</td>
<td>4.00</td>
<td>3.60</td>
<td>4.00</td>
</tr>
<tr>
<td>change?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Did satisfaction change?</td>
<td>3.30</td>
<td>4.00</td>
<td>3.30</td>
<td>4.00</td>
</tr>
<tr>
<td>3. Did productivity change?</td>
<td>3.00</td>
<td>4.00</td>
<td>3.30</td>
<td>4.00</td>
</tr>
</tbody>
</table>

*Responses were provided by the principal and two teachers selected by the principal who were interviewed.

Scoring Scale

No = 1
Little = 2
Some = 3
Yes = 4
principal and interviewees at Main School were most consistent with the
staff perception of the climate improvement effort. The Principal and
interviewed staff at Kline School rated the climate changes as positive
but their view of the effort was more conservative than that of the
general staff. The mean score of the staff's response was .33 to 1.0
higher than that of the interviewed staff.

Question 7. Were the school's efforts successful
and how was success determined?

Data Source Summary of School Data Form
and Climate Condition Checklist

The data collected for each school with the "Summary of School Data
Form" is reported in Appendix E. Additional data or climate change were
collected with the climate condition checklist. Both of these
instruments provide additional data to answer research question 7.

Summary of School Data Form.

Kline School: The data reflect an increase in achievement scores
over the three year period by approximately five to ten percentile
points. The drop-out rate decreased by 85% from 21 students in 1980-81
to three students in 1983-84. There was little change in student
attendance which was 89% in 1983-84.

Jones School: There was little change in student achievement over
the three year period. Student attendance remained the same at 93% and
the drop-out rate was not available. The number of suspensions showed
little change.

Main School: Student achievement showed a slight increase over the
three years, but when the achievement scores for the sixth grade are
followed for a three year period and the 1980-81 achievement scores are compared to the 1982-83 eighth grade scores; (same class three years later), there was a decrease of 5 percentile points. The drop-out rate decreased from 4.1% in 1980-81 to 3.2% in 1983-84. However, there was an unexplained reduction in the drop-out rate to 1.3% in 1981-82. Student attendance remained at 94%. The incidents of vandalism declined from 5 to 2 between 1980-81 and 1983-84. Disciplinary referrals declined as follows: Sixth grade from 1.3 to .6 per day, Seventh grade declined from 3.5 to 2.8 per day and in eighth grade the decline was 2.6 per day to 2.4 per day.

Smith School: Achievement scores reflected an average percentile increase of 6.9% in all three grades (7, 8 & 9) between 1981 and 1983. The drop out rate declined from 28 students in 1980-81 to 11 students in 1983-84. Attendance increased from 90% in 1980-81 to 95% in 1983-84 and discipline referrals declined from 183 to 98 in the same period of time.

Summary of data collected from Summary of School Data Form:
Caution is suggested in making school comparisons with the data provided in the Summary of School Data Form due to the different manner in which these school data were maintained in each school. Kline School had the largest increase in student achievement and that was an area of emphasis for the school. The drop out rate also decreased as did the type of disciplinary referrals according to the principal. Little change occurred in the data collected for Jones School. This is probably attributed to the fact that the school placed initial emphasis on staff
relationships and began to address student achievement in 1983-84. In Main School there appears to be little overall change when the achievement data for the sixth grade class are followed for three years and achievement of the same group of students (sixth graders) is compared to the achievement when those students were eighth graders. The number of disciplinary referrals did decline over the three year period.

Smith School was the only school to show improvement in all areas during the three year period.

**Climate Condition Checklist.** Tables 10 and 11 provide a summary of the reported changes in climate determinants as reported by the principal and the two interviewed teachers in all four schools by use of the Climate Condition Checklist.

The sample of staff completing this instrument was very small—three staff members per school. Even so, the interviewees provided valuable information to ascertain whether the staff perceived any change in school climate for either staff or students.

**Climate Condition Checklist.** The degree of perceived climate change for students and staff is reported in Table 10 and Table 11. An analysis of this data is provided below for each school.

Kline School: The greatest reported change occurred in process determinants for staff (mean = 3.18). This is an area that received much attention since the Pennsylvania model attempted to improve the processes used by staffs to address school needs. The second area of greatest reported change occurred for staff in the area of "program
Table 10

N=3

Mean Changes in Climate Determinants for Students
As Reported by Interviewed Staff

<table>
<thead>
<tr>
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<tr>
<td>Kline School</td>
<td>2.54</td>
<td>2.71</td>
<td>2.26</td>
</tr>
<tr>
<td>Jones School</td>
<td>2.86</td>
<td>3.23</td>
<td>2.66</td>
</tr>
<tr>
<td>Main School</td>
<td>3.27</td>
<td>3.15</td>
<td>2.93</td>
</tr>
<tr>
<td>Smith School</td>
<td>3.75</td>
<td>3.75</td>
<td>3.60</td>
</tr>
</tbody>
</table>
### Table 11

N=3

Mean Changes in Climate Determinants for Staff
As Reported by Interviewed Staff

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Kline School</td>
<td>2.68</td>
<td>3.18</td>
<td>2.91</td>
</tr>
<tr>
<td>Jones School</td>
<td>3.63</td>
<td>3.72</td>
<td>3.78</td>
</tr>
<tr>
<td>Main School</td>
<td>3.27</td>
<td>3.06</td>
<td>2.95</td>
</tr>
<tr>
<td>Smith School</td>
<td>3.50</td>
<td>3.90</td>
<td>3.42</td>
</tr>
</tbody>
</table>
determinants" (mean = 2.91). This area relates closely to the major school goal of improving student academic achievement. Some change was reported to have occurred for both staff and students in the area of "general climate."

Jones School: The staff reported that they addressed 9 of the general climate determinants for a reported mean change of 2.86 for students and 3.63 for staff. The major focus in the school's effort was to improve staff relationships and general climate factors relate closely with staff relationships, i.e., caring, trust, morale, rewards.

Areas reported having the greatest change for staff was in the area of process determinants (3.72). This area was heavily emphasized in the training program and was not necessarily an area of emphasis in the school's goals: setting and clarifying goals, feedback systems, consensus building process, improved communications.

Program determinants for staff reflected the highest degree of change and this area was emphasized in staff training by the central office staff.

Main School: The staff reported that emphasis was placed on general climate conditions and less emphasis was placed on program determinants. (Only 8 of 18 program conditions were addressed while 90% of the general climate areas were addressed.) This is perhaps due to the fact that the school used an informal approach to improve school climate and a formalized definition of climate was not established. In reviewing the mean changes of climate determinants at Gill School there appears to be fairly even change across all areas.
Smith School: Of the schools included in the study, this school had the greatest reported overall mean change in all three climate areas. This school also addressed the fewest climate conditions and had less consistency with the definition of school climate used in this study and cited in the literature.

The school staff reported that process conditions had the greatest change (mean of 3.90). Areas emphasized by the school included communication, personal support system for students and feedback systems for both students and staff.

**Summary Success of the Program Differences – Formal and Informal Approach**

All four schools reported that their climate program had been successful regardless of the approach used. The schools using a formal approach did use a more formalized system of program evaluation. The evaluation system consisted of pre-post staff surveys of change in climate conditions and pre-post review of school based data on suspensions, drop outs, achievement and vandalism.

The schools using an informal approach did not use any formal evaluation system and relied on staff interaction and perception to determined success of the program. The interviewed staff in the schools using an informal approach did report that they wished that they had used a more formalized evaluation system.

The staff in all four schools did report feeling positively about the school's climate improvement efforts. The only difference found in this study was in school achievement data. Student achievement did
increase in two schools over the three year period; however, one school where the increase in achievement occurred used a formal approach to improve climate (Kline School) and the second school where achievement improved used an informal approach (Smith School).

**Analysis of Climate Determinants**

The interviewed staff who completed the Climate Condition Checklist provided additional data to determine if each school's operational definition of climate matched the definition used in this study. The data also reflect which climate conditions were identified as school needs, which were addressed and what if any conditions changed as a result of the school's climate improvement effort.

The climate determinants used in this study were frequently used in each school's definition of school climate. Appendix F shows the percentage of agreement between the climate determinants used to define climate for this study and the climate determinants used by each school to define climate. Appendix G, provides data on the number of general climate determinants addressed while Appendices H and I provide these data for Process Determinants and Program Determinants respectively.

**Question 8.** What recommendations can be made to the schools studied and to other schools considering school climate improvement efforts? Data Source - Structured Interview.

**Recommendations to Other Schools**

**Kline School.**

Principal: ••• Learn and follow a good solid process. Don't just jump into something haphazardly, make sure your leadership is well trained.
Teacher: There will always be people who will disagree, all the time, because it is extra work and no-one wants extra work, but if there are a couple who can hold it together, that is what it takes.

Teacher: They have to know . . . and stick with the process. Also keep the steering committee to a reasonable size. Another school in the district has 16 people on the steering committee and they accomplish nothing . . . . I think too that the principal should be approached first and have the program explained to him very thoroughly. They are so used to having firm control and being in charge that's a scary thing if they don't understand the process.

Jones School.

Principal: The first thing is commitment. Commitment from the central office . . . The program takes time and we not a very generous donation of time from the central office. Faculty commitment must be determined before you waste one minute.

Teacher: This kind of procedure works. If you have a problem where your climate is deteriorating, get a management specialist in. Really, someone who will make you think positively about yourself, positive about kids, someone to help you to get the kids thinking positively about themselves.

Main School.

Principal: If I were to do it over I would make a greater needs assessment to document where we are . . . so that results could be measured.

Teacher: So much . . . depends on the makeup of the staff. In order to be successful, the staff must be willing to be positive toward kids and to have a positive attitude about themselves, their school and about what they are doing . . . . A lot of it is a mental attitude that must be transmitted to the students. Get a good staff . . . dedicated people.

Teacher: I think we have a good model and I would offer it (to a school).

Smith School.

Principal: Try to get everyone to work together in terms of selling the idea and you have got to be good at selling, because you can fall flat on your face if you can not get
everyone to buy into it (the program). You are never going to get everybody, but basically you need to get most people involved. . . . You need to give them a stake in it. . . . Try to involve them in such a way that they have a stake in what is going on.

Teacher: First of all someone who knows our program should present it and then, . . . give the strengths and weaknesses. Then develop it for a total faculty and then select groups . . . to work on different things . . . have a comprehensive program.

Teacher: I would suggest having the staff break up in small groups and sort of have a gripe session, maybe not an administrator as a leader in each group, but guidance oriented type of personality . . . . Have the staff complete a questionnaire and distribute the results to the entire staff. Then have a brainstorming session to address issues . . . with groups of teachers, students, and maybe parents.

Recommendations to Schools Studied by Staff Interviewed

Kline School.

Principal: More training up front with a larger majority of staff so they feel more comfortable with leadership roles . . . . The steering committee possibly took too much of the authority at the beginning . . . . I don't see much that I would change.

Teacher: I like the process, . . . some people don't . . . They don't feel it is democratic even though it is supposed to be . . . because what ever their suggestion was it didn't quite make it.

The teacher felt that the last goal setting session did not identify the most important goals for the school, but said that in the fall of 1984 the faculty would reassess the goals and they could be changed at that time.

Teacher: More time must be allowed for task forces to meet.

Jones School.

Principal: I think we are going to have to re-commit (ourselves) to keep the process. . . . We can't go back to the old ways.
Teacher: More time, more money to have the staff meet at the end of school.

Teacher: More problem solving with the kids and the parents, give them the process.

Main School.

Principal: I want to see the students behave more maturely, more responsible. I don't think that academics is enjoying the prestigious place that it should.

Teacher: More time, more staff involvement.

Teacher: More things for the staff. I don't mean more meetings, we have been meeting to death the last few years. I mean things for the staff to get excited about, maybe another retreat, more social hours.

More kids need to participate in the student leadership programs. I wish more time could be spent on the kids who need it.

Smith School.

Principal: I want to keep it moving and I want to have more involvement with the parents. More instructional changes. Heavy on instruction and beefing up the program. We are increasing the science requirement and expanding to a seven period day.

Teacher: An evaluation of this year and what has been done over the years to see if there are any unidentified problems.

Teacher: I think we need to keep it going and to keep our enthusiasm up. We need easier access to parents without tying up the (telephone) lines all day.

Differences - Formal and Informal Approach. Recommendations to other schools were fairly consistent regardless of approach used. Most agreed that climate improvement programs take time and commitment. Any school planning a climate improvement effort can expect some staff to not accept the process but the majority of the staff need to support the effort. Some of the staff in the informal schools recommended using
some of the processes used in the more formal program; i.e., formal assessment and evaluation and a staff interaction process such as brainstorming.

Recommendations to the schools studied from the interviewed staff did vary across all four schools and were related to the needs of the particular school and not to the approach used.

Summary

Chapter 4 reported data which address the eight research questions proposed for this study. Statistical data were presented for each school. The data generally reflected that the school's staff felt positively about their efforts and that positive school change was perceived by the school's staff.
CHAPTER 5
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study focused on the subject of school climate improvement. Following a review of the literature on effective schools and school climate, the researcher concluded that the literature on effective schools clearly identified school climate as an important consideration in improving schools. In addition the literature suggested that studies were needed to determine how schools might improve climate and to identify both the effects and obstacles of such efforts.

This study distinguished between two approaches to school climate improvement which were classified as formal and informal efforts. The formal effort was described as a process that consisted of a prescribed set of steps or actions and a pre-planned structure which was developed by someone outside the school. The informal effort was described as an unsystematic approach where the principal of the school or another significant member of the school staff established a focus on climate and proceeded to identify ways to improve the school.

A descriptive field study research approach was used to conduct the study. The author identified and visited two schools which had utilized a formal approach to improve climate and two schools which had utilized an informal approach. Five instruments were developed to collect data on the schools' climate improvement efforts. The instruments included: Structured Interview Guide, Questionnaire
for Interviewed Staff, Staff Questionnaire, Checklist of Climate Conditions and School Data Form. The "Staff Questionnaire" was completed by 20% of the school's instructional staff, the "School Data Form" was completed by the school principal and the remaining three instruments were completed by the principal and two teachers on the school staff who were identified by the principal.

Findings of the Study

Through the use of the five instruments, data were collected to answer the eight specific research questions. Each research question is stated below with a summary of the findings related to each question.

Question 1. Why did the school undertake a school climate improvement effort?

Three of the four schools studied undertook a school climate improvement program because of student related concerns: truancy, discipline and achievement. One school, which used the formal approach to improve school climate, participated in the program to improve staff relations but ultimately desired to improve their program for students. In summary, all four schools implemented climate improvement efforts to improve the school's program for students and the choice of using a formal or an informal approach to improve school climate was unrelated to the school's stated motivation for addressing climate.
Question 2. How were climate needs determined?

The two schools that used a formal approach to improve climate implemented a structured group process involving staff to identify and select priority needs. One school using an informal approach invited staff members to participate in a training program on invitational learning and from that group a committee of interested staff met with the principal to identify school needs. In the second school using an informal approach to improve climate the principal held numerous meetings with staff, students and parents to identify school concerns. A school staff advisory group was formed to determine which needs were to be addressed.

In summary, the two schools which used a formal approach to improve school climate used an identical process to identify needs. The process used in the formal approach differed from the one used by schools using an informal approach to improve climate. The two schools that used an informal approach also used different processes to identify needs. Two common elements across all four schools were (1) schools used a staff committee to provide overall leadership and support to the school principal in guiding the climate improvement effort and (2) the needs of each school were internally identified.

Question 3. What were the goals of the school's climate improvement effort?

All four schools had established goals. Each school focused on improving the image of the school, improving the learning environment for students and improving relationships in the school among staff and students.
Question 4. What process, steps, or actions were taken to improve the school's climate?

The schools that used a formal approach followed a specific organizational plan to provide staff leadership to identify school concerns. Specifically there was a formal staff steering committee and staff task forces were organized to address issues. The length of staff membership on the school steering committee was established and membership rotated. Even the system for identifying school priorities was formalized through a voting system. The schools that used an informal system did not follow an established structure, but they did form a staff steering or advisory committee.

The types of activities used in all four schools to improve school climate were very similar in that they were all designed to promote positive aspects in the school. Examples of such activities included providing rewards and recognition and developing attractive physical settings. Another common element was that in all four schools the ideas for promoting positive aspects of the school were created and implemented by the teachers in the school.

Question 5. What were the effects or outcomes of the climate improvement process?

All four schools reported both increases in satisfaction and productivity among staff and students. In the schools using a formal approach a larger percentage of the surveyed staff stated that their colleagues responded positively to the climate improvement process. However, none of the schools reported that the staffs responded
negatively to the efforts. All four schools reported positive outcomes from their climate improvement efforts and any specific outcome differences between schools appeared to be related to different activities in the schools rather than the approach used to improve climate. Specific activities which were completed were described in Chapter Four of this study. Improvements in attendance and drop out rates were negligible. Some improvement in achievement test scores occurred in two of the schools, but the two schools where achievement improved used different approaches to address school climate.

**Question 6. What obstacles were encountered in the climate improvement process?**

All four schools reported that common obstacles occurred regardless of the approach used. Obstacles encountered were insufficient time, lack of student/parent "buy-in," difficulties in communication and small groups of staff who did not support the program. While all of these obstacles were present in each school, the percentage of staff reporting the obstacles did vary and schools using a formal approach did have a larger percentage of their staff reporting common obstacles (Reference Table 6). For example, in the two schools using a formal approach to improve climate, a larger percentage of the staff surveyed reported that time was a problem.

**Question 7. Were the school's efforts successful and how was success determined?**

All four schools reported that their climate program had been successful regardless of the approach used. The schools using
a formal approach did use a more formalized system of program evaluation. The evaluation system consisted of pre-post staff surveys of change in climate conditions and pre-post review of school based data on suspensions, drop outs, achievement and vandalism.

The schools using an informal approach did not use any formal evaluation system and relied on staff interaction and perception to determine the success of the program. The interviewed staff in the schools using an informal approach did report that a more formalized evaluation system would have been helpful.

The staff in all four schools did report feeling positively about the school's climate improvement efforts. The only concrete difference found in this study was in school achievement data. Student achievement did increase in two schools over the three year period; however, one school where the increase occurred used a formal approach to improve climate (Kline School) and the second school where achievement improved used an informal approach (Smith School).

**Question 8. What recommendations can be made to the schools studied and to other schools considering school climate improvement efforts?**

Recommendations to other schools were fairly consistent regardless of approach used. Most agreed that climate improvement programs take time and commitment. Any school planning a climate improvement effort can expect some staff to not accept the process but the majority of the staff need to support the effort. Some of the staff in the schools using the informal approach recommended using some of the processes used in the more formal programs; i.e., formal assessment and evaluation and a staff interaction process such as brainstorming.
Recommendations to the schools studied from the interviewed staff seemed to relate to the needs of the particular school rather than to the approach used.

Summary of Findings

The results of this study indicated that positive results were obtained from all four schools' efforts to improve their climate regardless of the approach used. Positive results could have been a result of "the halo affect" that may accompany a new program. This study did not attempt to determine the degree that such an effect was present.

All schools reported that similar needs motivated their initial interest in implementing a school climate improvement process. Specifically, to some degree, all four schools had concerns with truancy, discipline, achievement and relationships among staff and students. The goals of all four schools focused on the same general goal areas; i.e., school image, relationships and behavioral/learning environment. Similar activities were undertaken by all four schools to address school needs and the approach used to improve climate did not result in any major differences in school activities chosen to improve climate. In all cases the schools implemented activities which emphasized positive accomplishments and relationships; i.e., rewards, recognition, clarity of expectations, increased positive communication.

In all four schools the staffs perceived that their efforts had been successful and they felt positively about their efforts. The surveyed staffs reported that the majority of their colleagues
responded positively to the climate efforts and similar obstacles occurred in each school; specifically, lack of time, lack of parent/student "buy-in," communication difficulties and reluctance of a minority of staff to support the program. The schools which used a formal approach had a larger percentage of the staff reporting common obstacles but the same effects and obstacles were reported in all four schools regardless of the approach used.

Some differences did exist between schools using the formal and the informal approach. The schools using a formal approach employed a structured needs assessment and evaluation program and they also applied a more structured organizational format to their process. Specifically, a structured brainstorming and voting system was used to identify needs in schools using a formal approach and the organization of the steering committee was more formalized with a structured process for rotating membership. However, all four schools utilized a staff leadership committee and task forces composed of volunteer staff to address school needs. The interviewed staffs in the schools which employed an informal approach suggested that a more formalized process of identifying needs and evaluating the school's efforts be employed.

Similar recommendations for implementing school climate efforts were made from all four schools and the recommendations did not vary between schools which used either a formal or an informal approach. Specific recommendations included the following:

1. The principal or school climate leader should have some clear plan for implementing the climate improvement effort.
2. The majority of the staff, probably two-thirds or more, need to support the efforts.

3. Persons implementing school climate improvement processes can expect some staff to resist the effort and should expect this obstacle to occur.

4. Incentives and enhancements will be needed to maintain staff momentum because positive responses from either students or parents were slow to occur in the schools that were studied even when a major effort was made to involve students and parents.

5. There must be strong commitment to school improvement from the principal and most of the school staff because the efforts will require increased time. Frustrations and set-backs can also be expected.

6. Climate improvement efforts should emphasize the positive and the involved staff must be able to look at students positively.

7. The use of a staff steering committee and involvement of staff in identifying needs and planning changes were common elements in the programs used in all four schools included in this study. This involvement process seemed to be a primary factor that contributed to the staff's positive feelings toward their school's climate improvement efforts.

Conclusions

After completing the study of four schools' efforts to implement either a formal or an informal approach to school climate improvement the following conclusions are offered.
1. Either a formal or an informal approach to school climate improvement can be successful in improving the learning environment of a school.

2. School staff training on the subject of school climate improvement was not provided in all of the schools studied; therefore, training on the topic of climate did not seem to be a critical element in determining success of climate improvement efforts. Such training may be needed in some schools, but it was not essential to the program's success in all the schools included in this study.

3. Developing an operational definition of climate could not be shown to be a major factor in the success of the efforts of the schools included in this study.

4. A positive approach to improving climate was successful in the schools studied, even when the school had serious problems in student behavior and achievement.

5. Obstacles with time, resistance and slow student/parent response were experienced by the schools included in this study and should be anticipated obstacles with similar efforts.

6. Other supportive interventions in addition to the climate improvement effort were applied to the schools under study. As an example additional staff training was provided on instructional issues such as "time on task" and "teaching/learning styles."

7. The staffs in the schools included in this study identified their own needs and developed their own solutions to meet their needs. Needs and solutions were not identified or imposed from persons outside the school.
Summary Reflections

The literature on effective schools and the recent national studies of schooling conducted by Goodlad, Boyer and the Commission on Excellence all state that our schools are in need of reform. The literature on school effectiveness cites many characteristics of good schools and from a review of this literature a list of common characteristics can even be listed. Such a list usually includes the following: strong instructional leadership, an environment conducive to learning, emphasis on the basic skills and instructional practices, high expectations and an ongoing evaluation and monitoring system. Even with the excellent literature on effective schools there is a need for additional information which both describes how to improve schools and identifies the effects and obstacles of such improvement processes.

All too often past efforts to improve schools have focused primarily on product variables; e.g., achievement results, quantity of time on task, teaching techniques, homework, attendance, dropout rates, etc. Granted these are important indicators of school success, but other variables are also important. These other variables relate to process and structure variables. Frequently these process and structural variables receive little attention (Epstein, 1982; Brookover, 1981; Kelly, 1980). The process variables include such factors as how people in a school feel and relate to one another. The literature on effective schools identifies several important process variables which are included in the
characteristics of effective schools. They include school climate, high expectations, and emphasis on instructional processes. Structural variables refer to the way that schools are organized and how the school uses time and space. Examples of structural variables are departmentalization, blocking, alternative schooling, etc. Granted, studies have been conducted on many of these variables but few studies have focused on the interrelationships of all three variables; i.e., product, process and structure.

Concerning process variables Goodlad states, "The interactions of individuals and the other elements in and around schools are extremely complicated and strategies . . . that ignore these interactions and the rationales governing them are unlikely to have more than minimal impact on the culture of the school" (1983:466).

In reflecting on this study it is suggested that there were no differences in the outcomes of the schools studied regardless of the approach to improve school climate because basically all four schools focused on the same objectives, that is, to improve relationships and attitudes toward learning. Additionally there were no differences found in the schools because the staffs were involved in the school's efforts to change and the activities used to develop positive feelings in each school were similar.

Since there were no major differences in the outcomes obtained and the obstacles encountered regardless of the approach used to improve climate, attention is needed on what should next be considered in research efforts to help school practitioners to reform schools.
Again, returning to the literature, Goodlad says that the best and perhaps the only way to reform schools is at the school level (1983:466-470). Goodlad and others (Cusick 1973, Odden 1983) are also saying that schools are indeed complex and that attempts to change one aspect of the school without understanding and considering the interrelationships of the many factors that make up a school will result in any change effort being less effective.

In order for schools to improve educators need to understand the interrelationships among process, product and structural variables. During the sixties and seventies there was a strong research effort to identify the best approach or the best materials for teaching. The basic result of all this effort concluded that there was no single best approach or material for successful teaching. Educators are realizing that the selection of the material or the approach depends on the assessed needs, skills and interest of the learner. In the eighties attention is beginning to be focused on school reform with a similar effort to identify the best ways to improve schools. Many are also asking how to improve a school's climate. Such efforts to study the isolated ways of school reform without recognizing the differences and complexities of schooling will only result in inappropriate applications of research.

Cusick (1973), Kelly (1980), Epstein (1981) and Brookover (1982) among others have called attention to the importance of process variables in studying schools. Others (Cusick, Odden and Goodlad) have called attention to a third dimension of schooling, structure. Researchers have studied how to increase time on a task or how to
group students, but have such studies of school structure considered the interrelationships of product, process and structure?

Cusick (1973) began to refer to the need for structural changes when he said that "schools can unwittingly tip the balance away from learning," classes are dominated by teachers, student attempts to express personal concerns are frequently ignored, schools concentrate on controlling students. This need for control is clearly shown when one looks at the regimentation of a school, particularly a secondary school, with its day divided into even modules of time and students are rotated among teachers to receive "words of knowledge."

With the recommendations of the national studies of schooling there is a renewed focus on standards and increased requirements. This emphasis on quantity will no doubt be accepted by the academically successful students who find success in school, but will it help or hinder the students who do not find learning easy or who are bright enough to recognize that there are other more important things to learning or better ways to learn?

It is proposed that a focus on any one dimension of schooling, methods, materials, relationships (product and process issues) and structure, without a focus on the whole will have limited results. As Odden states the research on effective schools has "made it clear that the individual school is the proper unit for educational renewal. Centralized standards and requirements may be necessary, but so is decentralized implementation. This simultaneous tight and loose approach is crucial to the success of any reform strategy" (1983:312).
What may be needed is not only a broader conceptual framework for viewing schools, but also increased flexibility for individual schools to experiment with not only the typical issues of methods and materials, but also with the process and structural issues that now so tightly restrain innovation in our schools. After all, if relationships and environment are important, then flexible arrangements in the use of time and space in schools should be studied to allow individual schools to seek better ways to improve their programs for students. It is indeed difficult, if not impossible, to develop a positive learning relationship with 150 students where the day is divided into six or seven units of less than 60 minutes each.

In summary, this study attempted to describe different schools' efforts to improve school climate. The schools included in this study wanted to help their students to feel better about their schools, their learning and themselves. To accomplish these goals the schools began programs that in essence gave positive reinforcement to students and staff. The school's logic seemed to be - if the students and staff feel positively toward school, then productivity will increase. The schools included in this study focused primarily on process variables and little attention was placed on structural variables. Additionally none of the schools focused on the inter-relationships of all three areas, product, process and structure.

The Pennsylvania model used in this study attempted to develop within a school's staff the skills that they needed to continue to address their own needs; that is, to be self-renewing. This seems to
be a logical approach especially if one accepts Goodlad's perspective that developing the capacity of each school to change and improve may not only be the best but it may be the only way to reform education (Goodlad, 1984:19, 34-35).

If schools are to reform they need time to consider not only methods and materials that are suitable for students, but they need time, training and support to seek ways to alter the process and structure that has traditionally constrained school's efforts to meet the needs and interests of students. Granted such an effort can exceed the costs which society is willing to pay for education, but as educators search for ways to reform schooling they need to focus on individual schools which are willing to look at all three concepts of product, process and structure.

The Solution

This study has emphasized the complexity of school climate and it has further called for an even more complex focus on schooling that includes a focus on product, process and structural changes in schooling. It is acknowledged that the literature does not simply identify a clean set of characteristics of effective schools and, likewise, there is no single set of conditions that even describe climate. Each school is different and the personalities of the individuals in the school influence these differences. Therefore, climate conditions will vary and the need to address different climate dimensions will vary from school to school.
Even more complex than school climate is the notion of developing a broader construct of school reform that considers all the variables at play in a school. Such consideration is indeed complicated and difficult to consider and study. But, research must continue and such research, like this study, will continue to assess small components of schooling. The more important consideration is to recognize the limits of studies of schooling and to view the findings of such research within the total complexity of schools. Within this total construct of schooling other questions may begin to evolve. Among these are the following:

1. What other ways might exist to improve a school's climate and do these other efforts consider all aspects of the school, i.e. product, process and structure?

2. How do different structural changes affect climate? Simply rearranging space, location of people and time will force new relationships and questions remain regarding how such changes will affect relationships and productivity.

3. What type of training and support will help a school staff to understand and implement school change?

4. To what extent are school staffs even aware of school climate and the potential relationships among process, product and structural changes?

5. How do different efforts by staff to change process and structural variables affect student attitudes toward schooling?

6. Do certain structural and process changes affect different groups in the school?
7. How do educators identify a positive climate or a poor climate?

8. In what ways does a positive or a negative school climate affect students and staff?

9. What effect does a principal or a staff have on climate and do different behaviors and/or actions have different effects on the school?

10. What types of support and changes in standards are needed to support and facilitate school reform?

11. Do school staffs have time to consider and implement change when all aspects of the school need to be considered in school reform efforts?

12. Will different staffing patterns facilitate school change and are experts on change needed to work with a school staff to implement school reform.

13. If schools are indeed as complex and unique as is being stated, what are the implications for defining the principals' role and for training persons for school leadership positions?

There are endless questions to ponder and study, but the more significant issues seem to be that school reform must be considered at the school level and that schools are complex social units. In short, there does not seem to be any simple solution that will improve all schools. Each school must have the initiative, flexibility and support to seek its own reform that will best address the needs of its students. Even with these differences research must continue because each study can identify some important considerations for schools.
As Rowan, Bossert and Dwyer warn, research needs to continue on how to make schools more effective but with the understanding that "only 50% of the variance (to improve a school) is due to school factors and the remaining 50% is due to random error" (1983:27). They further warn practitioners who are preparing to embark on school reform to look closely at both classroom and management variables and "to give careful thought to how school-level structures can be designed to support effective instruction" (1983:30). In stating their implications for future research, they state "... there is also a need to view organizational effectiveness as a multidimensional phenomenon and to analyze how structures that enhance effectiveness in one domain affect organizational structures and outcomes in other domains" (1983:30).

**Recommendations**

**Implications for Practice.** Schools experiencing problems with student behavior, achievement or relationships should consider implementing school climate improvement efforts providing the efforts would be supported by the school's staff.

Principals who feel comfortable providing leadership in addressing climate and in working cooperatively with their own staffs could consider implementing an informal approach to school climate improvement. A formal approach should be considered where the school principal desires added direction and support for school improvement. The formal approach to improve climate would be appropriate where a principal does not have a strong background in the principles of leadership and human dynamics in organizations.
Regardless of the approach to improve climate, a positive approach - as opposed to a negative confrontive approach - to school improvement, coupled with support to school improvement can be effective and is recommended as a strategy for school change.

School improvement efforts will be enhanced if school climate improvement efforts address not only process and product issues, but also address structural changes which will enhance the desired process and product outcomes.

Persons undertaking actions to reform a school, need to understand and consider the complexity of schools and accept the concept that to change one factor of the school without considering the many other factors that make up the school may result in the change effort being less effective. In many cases change efforts which are made without considering the complex interrelationships in schools can be counter productive.

Time to develop and implement any change effort will be a major limitation to the success of the change effort unless additional staff time is provided for the staff to study, design and implement the desired change.

Obstacles will occur in any school reform effort and the initiator of the reform should be alert to obstacles which occurred in similar efforts and try to anticipate obstacles which may occur in their reform efforts.

School climate improvement efforts should not be limited to actions which improve relationships but also should consider instructional processes and expectations that will facilitate climate
improvement. Such efforts should acknowledge that a change to improve productivity can have a counter effect on relationships and vice versa.

Recommendations for Research. Additional studies on school climate efforts should be undertaken to describe other approaches and to identify effects and obstacles which occur in other climate improvement efforts. Consideration should be given to using a longitudinal experimental design research method to study the effects and obstacles which occur in climate improvement efforts. This approach should assist in determining which variables influence outcomes and obstacles.

Multi-side studies should be undertaken to assess different approaches to improve school climate. Multi-site studies should assist educators in describing the effects of positive and negative climates and in identifying what contributes to each.

Cross sectional studies should be undertaken to assess if different segments of educators are aware of the importance of school climate and if they are further aware of the interrelationships of product, process and structural changes.

Additional studies are needed to answer the many questions poised above on climate and to explore the relationships of product, process and structural changes in schools.

Experimental schools should be established where time and assistance can be provided to a school staff and where research can be undertaken to understand the reform efforts completely.
Epilogue

In order for school reform to occur much more needs to be known by school administrators about the complexity of schools and change. Time for learning and study by principals and teachers is limited; therefore, school organizational structure should be reviewed to identify different ways to organize school systems to provide guidance and support to school staffs to help them consider and implement school reform efforts. Finally, without additional time and resources to support school reform and without an environment to support risk taking to explore flexible schooling options, schools are destined not to change in any significant way. A major question remains and that is - if schools remain as they are, will they survive?

To be successful, schools need to develop the capacity to assess their own needs and to develop and implement their own change efforts. In any such change effort consideration must be given to the complex interrelationships that exist in schools and the school's staff must be given the latitude, flexibility, resources and support prior to implementation of reform efforts.
BIBLIOGRAPHY


Howard, E. R. (1980). Some Ideas on Improving School Climate. Colorado Department of Education. (A copy of an article given to the Researcher directly by Dr. Eugene Howard.)


APPENDICES
APPENDIX A

PENNSYLVANIA MODEL
SCHOOL CLIMATE IMPROVEMENT MODEL

ENTRY DIAGNOSIS

NEEDS ASSESSMENT

School Selection

Groups Interviewed

School Data Collection

DELINQUENCY

ACHIEVEMENT

BEHAVIOR

ATTENDANCE

SCHOOL CAPACITY BUILDING SKILLS

LEADERSHIP TRAINING

PROBLEM SOLVING MODEL

DECISION MAKING PROCESS

STEERING COMMITTEE

TASK FORCE

CONTINUOUS SCHOOL RENEWAL

INTERNAL RESOURCES

SCHOOL EFFECTIVENESS RESEARCH

PREVENTION STRATEGIES

EXTERNAL PRODUCTS

SKILL ACQUISITION

SKILL IMPLEMENTATION

EVALUATION
APPENDIX B

PENNSYLVANIA OPERATIONAL DEFINITION
OF CLIMATE
Pennsylvania Operational Definition of School Climate

Conditions of School Climate

A. GENERAL CLIMATE FACTORS

1. Respect
2. Trust
3. High Morale
4. Opportunities for Input
5. Continuous academic and Social Growth
6. Cohesiveness
7. School Renewal
8. Caring

B. PROGRAM FACTORS

1. Opportunities for Active Learning
2. Individualized Performance Expectations
3. Varied Learning Environments
4. Flexible Curriculum and Extracurricular Activities
5. Support and Structure Appropriate to Learner's Maturity
6. Rules Cooperatively Determined
7. Varied Reward System

C. PROCESS FACTORS

1. Problem Solving Ability
2. Improvement of School Goals
3. Identifying and Working with Conflicts
4. Effective Communications
5. Involvement in Decision Making
6. Autonomy with Accountability
7. Effective Teaching-Learning Strategies
8. Ability to Plan for the Future

D. MATERIAL FACTORS

1. Adequate Resources
2. Supportive and Efficient Logistical System
3. Suitability of School Plant
APPENDIX C

INSTRUMENTS
Questionnaire for Interviewed Staff

Identifying Information

Please complete the following information. Your responses will be kept confidential. The only purpose in identifying yourself is to allow the researcher to contact you in the event that clarification of responses is needed or further information would be requested.

Name: __________________________
School__________________________
Position________________________
Number of years in education_______
Number of years in current school____
Address__________________________
Telephone: home_____________ work___________
Were you a leader in the climate improvement process?____
In what capacity did you serve as a leader?________________________

Which of the following best describes your attitude to the climate improvement process in the initial stages?

_____positive _____negative _____neutral
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Structured Interview Guide

Instructions for Completing the Structured Interview

Attached is a set of questions which will be discussed during the structured interview. The interview will probably take between 45 and 60 minutes to complete. You may wish to review the questions and make some notes for the interview. Responses to the questions will be recorded on tape and will be used to assist in the analysis of the school climate improvement efforts which have been undertaken in your school.

I will be in contact with the school principal to arrange a specific time to conduct the interview. Thank you for your time and cooperation in assisting me in the completion of my dissertation.
Structured Interview Guide

A. Initiating the climate process:
   1. Why did the school implement the school climate process?
   2. How did the school define school climate?
   3. How did the school choose the process used to improve school climate?
   4. What if any obstacles occurred in the initial stages of defining and determining the process?

B. Identifying climate needs:
   1. What facts led you to believe that the climate improvement process was needed?
   2. What process was used to identify climate needs?
   3. Did different groups in the school identify different school needs? If so, what were the differences?

C. Goals of the climate improvement process:
   1. What were the goals of the climate improvement process?
   2. How were the goals chosen?
   3. Which goals were not addressed and why?
D. Implementing the climate improvement process:

1. List the process, steps or activities that were taken to improve the school climate?

2. How did the school organize its resources and staff to implement the school climate improvement effort?

E. Obstacles in implementation:

1. What if any obstacles occurred in the implementation of the steps, process or activities?

2. Describe the gains or losses of different groups.

3. What if any new needs were identified as a result of completing the climate improvement effort?

F. Outcomes of the process:

1. List the outcomes of the climate improvement effort.

2. Did you anticipate all of the outcomes?

3. Were there unanticipated outcomes and why did they occur?

4. Were some goals not obtained, and why?

5. Which process, actions or steps had the greatest effect on accomplishing the goals?
G. Evaluation:
   1. How was success determined?
   2. Describe evaluation systems used, both final and interim.

H. External assistance:
   1. How was external assistance utilized?

I. Follow-up actions:
   1. What follow-up actions did the school implement as a result of the school climate improvement effort?
   2. What groups were affected by the follow-up and how?
   3. If the program were to be repeated, what changes would be made?

J. Recommendations:
   1. What recommendations are applicable to the school under study?
   2. What recommendations may be applicable to other schools considering similar climate improvement efforts?
Questionnaire for Interviewed Staff

Please respond to each question using the following key where applicable.

no    little    some    yes    do not know
1      2        3       4        5

Other questions may have more than one answer.

A. Initiating the school climate program:

1. Who was responsible for initiating the school climate program?
   ____Teacher ____principal ____parent ____other ____________

2. Who was responsible for implementing the school climate program?
   ____Teacher ____principal ____other (specify) ____________

3. Was school climate defined?
   1      2      3      4      5

   If answer to question 3 is yes, then please answer questions 4, 5, & 6.

4. Did the staff understand the definition of climate?
   1      2      3      4      5

5. Did the staff accept the definition of climate?
   1      2      3      4      5

6. What process was used to determine if the definition of climate was accepted and understood by the various groups?
   ____correspondence ____meeting ____other (____________________)

7. Who determined which process was used to improve school climate?
   ____teacher ____principal ____parent ____student ____other
8. Were the initial stages of the school climate improvement effort free of obstacles?
   1  2  3  4  5

B. Goals of the climate improvement effort:
1. Who was involved in determining the climate needs of the school?
   ____teachers ____principal ____students ____parents

2. Were goals of the program identified?
   1  2  3  4  5

3. Did the staff know the goals of the program?
   1  2  3  4  5

4. Were goals matched with the identified needs?
   1  2  3  4  5

5. Were all goals addressed?
   1  2  3  4  5

6. Who was involved in determining the goals?
   ____teachers ____students ____principal ____parents ____other

C. Obstacles encountered when implementing the school climate improvement program:
1. Did the climate improvement effort operate without any obstacles?
   1  2  3  4  5

2. How did the staff respond to the climate improvement effort?
   ____positively ____neutrally ____negatively

3. How did students respond to the climate improvement effort?
   ____positively ____neutrally ____negatively
D. Outcomes of the climate improvement effort:

1. Were the expected outcomes achieved?

1 2 3 4 5

2. Did all groups gain as a result of the climate improvement effort?
   (groups include staff, students or sub-groups of either)

1 2 3 4 5

E. Evaluating the climate improvement effort:

1. Was the effort successful?

1 2 3 4 5

2. Were interim evaluations or reviews utilized?

1 2 3 4 5
Questionnaire for Interviewed Staff

Please respond to the positive and negative questions using the following key.

<table>
<thead>
<tr>
<th></th>
<th>no</th>
<th>little</th>
<th>some</th>
<th>yes</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</tbody>
</table>

Other questions may have more than one answer.

A. Outcome of the school climate effort:

1. Did the school climate change?

   1  2  3  4

2. Did satisfaction change?

   1  2  3  4

3. Among which groups did a change in satisfaction occur?

   _____ staff _____ students _____ other (specify) _____________

4. Did productivity change?

   1  2  3  4

5. Among which groups did a change in productivity occur?

   _____ staff _____ students _____ other (specify) _____________

6. If staff and/or student satisfaction changed, describe how satisfaction was measured.

   ___________________________________________________________
   ___________________________________________________________
   ___________________________________________________________
   ___________________________________________________________
7. If staff and/or student productivity changed, describe how productivity was measured.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

8. Describe how satisfaction and/or productivity have changed.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Checklist of Climate Condition

The attached instrument contains 43 items in three categories that together constitute an operational definition of school climate. The three categories are: general climate factors, process determinants, and program determinants. Responses should be given to each item by column as follows.

Column 1. Included As Definition of School Climate: Check this column if the item was clearly included as a component of school climate. Discussions of the item with colleagues would be a clear indication that the item was part of the concept of your school's efforts to address school climate.

Column 2. Was This A Need: This column should be checked independently for students and staff. Specifically, if you perceive the item as one that is or was in need of attention for either or both groups, then please indicate by using a check.

Column 3. Was Issue Addressed. Again this column allows separate responses for staff and students. If the school climate effort in your school focused on the item for either group, then please so indicate by checking the appropriate item in this column.

Column 4. Degree of Change For Students: Please indicate your perception of the degree of change for each item using the four point scale at the bottom of the form. Change may occur in any item even though the item was not addressed as part of the effort to improve school climate. If an item is checked as being an area that was
addressed (column 3) then please indicate a response in the degree of change column, even if no change occurred.

Column 5. Degree Of Change For Staff: Please follow the same process as described for completing Column 4.

Column 6. Obstacle Occurred: Please indicate "yes" if an obstacle occurred in addressing the specific item. If answered "yes," please attempt to identify the obstacle for questions which will be asked during the structured interview.
Please provide the following information for each year indicated if available.

Summary

SCHOOL DATA FORM

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<tr>
<td>% OF STUDENT ATTENDANCE</td>
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<tr>
<td>NO. OF INCIDENCES OF VANDALISM BY STUDENTS</td>
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</table>
Staff Questionnaire

I am completing a study of school climate improvement efforts as a requirement for a doctoral dissertation at Virginia Tech. I would appreciate your assistance by responding to the following questions. Responses will be collectively reported and the individual respondent will not be identified. Thank you for your assistance.

Please respond to the positive and negative questions using the following key.

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<tr>
<th>no</th>
<th>little</th>
<th>some</th>
<th>yes</th>
<th>do not know</th>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tbody>
</table>

Other questions may have more than one answer.

1. Was the concept of school climate understood by staff?
   1  2  3  4  5

2. Were the goals of the program identified?
   1  2  3  4  5

3. Was the program successful?
   1  2  3  4  5

4. Did the school climate change?
   1  2  3  4  5

5. Did satisfaction change?
   1  2  3  4  5

6. Among which groups did a change in satisfaction occur?
   ____staff  ____students  ____other (specify)  ________________
7. Did productivity change?
   1   2   3   4   5

8. Among which groups did a change in productivity occur?
   _____ staff _____ students _____ other (specify) ____________

9. Describe how satisfaction and/or productivity have changed.
   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________

10. How did the staff respond to the climate improvement effort?
    _____ positively _____ negatively _____ neutral

11. List some of the major obstacles that occurred in the climate improvement process.
    ___________________________________________________________________
    ___________________________________________________________________
    ___________________________________________________________________
    ___________________________________________________________________
    ___________________________________________________________________

Identifying information:
School ________________ years in this school _____
Position ________________ years in education _____
APPENDIX D

OPERATIONAL DEFINITION OF CLIMATE
Comparison of Operational Definitions

General Climate Factors

<table>
<thead>
<tr>
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<th>Brookover</th>
<th>Howard</th>
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<td>1. Respect</td>
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<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>2. Trust</td>
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<td>3. Morale</td>
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<tr>
<td>4. Caring</td>
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<tr>
<td>5. Orderly environment</td>
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<tr>
<td>6. Fair/consistent discipline</td>
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<td>✓</td>
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<td>7. Fair/consistent treatment of staff</td>
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<tr>
<td>8. Pleasant physical environment</td>
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<td>✓</td>
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<tr>
<td>9. System of rewards</td>
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# Comparison of Operational Definitions

## Program Determinants

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<td>2. Active learning opportunities</td>
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<td>3. Successful student experiences</td>
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<tr>
<td>4. Varied learning environments</td>
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<tr>
<td>5. Staff committed to learning</td>
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<td>6. Flexible curriculum</td>
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<td>7. Clear and accepted rules</td>
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<td>8. Clear and consistent grading procedures</td>
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<tr>
<td>9. Efficient use of instructional time</td>
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<td>10. Homework, assigned and graded</td>
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<td>15. Time for teacher planning individually</td>
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<td>16. Time for teacher planning in groups</td>
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<td></td>
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<td>17. Frequency of supervision and observation</td>
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<td></td>
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<td>✓</td>
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<td>18. Conferences with teachers on instruction</td>
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### Comparison of Operational Definitions

#### Process Determinants

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<td>2. Processes for solving problems</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3. Clear school goals</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4. Clear plan to attain goals</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>5. Processes available for identifying and resolving conflict</td>
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<td>✓</td>
<td>✓</td>
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<td>✓</td>
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<tr>
<td>6. Effective communications</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>7. Opportunities for students to be independent and to show responsibility</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
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<td>8. Frequent status checks on goal attainment</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>System for feedback to:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Students</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>10. Staff</td>
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<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>11. Administrators</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>12. Modeling of desired values and beliefs by adults</td>
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<td>Personal support system:</td>
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<td></td>
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</tr>
<tr>
<td>13. For students</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>14. For staff</td>
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<td></td>
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APPENDIX E

SUMMARY OF SCHOOL DATA FORM
Please provide the following information for each year indicated if available.

Main School

**SUMMARY OF SCHOOL DATA**

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<th></th>
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<tbody>
<tr>
<td><strong>ACHIEVEMENT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>61%tile</td>
<td>58%tile</td>
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<td>58%tile</td>
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<tr>
<td>7th</td>
<td>57%tile</td>
<td>58%tile</td>
<td>62%tile</td>
<td>64%tile</td>
</tr>
<tr>
<td>8th</td>
<td>51%tile</td>
<td>59%tile</td>
<td>56%tile</td>
<td>not available to date</td>
</tr>
<tr>
<td><strong>DROP OUT RATE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8th grade only</td>
<td>4.1</td>
<td>1.3</td>
<td>3.6</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>% OF STUDENT ATTENDANCE</strong></td>
<td></td>
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<tr>
<td>Grades 6,7,8</td>
<td>94.27</td>
<td>94.17</td>
<td>94.32</td>
<td>94.38</td>
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<td><strong>NO. OF DISCIPLINARY REFERRALS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>233 or 1.29 per day</td>
<td>238 or 1.32 per day</td>
<td>99 or .6 per day</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>626 or 3.48 per day</td>
<td>459 or 2.55 per day</td>
<td>414 or 2.78 per day</td>
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<tr>
<td>8</td>
<td>474 or 2.63 per day</td>
<td>569 or 3.16 per day</td>
<td>351 or 2.35 per day</td>
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</tr>
<tr>
<td><strong>NO. OF INCIDENCES OF VANDALISM BY STUDENTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>-0-</td>
<td>-0-</td>
<td>-0-</td>
<td>-0-</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>1</td>
<td>-0-</td>
<td>-0-</td>
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<tr>
<td>8</td>
<td>3</td>
<td>1</td>
<td>2</td>
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Please provide the following information for each year indicated if available.

Jones School

SUMMARY OF SCHOOL DATA

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<td>ACHIEVEMENT</td>
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<tr>
<td></td>
<td>Not provided from school</td>
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<tr>
<td>DROP OUT RATE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% OF STUDENT ATTENDANCE</td>
<td>92%</td>
<td>Not given</td>
<td>93%</td>
<td></td>
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<tr>
<td>NO. OF DISCIPLINARY REFERRALS</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Out of school suspensions</td>
<td>73</td>
<td>1</td>
<td>67</td>
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<tr>
<td>In school suspensions</td>
<td>94</td>
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<td>103</td>
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<td>NO. OF INCIDENCES OF VANDALISM BY STUDENTS</td>
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Please provide the following information for each year indicated if available.

Kline School
SUMMARY OF SCHOOL DATA

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<td>7th</td>
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<td>7th</td>
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<td>9th</td>
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<td>Not available</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>at time of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>visit</td>
</tr>
<tr>
<td>DROP OUT RATE</td>
<td>21</td>
<td>17</td>
<td>3</td>
<td>A decrease of 85% in 3 years</td>
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<tr>
<td>% OF STUDENT ATTENDANCE</td>
<td>90%</td>
<td>91%</td>
<td>89%</td>
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<tr>
<td>NO. OF DISCIPLINARY REFERRALS</td>
<td>Little change. Type referrals are for less severe offense of 160 referrals, 38 students account for 105 of the 160 referrals</td>
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<td></td>
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</tr>
<tr>
<td>NO. OF INCIDENCES OF VANDALISM BY STUDENTS</td>
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Appendix F

N=3

Climate Determinants Included In Each School's Definition of Climate As Reported by Interviewed Staff

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<tr>
<td>Kline School</td>
<td>72%</td>
<td>71%</td>
<td>55%</td>
</tr>
<tr>
<td>Jones School</td>
<td>90%</td>
<td>50%</td>
<td>61%</td>
</tr>
<tr>
<td>Main School</td>
<td>90%</td>
<td>100%</td>
<td>44%</td>
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<tr>
<td>Smith School</td>
<td>45%</td>
<td>42%</td>
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Appendix G

N=3

Summary of Data on School Climate Determinants

General Climate Determinants Identified
As School Need and Addressed by Each School

Number of Conditions = 11

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<tr>
<th>School</th>
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<th>Main</th>
<th>Smith</th>
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<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Number of items identified as needs in the school for:</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>students</td>
<td>8(72%)</td>
<td>5(45%)</td>
<td>9(81%)</td>
<td>4(36%)</td>
</tr>
<tr>
<td>staff</td>
<td>3(27%)</td>
<td>6(54%)</td>
<td>10(90%)</td>
<td>2(18%)</td>
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<tr>
<td>Number of items addressed by the school for:</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>students</td>
<td>7(63%)</td>
<td>9(81%)</td>
<td>9(81%)</td>
<td>4(36%)</td>
</tr>
<tr>
<td>staff</td>
<td>3(27%)</td>
<td>10(90%)</td>
<td>2(18%)</td>
<td></td>
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APPENDIX H
Appendix H

N=3

Summary of Data on School Climate Determinants

Process Determinants Identified As School Need and Addressed by Each School

Number of Conditions = 14

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<th>Smith</th>
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<tbody>
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<td></td>
<td>students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5(35%)</td>
<td>4(28%)</td>
<td>12(85%)</td>
<td>5(35%)</td>
</tr>
<tr>
<td></td>
<td>staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9(64%)</td>
<td>3(21%)</td>
<td>12(85%)</td>
<td>5(35%)</td>
</tr>
<tr>
<td></td>
<td>students</td>
<td></td>
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<td></td>
</tr>
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<td></td>
<td>2(14%)</td>
<td>4(28%)</td>
<td>11(78%)</td>
<td>5(35%)</td>
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<td></td>
<td>staff</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9(64%)</td>
<td>5(35%)</td>
<td>11(78%)</td>
<td>5(35%)</td>
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APPENDIX I
Appendix I

N=3

Summary of Data on School Climate Determinants

Program Determinants Identified As School Need and Addressed by Each School

Number of Conditions = 18

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<th>Smith</th>
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<tr>
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<tr>
<td>Number of items identified as needs in the school for:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>students</td>
<td>8(44%)</td>
<td>4(22%)</td>
<td>11(61%)</td>
<td>7(38%)</td>
</tr>
<tr>
<td>staff</td>
<td>7(38%)</td>
<td>11(61%)</td>
<td>18(100%)</td>
<td>5(27%)</td>
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<td>Number of items addressed by the school for:</td>
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</tr>
<tr>
<td>students</td>
<td>5(27%)</td>
<td>4(22%)</td>
<td>11(61%)</td>
<td>6(33%)</td>
</tr>
<tr>
<td>staff</td>
<td>7(38%)</td>
<td>11(61%)</td>
<td>18(100%)</td>
<td>6(33%)</td>
</tr>
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The three page vita has been removed from the scanned document. Page 2 of 3
The three page vita has been removed from the scanned document. Page 3 of 3