

## Chapter 3

# The Role of Supportive School Environments in Promoting Academic Success



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**“My class is like a family.”**

Questionnaire item, *Sense of Community Measure*, Developmental Studies Center

**“This school hurts my spirit.”**

Student quoted in Poplin & Weeres, *Voices From the Inside* (1992)

This chapter focuses on the question, What influence does a caring, supportive school environment have on the course of students' academic success—their academic attitudes, motivation, engagement, and goal setting; their staying in school and graduating; their grades and test scores? Poor school achievement is certainly a concern in its own right and is the focus of most current school improvement efforts. But poor achievement is also a concern because it is a predictor of problem behaviors in

late elementary school (Hawkins, Lishner, Catalano, & Howard 1986) as well as middle and senior high schools (Hirschi 1969; Jessor & Jessor 1977).

Fortunately, a number of research studies focus on this question of whether, and under what conditions, building a caring school culture or “community” helps or hinders academic achievement. Some of this evidence is *correlational*, coming from descriptive studies that assess the relationship between aspects of the school environment as they naturally vary and student outcomes. Some of the evidence is *causal*, coming from evaluations of programs or “interventions” that are intended to alter the school environment in desired ways. As will be seen, the findings from these two bodies of research converge, making it relatively straightforward to answer the question of how building community in school affects achievement-related outcomes.

### *Background on Supportive School Environments*

A substantial body of research shows that, for good or ill, a school's social environment has broad influence on students' learning and growth, including major aspects of their social, emotional, and ethical development. The social environment is shaped by many factors:

- The school's espoused goals and values
- The principal's leadership style
- The faculty's teaching and discipline methods
- The policies regarding grading and tracking
- The inclusion or exclusion of students and parents in the planning and decision-making processes

But perhaps most important in determining the school environment is the quality of students' relationships with other students and with the school's staff. As John Dewey (1958) observed, an effective school "is realized to the degree in which individuals form a group" (p. 65).

The importance of the school environment is underscored by the Search Institute's list of environmental and individual "developmental assets" that serve as general protective factors (Leffert, Benson, & Roehlkepartain 1997). Among the items in the institute's list of *environmental* assets are:

- A caring school climate
- Parental involvement in schooling
- Clear rules and consequences in the school and family
- High expectations from teachers and parents

Among the items in the institute's list of *individual* assets are:

- Motivation to achieve
- School engagement
- Bonding to school

When students find their school environment to be supportive and caring, they are less likely to become involved in substance abuse, violence, and other problem behaviors (Hawkins, Catalano, Kosterman, Abbott, & Hill 1999; Battistich & Hom 1997; Resnick et al. 1997). They are more likely to develop positive attitudes toward themselves and prosocial attitudes and behaviors toward others (Schaps, Battistich, & Solomon 1997). Much of the available research shows that supportive schools foster these positive outcomes by promoting students' sense of "connectedness" (Resnick et al. 1997), "belongingness" (Baumeister & Leary 1995), or "community" (Schaps, Battistich, & Solomon 1997) during the school day.

Connectedness, belongingness, and community all refer to students' sense of being in close, respectful relationships with peers and adults at school.

These terms are used interchangeably here since they all refer to students' sense of being in close, respectful relationships with peers and adults in school or of being contributing and influential members of the school.

The wide range of effects of “community in school” have been documented by in-depth qualitative studies (e.g., Jones & Gerig 1994), by large-scale surveys (e.g., Resnick et al. 1997), and by rigorous program evaluations (e.g., Hawkins et al. 1999; Solomon, Battistich, Watson, Schaps, & Lewis 2000). Much of this research has been recently compiled, organized, and summarized (see, for example, excellent reviews by Osterman 2000; Solomon, Watson, & Battistich 2001; and Berkowitz & Bier, in press). Findings from this research are beginning to influence policy and practice recommendations for the general improvement of schooling (Learning First Alliance 2001) and for improving practice in the fields of school-based drug abuse prevention (Bosworth 2000), character education (Berkowitz & Bier, in press), and social and emotional learning (Collaborative for Academic, Social, and Emotional Learning 2002).

Why is promoting community in school proving to be so important? Why does it have such broad effects on students’ development? One persuasive explanation attributes the effectiveness of high-community schools to their capacity to satisfy students’ basic psychological needs for safety, belonging, autonomy, and competence (Deci, Vallerand, Pelletier, & Ryan 1991). When these basic needs are fulfilled, students are more likely to become engaged in, and committed to, the school and, therefore, inclined to behave in accord with its expressed goals and values (Watson 2003). This phenomenon is often termed “school bonding” or “social bonding” (Hawkins, Catalano, & Miller 1992). Moreover, active involvement in the activities and deliberations of a caring

school community helps students to develop their empathy for others, their social skills and social understanding, and their understanding of the values of the community. Students in high-community schools are more likely to become thoughtful and reflective, to be self-directing but also to accept the authority of others, to be concerned for and respectful of others, to avoid courses of action that are harmful to themselves or others, and to maintain higher standards of ethical conduct (Osterman 2000; Schaps, Battistich, & Solomon 2004). As students become more capable and inclined to contribute to the supportive school context, they in effect promote, along with the school’s faculty, an “upward spiral” by which community is strengthened and those involved in it are further benefited.

When students’ basic psychological needs (safety, belonging, autonomy, and competence) are satisfied, they are more likely to:

- Become engaged in school (school bonding).
- Act in accord with school goals and values.
- Develop social skills and understanding.
- Contribute to the school and the community.

When schools fail to meet students’ needs for belonging, competence, and autonomy, students are more likely to become:

- Less motivated
- More alienated
- Poorer academic performers

Despite some increased attention to the research on community building, a high proportion of students probably still experience their schools as relatively impersonal (Hargreaves, Earl, & Ryan 1996; Maehr & Midgley 1996). One survey of students in 24 elementary schools in six districts nationally (Battistich, Solomon,

Kim, Watson, & Schaps 1995) showed that sense of community was not strong in most schools and that it tended to be significantly lower for low-income students and students of color than it was for their Anglo, more affluent counterparts. Thus, students who are often most in need of a supportive school environment (Tharp 1989) may be

placed at a further disadvantage by the quality of their experience in school. Some researchers on motivation (Deci, Vallerand, Pelletier, & Ryan 1991) believe that when schools fail to meet students' needs for belonging (or competence and autonomy), students will become less motivated, more alienated, and poorer performers.

### *Effects of Community on Academic Achievement*

The history of American education is marked by a long-standing tension between "progressive" visions of education that call for schools to address students' social and academic needs and "traditional" visions that advocate academic achievement as the school's overriding if not exclusive concern. Traditional educators often ask whether in-school community building, an intrinsically social endeavor, will distract from academic achievement, whatever its other benefits for students. In this vein one oft-expressed concern is that educators will compromise academic standards in order to preserve good personal relationships with poorer-performing students. Shouse (1996), for instance, asserts:

... a sound basis exists to suspect that low-socio-economic status students will likely be exposed to socially therapeutic—rather than intellectually demanding—values and activities, and that their school's efforts to build supportive and cohesive communities may actually help to divert attention from academic goals (p. 52).

In contrast, progressive educators have contended that "students will care about schools that care about them" and that

students will work harder to achieve academically in a context of safety, connection, and shared purpose (Noddings 1996). According to the Collaborative for Academic, Social, and Emotional Learning (2002):

Improving the social and emotional climate of schools, and the social and emotional soundness of students, advances the academic mission of the schools in important ways....Satisfying the social and emotional needs of students does more than prepare them to learn. It actually increases their capacity to learn (p. 10).

The next section presents evidence in two categories regarding the academic effects of community. In the first category are correlational studies that examine the observed association between the school environment and academic achievement. In the second category are studies involving the introduction of a program or "intervention" that is intended to change community-related aspects of the school or classroom. These evaluation studies assess the impact of a program on achievement-related outcomes.

### *Correlational Studies Relating Community and Achievement*

Correlational studies that focus on the school or classroom atmosphere generally seek to identify factors that are associated with students' academic attitudes, engagement, and motivation as well as their achievement. Studies of this type do not definitively determine cause-and-effect relationships, but they can establish whether a sense of community and achievement are linked in some way.

*Fifteen thousand hours: Secondary schools and their effects on children* (Rutter, Maughan, Mortimore, & Ouston 1979)

**Sample:** 12 London secondary schools

**Findings:** Various school characteristics and practices and the school atmosphere in general were related to academic behaviors, attitudes, and achievement. There were generally high levels of achievement at the school when students identified with its norms and goals. This identification was most likely to happen if three general conditions were in place: (1) the school environment was pleasant, and the school staff was positively disposed toward students (as shown in frequent use of praise, availability to give help and advice); (2) there were numerous shared activities between staff and students; (3) there were broadly shared student positions of responsibility in the school. All three of these conditions are central aspects of community in school.

*Promoting school connectedness: Evidence from the National Longitudinal Study of Adolescent Health* (McNeely, Nonnemaker, & Blum 2002)

**Sample:** 80,000 students nationally, grades 7 through 12

**Findings:** School connectedness, which was defined as feeling part of one's school and feeling close to people at school, was positively related to grade point average in major subjects. (In addition, the absence of school connectedness was correlated with a variety of problem behaviors.)

*Classroom belonging among early adolescent students: Relationships to motivation and achievement* (Goodenow 1993a, 1993b; Goodenow & Grady 1993)

**Sample:** Suburban middle school students, urban Latino and African American middle school students

**Findings:** Students' feelings of "belongingness" (i.e., good relations with teachers and peers, measured separately) were generally found to be positively and strongly related to their academic motivation and academic expectations but weakly related to their grade point averages, absenteeism, and tardiness. Academic effort was positively related to perceived teacher support but was unrelated to peer support.

*Social relationships and motivation in middle school: The role of parents, teachers, and peers* (Wentzel 1998)

**Sample:** Suburban middle school students

**Findings:** Perceived teacher support and caring was associated with greater interest in class and school, which in turn positively affected grade point averages.

*Competence, autonomy, and relatedness: A motivational analysis of self-system processes* (Connell & Wellbourn 1991)

**Sample:** Suburban and rural elementary students, grades 3 to 6

**Findings:** Relatedness to teachers, peers, and, to a lesser degree, parents was positively associated with engagement in school but not directly associated with academic performance; rather, relatedness fostered engagement, which in turn boosted achievement.

*Reducing the risk: Schools as communities of support* (Wehlage, Rutter, Smith, Lesko, & Fernandez 1989)

**Sample:** 14 alternative high school programs for at-risk students

**Findings:** The researchers focused on social bonding composed of attachment (social and emotional ties to others), commitment (rational calculation of what is needed to achieve goals), involvement (engagement in school activities), and belief (faith in the institution of the school). The most effective schools were small (allowing close teacher connections with students) and created “a culture and structure of support.” Seven of the 14 programs set community building as an explicit goal. Six of these showed

positive changes in students’ academic attitudes, attendance, and engagement and ultimately decreased students’ likelihood of dropping out.

A review of the participatory dimensions of sense of community (Fraser 1991) concluded from many studies of classroom social climate that students are most likely to show cognitive and affective gains in classrooms described as cohesive, democratic, and goal-directed.

### Community Building and Academic Press

Bryk and Driscoll (1988), using data from the national “High School and Beyond” survey, assessed high schools as communal organizations (defined as including shared values, a common agenda, and a schoolwide ethos of caring) and found positive associations with students’ interest in schooling and achievement and negative associations with school dropout rates. Shouse (1996) questioned the relevance of Bryk and Driscoll’s findings for schools serving low-income students, where “academic press” (i.e., strong academic expectations and norms for all students) is likely to be lower than in more privileged neighborhoods. Shouse found that math achievement among low-income students was greatest in schools where there was strong academic press as well as a strong sense of community and that absent academic press, community was not helpful for furthering math achievement. However, Shouse’s measure of community is not consistent with the term as used here; his measure consisted of many items that assessed faculty attitudes and cohesiveness and only a few items that tapped students’ perceptions of their in-school relationships.

Using the same data set that Shouse examined, Muller (2001) studied math achievement in a general population of students and also in the subset of students who were judged to be at high risk of dropping out. For the general student population, Muller found little association between perceived teacher caring and students' achievement. However, at-risk students who perceived their teachers as caring showed significantly higher test scores and greater math proficiency than did those who reported lower levels of teacher caring. At-risk students who perceived teachers as caring put forth more effort than did other at-risk students, although Muller judged increased effort to be only one of several probable contributors to higher achievement. Muller also noted that teacher caring had a strong academic emphasis, as measured in this study through survey items such as "my teachers care about me and expect me to succeed in school."

Others have also investigated the relative importance of sense of community and academic press for encouraging achievement and productive forms of student engagement. Lee and Smith (1999) found that without an emphasis on academic press, fostering community in school was inadequate for producing achievement gains among low-income, urban students. Lee and Smith concluded, "Only in schools with an organizational thrust toward

serious academics does social support (i.e., sense of community) actually influence learning" (p. 937).

### Summary of Findings from Correlational Studies

These correlational studies show that sense of community in school is positively associated with a range of positive academic outcomes. The strongest correlations are with:

- Attitudes toward school (e.g., liking for school, enjoyment of class)
- Academic expectations (e.g., expectations of success)
- Academic motivation and engagement (e.g., intrinsic academic motivation)

Somewhat less consistent are the associations between sense of community and students' academic effort, tardiness, and absenteeism. As for academic effort, students' connectedness to teachers is more strongly correlated with effort than is students' connectedness to peers.

Least consistent in these studies is the association between sense of community and actual achievement as measured by grades or test scores. Here again, connectedness to teachers is more strongly correlated with achievement than is connectedness to peers. The pattern of findings for achievement suggests that community building may need to be combined with academic press to be effective.

### *Studies of the Academic Effects of Community-Building Programs*

Several programs that focus on building community in school have been evaluated for their effects on achievement-related outcomes. The programs selected below were chosen because of their potential for influencing the social environment of the school or classroom. They are not “pull-out” programs or special courses delivered during a limited time frame, nor is their primary aim to work directly to change individual students’ attitudes, inclinations, or behaviors. (The Seattle Social Development Project is an exception; although its main emphasis is on changing the school environment, it also includes specific instruction in interpersonal problem solving and refusal skills.) Instead, the programs concentrate on permanently altering aspects of school organization, climate, curriculum, and/or pedagogy. Their underlying assumption is that providing a supportive school environment is likely to produce strong, broad, and durable effects on overall development and on academic learning. A priority on building a sense of community is explicit in several of these programs—either as a direct focus or as an explanatory mechanism. Other programs explicitly address one or more of the central aspects of in-school community, such as providing a supportive climate or opportunities for students to be influential in decision making, even if they do not use the term.

**Child Development Project (CDP):** *An elementary school program designed to influence children’s social, ethical, and intellectual development.*

The CDP program emphasizes student autonomy, influence, and self-direction; student interaction, discussion, participation, collaboration, and negotiation; student participation in positive (prosocial) activities; a warm and supportive classroom and school environment; and an emphasis on basic personal and interpersonal values. The program is designed to influence the overall atmosphere of the classroom and school (through emphases on positive interpersonal values and attitudes, student autonomy, self-direction, and participation in classroom decision making) by establishing a variety of classroom, schoolwide, and home-school approaches (e.g., class meetings, a “buddies” program pairing older and younger students, family involvement activities).

One evaluation of CDP was conducted in six school districts over a four-year period. The study involved two program and two comparison schools in each district. Careful monitoring of program implementation showed that only five of 12 program schools actually enacted the program consistently. Relative to their comparison schools, those five schools showed significant effects on students’ liking for school, enjoyment of class, and academic motivation but no consistent effects on achievement as measured by district-administered tests or the

researchers' own academic measures. Many positive effects were shown on prosocial measures (e.g., concern for others, prosocial conflict resolution skill, democratic values, and altruistic behavior), and reductions were shown in drug use and some forms of violence (Battistich, Schaps, Watson, Solomon, & Lewis 2000; Solomon, Battistich, Watson, Schaps, & Lewis 2000). Other analyses showed clear linkages between participation in the program and students' sense of community, and between sense of community and most of the assessed student outcomes, including academic motivation and engagement in class, but not in achievement as measured by district test scores or critical thinking (Battistich, Schaps, Watson, Solomon, & Lewis 2000; Solomon, Battistich, Watson, Schaps, & Lewis 2000).

A follow-up study tracked students from a subset of the CDP and comparison schools through their middle school years. Although no similar program was in place in the middle schools, former CDP students scored better than did former comparison students on various school-related attitudes and behaviors (e.g., trust in teachers, liking for school, engagement in class activities), and they achieved higher grade point averages and had better scores on district achievement tests. They also continued to manifest more prosocial attitudes and behaviors (Schaps, Battistich, & Solomon 1997).

**Positive Action Through Holistic Education (PATHE):** *A secondary-school program designed to combat delinquency by increasing students' attachment to school and positive others in the school community, active involvement in school activities, and experiences with academic success.*

The PATHE program attempted to influence several aspects of the environment simultaneously, with a rationale similar to the social development model (Hawkins & Weis 1985). Its specific aims were to increase students' social bonding in school, to improve their self-concepts, to increase academic success experiences and decrease academic failure experiences, and to "create a climate of mutual respect and cooperation and a sense of belonging among teachers, administrators, and students; to increase effective communication; to increase student and faculty involvement in planning for and implementing school change efforts; to increase the clarity, fairness, and consistency of school rule enforcement; and to increase teachers' classroom management skills" (Gottfredson 1986, p. 708).

The program attended to both organizational and individual changes. Implementation involved the creation of school-based teams in which various community members (including students) designed and helped to carry out school improvement plans, discipline committees in which students (along with others) helped to develop school and classroom rules, minicourses on study skills, a team-based approach to cooperative learning, activities to improve school climate (such as a "school pride campaign"), career-focused activities, and specific services to high-risk students aimed at increasing their achievement, self-concept, and positive social bonds.

Evaluation of the project was conducted in five middle schools and four high schools (with one of the schools at each level serving as a comparison school). Targeted high-risk students showed significant increases (relative to the high-risk

comparison group) in school attendance and on various indicators of commitment to school and academic achievement as well as reduced drug involvement (but not serious delinquency). For the general population of middle and high school students, the program was found to reduce delinquency, misbehavior, and drug involvement among high school students. It also showed positive effects on attachment to school for middle school students and a reduction in alienation and improvements in self-concepts for both middle and high school students.

**Responsive Classroom:** *An elementary school (pre-K-6) program that also attempts to create a sense of community.*

Responsive Classroom aims to create a caring classroom environment, to convey an “ethic of caring” (Wood 1994). It also uses various techniques (e.g., modeling, role playing, teacher reinforcement, reminders, and redirection) to foster students’ social skills—cooperation, assertion, responsibility, empathy, and self-control. Classroom approaches, which emphasize both social and academic learning, include a classroom that provides interest areas, displays of student work, and a mix of whole-class, small-group, and individual instruction; morning meetings in which children exercise social skills through greeting, conversing, and solving problems; student participation in the development and enforcement of classroom rules; choice time, during which children can direct their own learning in both individual and cooperative group activities; guided discovery in which children have the opportunity to explore various learning experiences; and frequent assessment and reporting to parents.

An evaluation (Elliott 1992) compared the performance of students in a program school with those in two comparison schools. It indicated that the program produced gains in students’ academic competence and social skills and declines in their problem behaviors—as determined by ratings of teachers, parents, and the students themselves in the fall and spring. A second evaluation involved 212 randomly selected or teacher-nominated students from 26 Washington, D.C., schools (Elliott 1995). About 60 percent of the students were in classrooms using the full Responsive Classroom program; the others were in classrooms in which only one component, the Morning Meeting, was used. In addition to the ratings used in the earlier evaluation, some additional measures were used (in questionnaires for students, parents, teachers, and principals). The results were generally consistent with those found in the earlier evaluation: students who received the full program performed better than those in the single-component program.

**School Development Program (SDP):** *A K-12 program developed to improve achievement by strengthening relationships and climate in school.*

James Comer’s School Development Program aims at improving achievement and other student outcomes by strengthening school climate and relationships between students, parents, teachers, administrators, and other school staff. Originally an elementary school program, the SDP is now also used in middle and senior high schools. It focuses on establishing collaborative governance and planning groups (called “structures”)

that apply several principles to the reshaping of pivotal aspects of school functioning. These principles include putting students first, cooperating, taking a problem-solving orientation, and engaging in consensus decision making. The SDP has become one of the most widely implemented school reform models in the nation; it has been introduced to hundreds of schools.

Early evaluations of the SDP reported significant gains in student achievement (summarized in Haynes, Comer, Gebreyesus, & Ben-Avie 1996). A more recent and rigorous study (Cook et al. 1999) involved 23 middle schools that were randomly assigned to implement the program or serve in a control group. Over a four-year period, Cook and colleagues found only a very partial and highly variable implementation of the SDP program and negligible effects on school climate or student outcomes, including math achievement outcomes. The evaluators concluded that the SDP needs a stronger academic focus to complement its existing social focus.

**Seattle Social Development Project (recently renamed the Skills, Opportunities, and Recognition, or SOAR, program):** *An elementary school program to help students develop social bonds to school and family, learn social skills, and participate in productive activities.*

This program (O'Donnell, Hawkins, Catalano, Abbot, & Day 1995) aims "to reduce or eliminate the effects of exposure to risk by developing preventive interventions that primarily targeted the risk factors of academic failure, low

commitment to school, early conduct disorders, family management problems, and involvement with antisocial others. Each intervention was designed to increase protective factors while reducing risk" (p. 89).

The program was introduced in 18 Seattle elementary schools, and students were randomly assigned to experimental or control classrooms. The classroom intervention involved "proactive classroom management" (providing clear expectations for behavior, recognizing and rewarding compliance, using encouragement and praise), "interactive teaching" (involving sequential mastery of specified individualized learning objectives and frequent monitoring, assessment, and remediation), and "cooperative learning" (using an approach that involved cooperation within teams and competition between teams). Students in the 1st and 6th grades also received social skills training—Interpersonal Cognitive Problem Solving (Shure & Healey 1993) for 1st graders and refusal skills training for 6th graders. Volunteer parents of students in most of the grades were also given parent training classes that covered child behavior management (a reinforcement-based approach), academic support (focused on improving parents' communication with their children by learning to help with reading and math), and antisocial prevention (focused on drug prevention, resistance skills, self-control skills, and active involvement in familial roles).

Data analyses focused on high-risk (high poverty) students at the conclusion of elementary school and found that the program produced positive effects on academic achievement, attachment and

commitment to school, study skills, persistence, boys' social competence and delinquency, and girls' drug use. The authors speculate that the differences in effects for boys and girls may have reflected social or developmental differences between them.

A follow-up study was conducted when the same students were 18 years old (Hawkins, Catalano, Kosterman, Abbott, & Hill 1999). Results were compared for three groups of students: those who had received a "full intervention" (grades 1 through 6), those who had received a "late intervention" (only grades 5 and 6), and a no-intervention control group. Long-term effects were almost exclusively limited to the full intervention group, which scored significantly higher than did the control group on measures of school achievement, school commitment and attachment, misbehavior, lifetime violence, and sexual activity. The authors speculate that the program's emphasis on school bonding and achievement "may set children on a developmental path toward school completion and success that is naturally reinforced both by teachers responsive to eager students and by the students' own commitment to schooling" (p. 233).

**School Transitional Environment Project:**  
*A high school program based on the assumption that students would feel greater connection to school if they could spend significant amounts of time in small and stable groups within the school.*

This one-year program for incoming high school students placed them in "schools within the school," each with 65 to 100 students (Felner & Adan 1988; Felner,

Ginter, & Primavera 1982). The students stayed in small groups for both their homeroom and their academic subjects, and the homeroom teacher was actively involved in attending to the varied needs of the students. This arrangement was found to have positive effects on students' academic performance, persistence, absenteeism, and dropping out. However, a similar program (Reyes & Jason 1991) failed to produce positive results.

**Turning Points Study:** *A middle school project that implemented changes in school organization, structure, and atmosphere.*

Felner et al. (1996) conducted a longitudinal study of Illinois middle schools that were attempting to implement the recommendations of the Carnegie Council's report *Turning Points* (Carnegie Council on Adolescent Development 1989). The report called for comprehensive changes in school organization, structure, and atmosphere aimed at being responsive to the developmental needs of adolescents, including the use of interdisciplinary teams of teachers with joint planning time, teacher autonomy in making decisions, grouping of students into teams, heterogeneous ability grouping, cooperative activities, peer tutoring, mentoring activities, emphases on critical thinking, integration of various curriculum elements, experiential learning, flexible scheduling, increased school-community connections, and other elements.

Felner et al. (1996) describe results for 31 schools that were in the project as of its second year (1991-92). Three groups of schools were compared: nine that had made most of the recommended changes at relatively high levels; 12 that had made

some of the recommended structural changes but not the instructional and contextual changes; and ten that had not made progress with any of the changes. The three groups showed large and significant differences in many student characteristics with, in each case, the high-implementing group scoring the highest and the nonimplementing group, the lowest. These differences were found for student achievement, teacher ratings and student self-reports of student in-school behavior, behavioral problems, depression, anxiety, worries about being victimized or something bad happening at school, worries about the future, and self-esteem. The positive effects of higher levels of implementation were pronounced for high-risk (minority, low-income) students.

Inasmuch as the study did not include comparison schools (all the schools were apparently intending to implement the recommendations), the findings noted above could simply reflect preexisting differences in principal orientation, staff competence and cohesiveness, or some such. The researchers conducted an additional set of analyses that render such alternative explanations less likely. They compared changes in implementation level within schools across one and two years and found strong correlations between the level of implementation change and the corresponding changes in student outcomes in each of the areas—achievement, student perceptions of the school climate, student adjustment, and health indexes.

### Summary of Findings from Intervention Studies

The goal of all these programs is to change the relationship of students to school, building up the positive aspects of that relationship so that it can become a strong and stable protective force rather than (or in addition to) focusing directly on individual risk factors. In keeping with this goal, most programs are directed toward the entire student body of a school instead of a targeted subset of students.

Although the focus is not always explicitly stated, these programs aim to create a supportive school environment so that students will become affectively attached to school and to their teachers and fellow students. This focus on school bonding is stated most explicitly in the rationale for the Child Development Project and the Seattle Social Development Project, which emphasize creating a “system of positive social influences on development by directly affecting the normative climate and socialization processes of the school” (Schaps & Battistich 1991, p. 171).

Although some of the programs described above target secondary school students, several begin early in elementary school; for example, Child Development Project, School Development Program, Responsive Classroom, School Development Program, and Seattle Social Development Project. The intent of these elementary school programs is to create an “upward spiral,” in which early successful experiences produce gains in children’s motivation, sociability, and other positive characteristics and lead directly to further efforts and successes. As part of this spiraling effect, children

become more socially and intellectually engaged and so experience increasingly enjoyable and stimulating exchanges with teachers and peers, producing positive reactions and encouragement from them that leads to even more constructive effort and continuing learning gains (Bereutta-Clement, Schweinhart, Barnett, Epstein, & Weikart 1984; Hawkins, Catalano, Kosterman, Abbott, & Hill 1999; Zigler, Taussig, & Black 1992).

The programs named above differ in the processes they employ to create a supportive school environment:

- Several programs stress the importance of a predictable set of expectations and the consistent and fair use of rewards and punishments (e.g., PATHE, Seattle Social Development Project); others avoid extrinsic incentives in favor of promoting and relying on students' intrinsic motivation (e.g., Child Development Project).
- Encouraging students' participation in school and in classroom decision making

and planning is also common to these programs (e.g., PATHE, Responsive Classroom, School Development Program, Child Development Project).

- Another feature common to several programs is providing opportunities for students to interact with one another in cooperative activities or in other ways, to have experiences of success, to be self-directing, and to explore areas of interest (e.g., Child Development Project, Responsive Classroom, PATHE, Seattle Social Development Project).

Follow-up studies of both the Child Development Project and the Seattle Social Development Project showed that enduring effects—those that persist through middle school or beyond—occurred only or most clearly for students who experienced high levels of program implementation over several years. Thus it appears that programs must be consistently implemented throughout a school (so that students have comparable experiences as they move from class to class, grade to grade) for an extended period of time.

## *Conclusions and Recommendations*

The research described in this chapter concludes that building in-school community is a means of fostering academic success. Students who experience their school as a caring community consistently become more motivated, ambitious, and engaged in their learning. In particular, students' positive connections with teachers and their perceptions that teachers care about them are what stimulate their effort and engagement. Relationships with other

students appear to be less important for promoting engagement in the general student population and among high-risk students.

Building community may need to be done thoroughly to have long-term effects. Two major studies suggest that community-building programs must be consistently implemented throughout a school and over a period of several years to have broad and enduring effects (perhaps so that students

will have comparable experiences as they move from class to class and grade to grade). The inevitable changes in personnel, leadership, and external influences in many schools, as well as internal politics and inertia, may make achieving such consistency over the years a significant challenge.

In-school community affects motivation and engagement in school, which appear to lead to higher academic grades and test scores. Community building should be complemented by an emphasis on academics—academic press—which consists of strong school norms and expectations that encourage academic effort and achievement for all students.

Although students' experience of community in school may have a direct effect on their liking for school, educational aspirations, academic motivation and engagement, and tendency to stay in school, community does *not* seem to have a direct effect on achievement as measured by grades or test scores. Instead, the community's effects on motivation and engagement appear to be what, in turn, lead to higher academic grades and test scores. Even then, community building may be insufficient, especially among low-income students and students of color, unless complemented by "academic press"—a set of strong norms and expectations in the school encouraging academic effort and achievement. Academic press prevails when teachers and administrators, and also parents, expect all students to make significant academic progress. This expectation requires a school's staff to come to know each student; to track each student's learning in an ongoing way; and to adjust expectations accordingly to ensure further growth.

Schools recently have come under pressure to show student achievement gains quickly, often within a year or two. It is no longer sufficient to show achievement gains after a period of several years or after students have graduated to a higher level of schooling. Moreover, schools are now called upon to reduce the disparities in achievement among various racial, ethnic, and income subgroups. In light of these new requirements, the combination of community building and academic press appears highly advisable for maximizing achievement.

Although not addressed in the research reviewed here, a third priority, "academic support," might be considered by schools as a way to complement community building and academic press. When schools provide the full range of students with challenging and engaging learning opportunities, they are providing academic support. The opportunities provide students with the skills and knowledge needed for mastering the various academic disciplines. Such learning opportunities also connect to students' prior interests and experiences and in this way tap intrinsic motivation to learn. Making learning both challenging and engaging, thereby providing high levels of support, involves (1) teaching for both conceptual understanding *and* skills development; (2) ensuring that essential content is covered and that students can pursue their own interests at times; and (3) balancing and integrating the use of didactic *and* experiential teaching methods.

When coupled with building community in school, these additional priorities of academic press and support are likely to

have powerful effects on achievement. To be sure, enacting these three priorities requires simultaneous, coordinated change in many facets of school and classroom life. But they may be the most important priorities that schools and districts can establish for the academic success and overall health of their students.

In summary, a substantial body of research indicates that in-school community building can effectively promote academic motivation and engagement as well as achievement

when coupled with an emphasis on academics. Because community building also promotes social, emotional, and ethical growth and the prevention of problem behaviors, it may powerfully meet the needs of both students and society. Of special interest are the indications that building community may be particularly beneficial for disadvantaged students. Challenging, supportive, and caring schools may provide the pivotal support needed by students who traditionally have been least likely to succeed.

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