



Chapter 6

The School Development Program Evaluation Process

NORRIS M. HAYNES, CHRISTINE L. EMMONS,
SARA GEBREYESUS, AND MICHAEL BEN-AVIE

Most educational change initiatives implement a program and claim results on the basis of test scores alone. By contrast, the SDP conducts research and evaluation in the real-life situation of the school. In addition to evaluating test scores, SDP staff members calibrate school climate and children's self-concept, behavior, and social competence, and then measure these elements against the level of program implementation. To offer timely and useful information, the SDP's national research and evaluation staff has built the capacity to visit schools, collect data, conduct data analysis, and report findings to the schools and the school districts within a timely manner.

From the start, a key feature of the School Development Program (SDP) has been that it is a data-driven school improvement process. Consistent, careful, and clear documentation of the *process* of SDP implementation in schools and of the *impact* of implementation provides us with a continued sense of purposeful direction. Norris M. Haynes, director of the SDP Research and Evaluation Unit, states in the Epilogue of this book, "Measuring program outcomes, such as improved student performance on standardized tests, is meaningless unless there is a commensurate assessment of the level and quality of program implementation." The documentation of the SDP process and of its impact is regarded as a collaborative effort between schools and SDP staff at the Yale Child Study Center.

The purpose of documentation is threefold: (1) to provide formative process data to improve and strengthen program implementation; (2) to provide measures of program impact on salient outcome variables, including those identified in Comprehensive School Plan goal statements; (3) to contribute to the theory on how schools change and how students succeed.

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Included in the formative process is the *needs assessment*, the purpose of which is to show the current state of the school and to collect baseline data that become the comparison points for future changes. *Formative assessment* provides continuous feedback for improvement and takes place at several levels: school, district, and SDP national office at the Yale Child Study Center. *Summative assessments* serve as benchmarks of progress and do not imply finality.

Theory building, although not the primary purpose of the SDP evaluation process, is an important aspect of it. Although the SDP has a strong theoretical base, that theoretical base must be regularly tested for its continued validity, and for refinement and enhancement. Knowledge is not static. As we study school reform through implementation, we increase our knowledge of how change takes place and is sustained, about the nature and development of human beings, and about the role of relationships in human development and organizational change. The weaving of this information into the fabric of a coherent theory allows for its application in fields beyond school reform. For example, the principle of no-fault can be applied to problem solving in any situation.

SDP Research and Evaluation Framework and History

Theoretical Framework

The theoretical framework for the SDP evaluation process is consonant with the theoretical underpinnings of the program. The school is viewed as a system in which change in any part affects all the other parts. Therefore, the research design allows for data to be gathered from all stakeholders: the students, parents, school staff including teachers, administrators, janitorial, secretarial, professional, and nonprofessional support staff. As the views of all are sought in decision making, the opinions and responses of all are sought during the evaluation process. The SDP evaluation process is conducted with the philosophy that all stakeholders should be involved, that the responsibility and decision making should be shared, and that whatever is done should be in the best interest of children.

The SDP is a process that creates a healthy, positive, and supportive school climate through its nine-element design: three teams (the School Planning and Management Team or SPMT, the Student and Staff Support Team or SSST, and the Parent Team or PT); three operations (Comprehensive School Plan, staff development, monitoring and assessment); three guiding principles (consensus, collaboration, and no-fault). See Figure 1-1 in Chapter One.

Through these nine elements, and specifically with the implementation of the three teams, the SDP improves essential dimensions of school climate. As these dimensions improve, students experience significant positive growth along the six critical developmental pathways and are at reduced risk for negative outcomes. The probability of positive psychosocial behavioral and academic outcomes is also

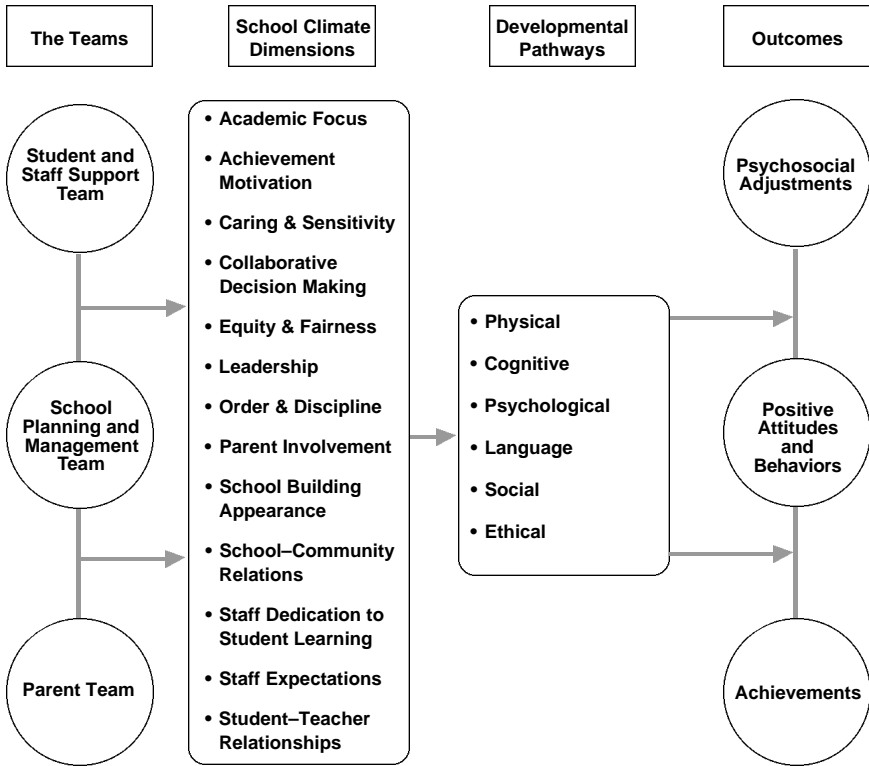


Figure 6-1. The School Development Program (SDP) model of effects.

increased when appropriate programmatic and instructional activities are implemented as part of the school’s comprehensive planning process.

Figure 6-1 shows that the three SDP teams help to create essential positive school climate dimensions that support and nurture total student development along the six developmental pathways, through well-planned and focused activities, resulting in increased likelihood of positive outcomes.

The three SDP guiding principles—consensus, collaboration, and no-fault—apply as much to documentation as they do to implementation.

CONSENSUS

It is important that decisions about what data to collect and how to collect them be made through the consensus process. This process involves the brainstorming of ideas, the consideration of pluses and minuses of each idea, and the general agreement to try one or two ideas first, and then to try other ideas as alternatives.

At the school level, working through the Comprehensive School Plan as a guide, the school community reaches consensus on the what and how of documentation. This process requires an informed school community, a mechanism for optimum input by constituents, and a procedure for feedback and review of decisions on documentation. At the district level, there should be a committee or team approach to documentation involving the SDP facilitator, research and evaluation specialist, as well as other key program coordinators and staff.

COLLABORATION

As with implementation, the best approach to documentation must be built on a commitment to the principles of true collaboration and inclusion. At the school level, staff, parents, and students serve as sources of information and participate in the documentation process. At the district level, through the committee or team approach mentioned above, all key personnel in various departments work together to produce the needed data in an integrated way.

NO-FAULT

There is collective responsibility for identifying data needs and gathering the necessary information to meet these needs. The Comprehensive School Plan process at the school level allows everyone in the school, through representatives, to identify needed data and ways to collect them. Instead of holding one person liable when needed information does not exist, there is shared accountability, since the identification and acquisition of important information is a system responsibility.

Operating with mutual respect requires that the results of the evaluation be shared with the schools from which the data were collected. Each school receives from the SDP Research and Evaluation Unit copies of all school-level reports produced about that school, and copies of all district-level reports that include data collected from that school. The sharing of reports is important also because the intent is that the information contained in the reports will assist the SPMT, SSST, and PT in making decisions that would improve the quality of life for the children.

History of SDP Evaluation

James P. Comer's work began in two individual schools in New Haven. Comer and his staff worked closely with these two schools and monitored their activities regularly. As the work expanded and his team intervention slowly grew into national program implementation, close relations with school staff that allowed for individual dialogue, evaluation through regular observation, and immediate feedback and modification changed to a more distant, less frequent interaction with SDP national office staff. The inclusion of a large number of schools into the SDP's network meant that the SDP staff could no longer easily do both implementation and research work. This necessitated the employment of research and evaluation staff to undertake the evaluation of the program implementation and its impact on school climate and student outcomes including self-concept, attendance, and achievement. This has been

the major focus of our research and evaluation activities during the past 9 years. Our studies have been cross-sectional quasi-experimental studies designed to assess SDP efforts. We have just begun a 6-year longitudinal study to assess the long-term effects of SDP. We are now in a position to do this assessment due to committed support for a more longitudinal study and demonstrated need. This issue is further discussed in a later section in this chapter.

The research and evaluation staff developed a variety of questionnaires including school climate surveys and implementation questionnaires. Gradually, the climate instruments were revised and psychometrically tested, and additional protocols for interviews and documentation of the implementation process were developed.

Several cross-sectional quasi-experimental studies comparing SDP and non-SDP schools on school climate, student self-concept, student attendance, and student achievement favored the SDP schools. Follow-up studies on middle school students who had attended SDP and non-SDP schools indicated a long-term positive effect in terms of adjustment and achievement that favored students who had attended the SDP schools. However, the results, not always consistent, suggested that in-depth understanding of the SDP implementation process in the field was needed. There needed to be a triangulation of theory, quantitative, and qualitative research to deepen understanding of the change phenomenon.

Committed to a multimethod assessment and modification plan that was designed to best document and capture the process of implementation and the contextual factors in the schools, we conducted selected semiethnographic studies and administered school implementation questionnaires in select districts. In this documentation process we used our interview protocols and observation logs, examined school archives, and engaged in individual and group dialogue. These selected case studies provided us with important preliminary results and laid the foundation for conducting further research on a number of issues.

The results of both the quantitative and qualitative studies, in conjunction with SDP implementation field experiences, have led to a change in focus from the implementation of SDP in individual schools to its implementation at a systemic level, meaning the commitment of the district central office, the school board, and the school building staff to the process. Our research has shown that the individual school needs the support of the district central office and the school board if the process is to be fully successful. This change in focus from individual school to systemic implementation has also shifted the focus of the Research and Evaluation Unit from individual school to the documentation of systemic implementation and its outcomes. As a result, we have developed a 6-year longitudinal plan to monitor the implementation of SDP in the three systemic districts: New York Community School District #13, Washington, D.C., and New Haven (which is in transition).

As the number of schools involved in the SDP grew, so did the need for additional personnel in the field who understood the School Development Program and could assist with its implementation at the school and district level. The Comer

Process for Change in Education (CPCE), the implementation unit within SDP, developed leadership programs to train school personnel to facilitate the implementation of the SDP in their district. Consistent with SDP policy of continuous assessment and modification of all aspects of the program, the SDP Research and Evaluation Unit in collaboration with CPCE developed procedures for the evaluation of both the leadership programs and the quality of implementation in the schools. Both quantitative and qualitative methods are used for this evaluation.

To document the growth of the SDP across the United States, and now internationally, the Research and Evaluation Unit has developed a national database that lists the schools implementing SDP, the demographics of the students, and selected school-level outcome data, for example, attendance and achievement.

As shown from this brief description, the SDP evaluation process has both affected the implementation of SDP and has been affected by it. This symbiotic relationship has resulted in a widening upward spiral that expands the breadth and complexity of SDP implementation, and the depth, scope, and difficulty or intricacy of evaluation and research.

Previous Research on SDP Process and Outcomes

Academic Effects

School-level aggregated data analyses provide evidence of significant SDP effects on achievement. In 1986, an analysis of achievement data in the Benton Harbor Michigan Area Schools showed significant average 4-year gains, between 7.5 and 11.0 percentile points, in reading and mathematics, at the second, fourth, fifth, and sixth grades for SDP schools, exceeding gains reported for the school district as a whole. Program schools also registered higher gains in mathematics and reading than the district as a whole, with regard to the percentage of students obtaining 75% and above of the objectives on the Michigan Educational Assessment Program (Haynes, Comer, and Hamilton-Lee, 1988a). These data are presented in Table 6-1.

An assessment of SDP effects conducted by the research office of the Prince George's County Public Schools in 1987 revealed that average percentile gains on the California Achievement Test between 1985 and 1987 were significantly greater for Milliken schools that used the SDP than for the district as a whole. At the third-grade level, program schools gained about 18 percentile points in mathematics, 9 percentile points in reading, and 17 percentile points in language. The district as a whole registered gains of 11, 4, and 9 percentile points respectively in mathematics, reading, and language. At the fifth-grade level, program schools recorded gains of 21, 7, and 12 percentile points in mathematics, reading, and language compared to gains of 11, 4, and 7 percentile points for the district as a whole (Comer, 1988b, p. 47). Further analysis also revealed that academic gains were linked to the degree and quality of implementation of the SDP. These data are summarized in Figures 6-2 and 6-3.

Table 6-1. Four-Year Average Gains at Each Grade Level on the California Achievement Test

Grade levels	1	2	3	4	5	6
SDP Schools						
Reading	9.3	9.8*	7.5	7.0	7.5**	11.0**
Math	12.5	10.5**	11.5	9.5**	7.8	10.5
Total Battery	11.0	9.8	10.3	7.5	7.5	9.8
District						
Reading	11.0	9.8	8.5	7.5	6.0	10.0
Math	13.3	9.3	12.0	9.0	11.5	11.5
Total Battery	11.5	10.0	11.5	9.0	9.0	13.3

*Equals District Gain.

**Exceeds District Gain.

Source: Haynes, N. M., Comer, J. P., Hamilton-Lee, M. (1988). The School Development Program: A model for school improvement. *Journal of Negro Education*, 57 (1), pp. 11-21.

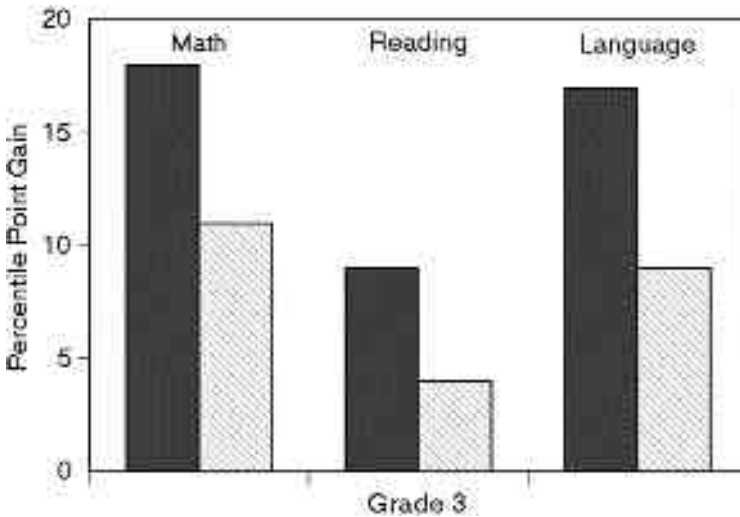


Figure 6-2. Grade 3 average percentile gains, 1985-1987, California Achievement Test scores. *Solid bars:* SDP schools; *hatched bars:* district. (Source: Comer, J. P. [1988]. Educating poor minority children. *Scientific American*, 259 [5], 42-48.)

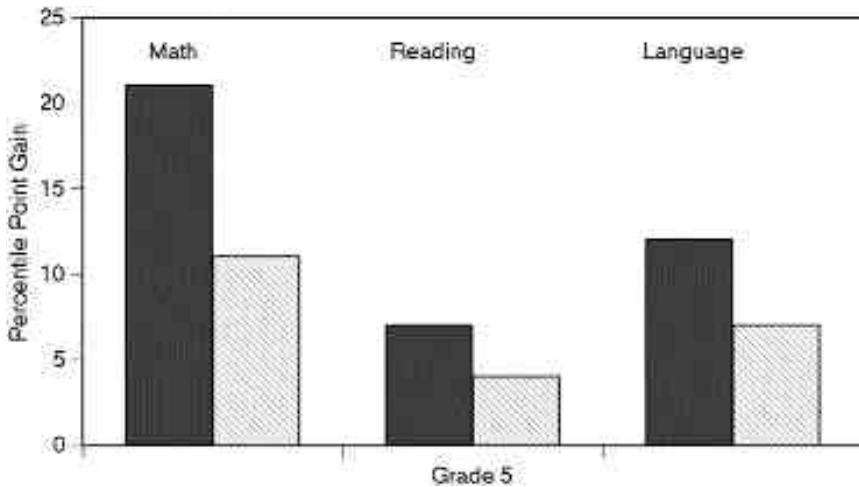


Figure 6-3. Grade 5 average percentile gains, 1985–1987, California Achievement Test. *Solid bars:* SDP schools; *hatched bars:* district. (Source: Comer, J. P. [1988]. Educating poor minority children. *Scientific American*, 259 [5], 42–48.)

A trend analysis of achievement data among fourth graders in the two pioneer SDP schools in New Haven conducted by our SDP research team based on objective archival data provided by the school system indicated steady gains in mathematics and reading between 1969 and 1984. The grade equivalent scores for the two schools increased from about 3.0 in reading and mathematics in 1969 to 6.0 in reading and 5.0 in mathematics in 1984 (Comer, 1988b).

Several experimental control group studies involving randomly selected students in carefully matched schools reported significant differences in academic achievement between students in SDP schools and students in non-SDP control schools. A study by Cauce, Comer, and Schwartz (1987) reported that seventh-grade students from SDP schools had significantly higher averages in language, work study, and mathematics, and an overall higher mean grade equivalent than students from non-SDP schools. These data are summarized in Table 6-2.

In a retrospective follow-up study conducted at a New Haven middle school (Haynes, Comer, and Hamilton-Lee, 1994), 92 sixth and eighth grade students were studied. Forty-seven (51%) were from a non-SDP elementary school and 45 (49%) were from a program elementary school prior to entering the middle schools. The academic achievement of these students was measured by report-card grades and by percentile scores on the Metropolitan Achievement Test. Significant differences in favor of the SDP students were found for sixth graders in mathematics, language, and total battery on the Metropolitan Achievement Test. SDP students obtained consistently higher scores on all other achievement measures. Recent data from Lincoln

Table 6-2. Long-term Effects Related to Attendance at an SDP Elementary School: Mean Grade-Equivalents for Seventh-Grade SDP and Non-SDP Students on the Iowa Test of Basic Skills, 1985

Skill	SDP students (n = 24)	Non-SDP students (n = 24)	F-Statistic
Language			
Vocabulary	6.18	5.12	20.22***
Reading	7.80	5.60	9.67**
Spelling	7.20	5.38	14.95***
Capitalization	7.00	5.02	17.26***
Punctuation	7.50	5.80	20.83***
Usage	7.00	5.18	24.12***
<i>Total</i>	7.00	5.34	27.52***
Work-Study			
Visual Materials	6.58	4.96	9.08**
Reference Materials	7.28	5.97	9.46**
<i>Total</i>	6.95	5.46	13.01***
Mathematics			
Concepts	7.25	5.94	9.93**
Problem-Solving	7.12	5.73	9.53**
Computation	7.28	6.49	6.46*
<i>Total</i>	7.22	6.05	9.55**
Composite	6.90	5.56	9.65***

* $p < .05$

** $p < .01$

*** $p < .001$

Source: Cauce, A. M., Comer, J. P., Schwartz, B. A. (1987). Long term effects of a systems-oriented school prevention program. *American J. Orthopsychiatry*, 57 (1), pp. 127–131.

Bassett School in New Haven, one of the best implementing SDP schools which is located in one of the poorest and most troubled areas in the city, indicated significant achievement gains for third graders on mathematics and language following adoption and implementation of the program in 1987; these data are presented in Figure 6-4.

In New Orleans, which is a district with a university and school district partnership for implementing the SDP described in Chapter 4, a strong effort is made to harness the resources of the “whole village” for the benefit of the students. In addition to the SDP facilitator, Southern University of New Orleans staff with their students work closely with the schools. An examination of achievement for the

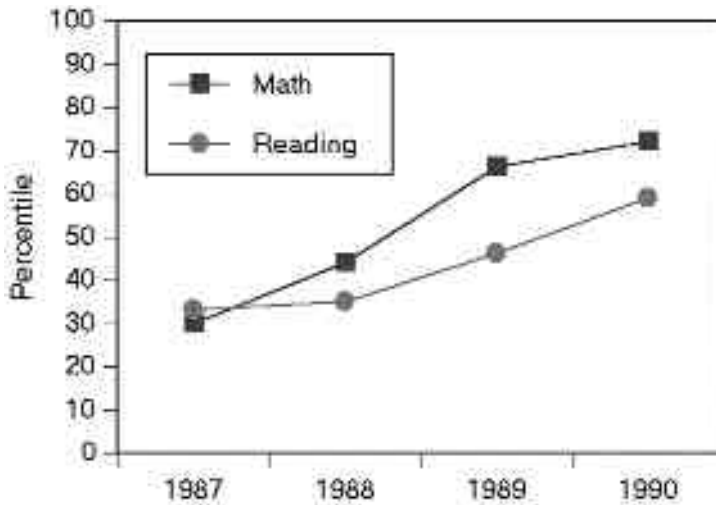


Figure 6-4. MAT-6 results 1987–1990, grade 3, Lincoln Bassett Elementary School. (Source: SDP National Database.)

first four SDP schools, three of which began implementing the program in 1991–1992, and one of which began implementing SDP in 1992–1993, shows a general positive trend. Figures 6-5 and 6-6 illustrate the trend in reading and math achievement scores for grade 3 for the years 1991–1992 to 1993–1994.

The upward trend seems to indicate that the SDP is having a positive effect. Our ethnographic work indicates that a rigorous system of monitoring student performance and growth was in place in some schools as a result of the SDP. This may have accounted for the significant improvement observed in student performance.

Behavior and School Adjustment Effects

Experimental control studies conducted by Haynes, Comer, and Hamilton-Lee (1988b, 1994) indicated that SDP students experienced significantly greater positive changes in attendance, and teacher ratings of classroom behavior, attitude toward authority, and group participation, when compared to non-SDP students. A study by Cauce, Comer, and Schwartz (1987) found that SDP students reported significantly better perceived school competence and self-competence compared to a control group of non-SDP students.

Self-Concept

In a recent study (Haynes and Comer, 1990) SDP students in the fourth and sixth grades were compared with non-SDP students on six self-concept dimensions on

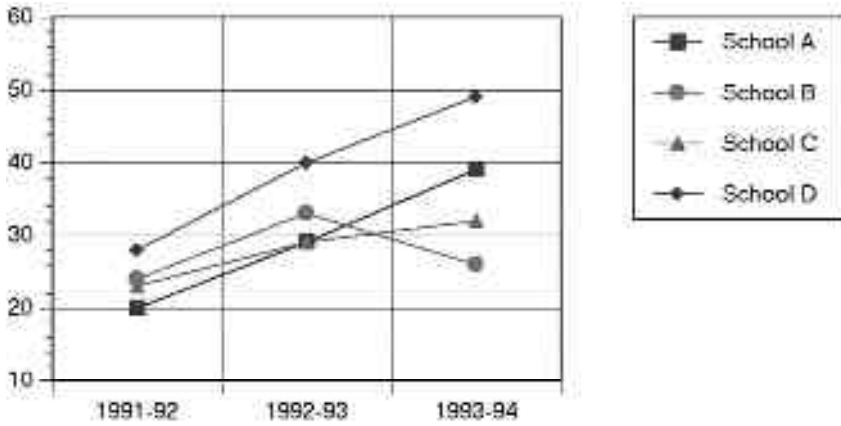


Figure 6-5. CAT/E: median percentile score, grade 3, reading, 1991–1994. (Source: SDP National Database.)

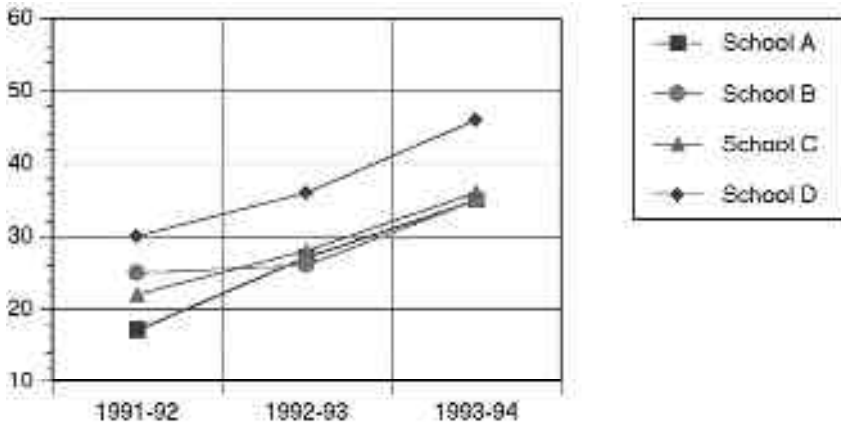


Figure 6-6. CAT/E: median percentile score, grade 3, mathematics, 1991–1994. (Source: SDP National Database.)

the Piers Harris Self-Concept Scale. Both groups of students were also compared with the national normative sample on total self-concept. Analysis of covariance was used to control for pretest differences that existed between SDP and non-SDP students. On the post-test measures, SDP students scored significantly higher than the control group of non-SDP students on all six self-concept dimensions and significantly higher than the normative group on total self-concept (see Table 6-3 and Figures 6-7 and 6-8).

Table 6-3. Means and Standard Deviations (SD) on Piers-Harris Self-Concept Dimensions for SDP and Non-SDP Students, 1988–1989

Self-Concept Dimensions (highest possible score)	Pre-Test Means (SD) September 1988		Post-Test Means (SD) April 1989	
	SDP Students n = 87	Non-SDP Students n = 87	SDP Students n = 87	Non-SDP Students n = 87
Behavior (16)	6.9 (1.8)	7.6 (2.6)	12.2* (1.7)	8.1 (2.5)
Intellectual and School Status (17)	7.9 (1.6)	8.7 (2.4)	13.2* (1.5)	8.9 (2.3)
Physical (14)	8.4 (1.7)	8.7 (1.8)	10.0* (1.4)	9.0 (1.7)
Anxiety (14)	8.0 (1.8)	8.6 (1.9)	10.1* (1.9)	8.7 (2.1)
Popularity (12)	7.9 (1.9)	8.1 (1.6)	9.4* (1.5)	8.4 (1.6)
Happiness and Satisfaction (10)	6.0 (1.5)	7.1 (1.6)	9.0* (.87)	6.9 (1.7)
Total Score (89)	45.1 (6.3)	48.8 (7.6)	63.9* (4.9)	50.0 (7.4)

*Significant post-test mean differences ($p < .001$).

Source: Haynes, N.M. and Comer, J.P. (1990). The effects of a school development program on self-concept. *Yale Journal of Biology and Medicine*, 63, 275–283.

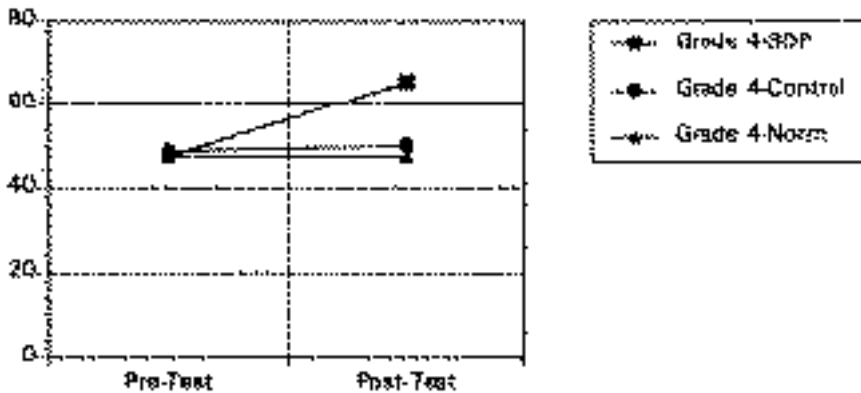


Figure 6-7. Comparison of mean total self-concept scores for fourth grade SDP students, non-SDP students, and normative group, 1990. Note: Highest possible score is 80. (Source: Haynes, N.M., and Comer, J. P. [1990]. The effects of a school development program on self-concept. *The Yale Journal of Biology and Medicine*, 63, 275–283.)

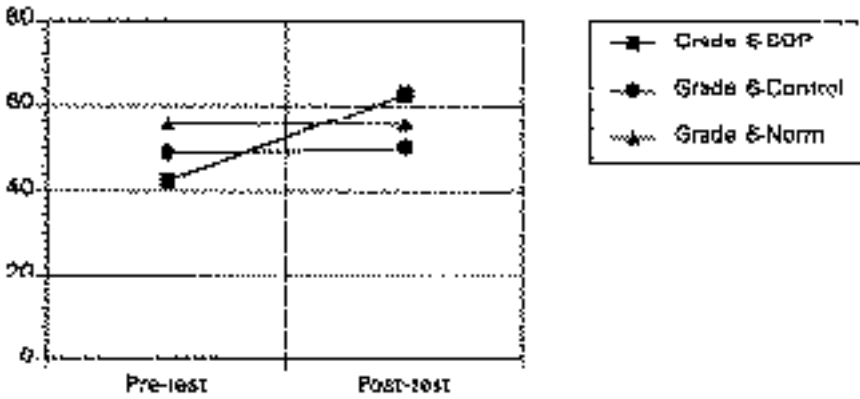


Figure 6-8. Comparison of mean total self-concept scores for sixth-grade SDP students, non-SDP students, and normative group, 1990. *Note:* Highest possible score is 80. (Source: Haynes, N.M., and Comer, J. P. [1990]. The effects of a school development program on self-concept. *The Yale Journal of Biology and Medicine*, 63, 275–283.)

Classroom and School Climate

In a quasi-experimental study (Comer, Haynes, & Hamilton-Lee, 1989b) designed to examine the effects of the SDP on climate and other variables over the period of an academic year, students in the SDP schools reported significant improvement along five of the nine Trickett and Moos (1974) *Classroom Environment Scale* (CES) subscales, and on the total CES. Students in the four control schools reported significant improvement on two of the subscales. Parents' assessment of school climate as measured by the School Climate Survey (SCS), 1985 version, showed significant positive change for the SDP schools. Parents of non-SDP schools reported significant negative changes in their assessment of the climate in those schools.

Qualitative/Ethnographic Findings

As noted earlier, qualitative studies formed an important and integral part of SDP's evaluation of its implementation process. Ten sites were selected for study in 1992–1993. Our investigation in each of the 10 selected sites began in Spring 1993. In our effort to learn about how schools instituted the nine SDP elements, we sought to understand what if any conditions already existed in the various districts that facilitated or hindered the processes of establishing the nine elements, and how the schools overcame the hindrances. Our aim was to understand the processes by which the SDP structures were built in each of these schools.

FACILITATING CONDITIONS

The conditions that facilitated the establishment of the nine elements in the schools included (1) direct SDP and district-level collaboration, (2) positive interpersonal relationships, (3) facilitators' knowledge and use of preexisting change mechanisms in the schools, and (4) parent and student participation.

(1) Direct and formal collaboration between the School Development Program and the school districts greatly helped the restructuring process. This collaboration was secured through a contractual agreement with the central office. The superintendents appointed district-level facilitators, most of whom dedicated more than 50% of their time to ensure the implementation of the SDP. The facilitator attended SDP professional leadership development sessions to enhance facilitation skills. The principals and school staff also obtained training in the philosophy of the SDP. Once trained, the facilitators provided the school administrators and staff members with formal SDP orientations and training to help initiate the establishment of the SPMT, SSST, and PT.

(2) Most facilitators identified the quality of the relationship they created with principals, parents, and school staff as a crucial element in their initial efforts to introduce the nine elements of the SDP to the schools. Good relationships are built when the facilitator honors commitments made to the school, assists with school functions, and takes the time to describe the nine elements of the SDP to individual staff members as needed. Such collaboration with and accessibility to school and community staff helped the facilitators to strengthen their relationships and build trust among parents and school staff.

(3) Facilitators' knowledge and use of preexisting structures that are similar to the SDP teams have proved useful in their initial implementation efforts. Preliminary assessment helped the facilitators to customize their formal orientation to the knowledge level they found in the schools. Restructuring and reorganizing existing teams in these sites facilitated the introduction of the School Development Program in schools.

(4) The other common characteristic shared by all 10 schools was that these schools had some form of parental participation, student referral team, or management team.

Thus, we learned that the role of the district facilitators in the selected sites was crucial in shaping and directing the initiation of the SDP in the schools, and that changing existing mechanisms worked to the advantage of these schools. The willingness of the principals and the school staff to implement the program was key to the success of the facilitators' work in this implementation process.

CONDITIONS THAT HINDERED

Conditions that hindered the implementation of the SDP in schools included (1) staff members' negative experiences with previous school reform programs, (2) staff members' lack of desire to change, (3) low interaction comfort level between parents and staff, and (4) teachers' resistance to parent involvement.

(1) Although most of the school staff members supported the efforts of the SDP to change the schools positively, some lacked faith in SDP's ability to do so. Past experience with other school reform programs showed them to be ineffective and short-lived. They expected the same of the SDP. Thus, at the initial stages of implementation, these schools resisted changes in school management. The existence of other school reform initiatives concurrent with the School Development Program also created confusion among school staff, who assumed that the SDP process would simply mean additional teams and management structures.

(2) Another reason for slow implementation of the team leadership was some staff members' wish to adhere to traditional ways of management and avoid any kind of change in general. Our interviews with the district facilitators revealed that some school staff members felt comfortable having the principal assume the authority and responsibility for managing school affairs. These staff members were not interested in assisting with the management and decision-making process in their schools.

(3) A low parent–staff interaction comfort level proved to be another hindrance to the smooth implementation of the SDP, especially for the Parent Team component. Parents feared that they might be rejected by the staff at their children's school. Some parents felt incompetent and as a result were inhibited in approaching school staff. Parents who spoke other languages and were of different cultures from the predominant language and culture of the schools felt too shy or inhibited to interact with school staff beyond attendance at teacher and parent conferences when needed. Most parents lacked time to manage their family affairs and attend parent activity meetings in the schools, and some parents lacked transportation to attend school events and volunteer in school activities.

(4) Teachers' resistance to parent involvement formed a further barrier to SDP implementation. Some teachers believed that active parental involvement would permit overbearing parents to unfairly criticize them and monitor their work so as to hinder their role as teachers. Some staff members mistrusted parents' motives, interests in, and concern for their children's educational well-being, and many teachers believed that parents would have little to offer by engaging actively in the schools because of their limited knowledge and skills about the schools.

PROBLEM SOLUTIONS

This was the context in which most of the principals operated when they began implementing the principles of the SDP. In their efforts to solve the challenges they encountered and advance the implementation of the SDP, the principals drew from their leadership training they obtained at the Yale Child Study Center. They sought to alleviate some of the conceptual misunderstandings that some of their staff members espoused about school reform organizations in general. They promoted team leadership and made efforts to increase parental involvement through various mechanisms.

The principals worked synergistically with the district facilitators and school staff to identify solutions for the problems they faced. As the first step toward the initial implementation, selected groups of teaching and nonteaching staff and parent volunteers were sent for SDP training at the Yale Child Study Center. Workshops on SDP, and school and community-building training, were given on site by the SDP facilitators. School staff also benefited from the ways in which the principals demonstrated their efforts to change their administrative and leadership styles as they promoted the principles of consensus, collaboration, and no-fault. The principals encouraged broad participation of the school staff in the decision-making process of the schools' academic and social affairs. For example, school staff regularly participated in preparing comprehensive school plans and assessing staff development needs.

Although the implementation process was slow, the principals, facilitators, and school staff members in these schools were able to reap the fruits of their collective work as they progressed through the various implementation levels. The ability of staff to appreciate team leadership and increased parental involvement in the schools were reasons to celebrate. Collaborative decision making not only required courage and foresightedness on the part of the principals who shared their authority, but also necessitated that staff adapt to team leadership styles.

The formation of the SPMT and SSST in the schools helped to reinforce parental involvement. We found that it was an old tradition in all of the schools that we visited to have periodical social evenings for parents (Haynes, Gebreyesus, and Comer, 1993). However, with the introduction of the SDP, concerted efforts were being made to encourage parents to be more meaningful members of the school community. Thus, parents were trained to develop the skills they needed to participate in the schooling process. For example, experts were invited to conduct workshops around the issues such as parent-school staff communication, parenting skills for younger mothers, and computer literacy. Parents participated in the school's process of decision making through their attendance at SPMT and Parent Team meetings. Parents contributed to their children's social and academic skills by serving as teachers' aides, participated in organizing social evenings, solicited other parents to get more involved and interested in their children's school, and assisted in grading papers and posting items on bulletin boards (Haynes, Gebreyesus, and Comer, 1993). Additional steps taken to increase parental involvement included (1) holding meetings in the community where access was easier for parents, (2) arranging with employers for release time for parents to attend meetings as the employers' contribution to the educational change process, (3) asking volunteer parents to reach other parents in the community at large and in social agencies, such as churches and health centers, and (4) establishing carpools to transport parents to meetings and other events.

The struggle to implement the nine elements and the changes that occur during such implementation can perhaps be summarized in this respondent's words:

Traditionally in any school you have decisions that are being made, usually by the principal and what have you, and I think for a lot of us it was uncomfortable when introducing the Comer process that we found ourselves in the position of being a part of that decision-making process. . . . I think I can honestly and truly say that we are moving to a point that I can envision that no . . . pertinent decisions will be made without . . . parental input, as well as the management team's input for the coming years.

Current SDP Agenda

The responsibility of the SDP Research and Evaluation Unit is to conduct formative and summative assessments of the work of the School Development Program. This involves the monitoring of work at the SDP national office and in the field, and includes an action research component. The major SDP research activities are (1) implementation assessment, (2) assessment of SDP impact, (3) development of the national SDP database, and (4) evaluation of SDP leadership development programs.

Implementation Assessment

The purposes of this assessment are to document the implementation process itself, to validate the SDP life cycle, and to examine the degree and quality of implementation in various schools and how this is related to the school climate, student attendance, and student achievement.

The life cycle (see Figure 6-9) of the SDP refers to the particular sequence in which the implementation of the program seems to occur. There are five phases in this sequence called the life cycle: (1) *planning and preorientation*, which is the preparation at the district level for the implementation of the SDP; (2) *orientation*, during which information about the SDP is disseminated, and individuals become acquainted with the mission, goals, philosophy, and nine elements of the program; (3) *transition*, involving the establishment and refinement of the nine SDP elements; (4) *operation*, during which the nine elements are in place and working efficiently; and (5) *institutionalization*, which reflects the infusion and saturation of the philosophy and elements of the SDP throughout the school.

The implementation evaluation consists of two main parts. The first part is qualitative research on the process of implementation, including the in-depth documentation of the process of systemic reform. Currently, the research is concentrated on one systemic district and takes the form of attendance at and documentation of district-level team meetings: interviews with the superintendent and district-level staff involved in the district-level implementation of the SDP, with the SDP staff responsible for systemic implementation in the district, and with representatives from the funding agency. As systemic reform is implemented in schools, interviews will be extended to include principals, staff, parents, and students of selected schools. The interviews can be considered semistructured in that an interview protocol, developed by the SDP staff, is followed. However, because

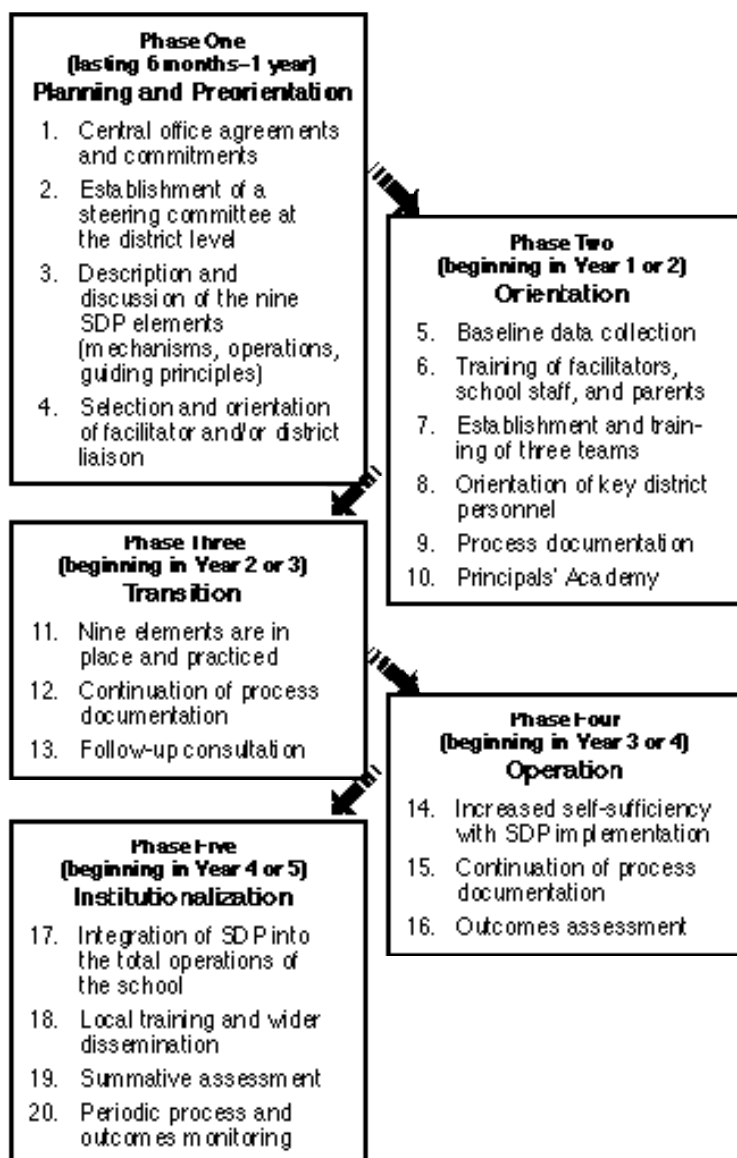


Figure 6-9. Phases in the implementation of the SDP life cycle.

the questions are open-ended, the researcher can pursue an area of interest or ask for elaboration. Further interviews will also pursue the topic of specific programs, activities, and changes in attitudes that have occurred in the school because of the implementation of the SDP.

The documentation of the meetings and retreats involves not so much what is being said or what decisions are made (this is already reflected in the minutes), but the type and quality of interaction that occurs and the role that each person is playing. Such observation allows for the examination of the growth and practice of consensus, collaboration, and no-fault at the district-level.

Archival records such as minutes of meetings, district plans, agendas, mission statements, and staff development materials form part of the resources used for documentation. It is noteworthy that systemic implementation of SDP came as a result of qualitative research on optimal conditions for the faithful replication of SDP.

The second part of the implementation evaluation is the quantitative aspect involving the distribution of the *School Implementation Questionnaire—Revised* (SIQ-R) and the gathering of school-level outcome data. The SIQ-R is being administered to staff and SPMT, SSST, and PT members in more than 110 selected schools. In our current research plan, the SIQ-Rs are being distributed in all the SDP schools in the three systemic districts yearly over a period of 6 years. Concurrent school-level attendance, achievement, and, in selected cases, school climate data are also being collected.

Previous qualitative research on degree of implementation sparked the need to perform this type of systematic, longitudinal research on degree of implementation and its relationship to outcomes. Through observation in the field and especially through interviews and focus groups, the SDP staff found that the degree of implementation varied widely across schools, even among schools that began the program at the same time. Outcome results also varied, with the tendency for schools with high levels of implementation to manifest better climate, improved attendance, and, in some cases, increased achievement. We expect the longitudinal implementation study to clarify issues around the pattern of implementation termed the life cycle, the variability of the SDP implementation, and the impact of the SDP implementation on school-level outcomes.

Assessment of SDP Impact

EFFECT ON SCHOOL CLIMATE

The reason for assessing school climate is to examine the extent to which relationships among adults and between adults and the youth have changed as a result of the implementation of the SDP. Because positive relationships are crucial for the establishment of a caring climate and are the foundation on which meaningful change is built, it is essential that changes in relationships be monitored. We have found that change in climate is the first signal that the process is in place and working.

Our previous research on school climate has been mainly quasi-experimental in that schools were not randomly assigned to SDP or non-SDP conditions, but were selected with these preexisting conditions. In other words, schools implementing the School Development Program in a selected district were compared to schools with similar demographics from that same district on student, staff, and/or parent perceptions of the school climate. Studies showed that the SDP schools tended to have significantly better climate than non-SDP schools.

In our current study, we focus on change over time in 21 schools across two systemic districts. This study began in 1994–1995 and will conclude in 1999–2000. School climate data will be collected every other year beginning in 1994–1995. We have already collected the first wave of data for this study.

The School Climate Survey (Haynes, Emmons, and Comer, 1994), parent, student, and staff versions, developed by SDP staff, will be administered in each of the 21 schools. The sample is comprised of students from grades 3 and higher, their parents, and all members of the school staff. We hope to answer two main questions:

1. Do successive cohorts of students view the climate of the school significantly differently from one another, e.g., as increasingly more positive?
2. Is level of SDP implementation related to perceptions of school climate?

Because the 21 schools involved in this study are also involved with the implementation study, we will be able to examine the relationship between degree of implementation and quality of school climate.

Sharing the School Climate Reports with the school principals permits their use as information input into the decision-making process regarding what activities should be included in the Comprehensive School Plan for the purpose of improving the conditions at the school.

EFFECT ON STUDENT OUTCOMES

The first steps in this research are to examine what changes in programs and activities are taking place because of the school's involvement with the SDP, and to measure the extent to which changes in the degree of implementation are related to changes in school climate. The reason for this approach is for us to be able to make strong causal attributions regarding the SDP's role in changing the climate of the school. The next step is to examine the relationship between students' perceptions of the climate of their school and their attendance, behavior, social competence, and achievement.

Research in the area of school climate has shown significant relationships with student self-concept, attendance, behavior, dropout rate, and achievement. Our own research supports these findings. Because the SDP is built on the theory that positive relationships are essential to creating the type of environment in which the whole child can be developed, it is important for us to understand to what

extent changes in these relationships are related to changes in student outcomes. More recent research (Kuperminc and Kamensky, 1995) indicates that a significant amount of variance in students' internalizing (e.g., depression, withdrawn behavior) and externalizing behavior (e.g., aggression, disruptive and acting-out behavior) can be explained by students' perceptions of the school climate as measured by the SDP School Climate Survey—Elementary and Middle School Version. The notion that school climate is related to students' mental health is one that Comer refers to early in his work (1980) but one that we are just beginning to explore from a clinical viewpoint. We have done extensive work linking school climate to self-concept, but not to clinical manifestations of poor school adjustment and behavioral problems.

This longitudinal cohort study began in 1994–1995 and will conclude in 1999–2000. School climate, social competence, attendance, behavior, and achievement data will be collected every other year beginning in 1994–1995. We have already collected part of the first wave of data for this study, which is being conducted in the same 21 schools as the climate study. However, only one set of climate data is collected from the students for use in both studies. The sample is comprised of students from grades 3 and higher. At each wave, data will be collected from all students, grade 3 and higher, for whom we receive parental permission. Data collected are:

- Student perceptions of the climate of the school measured by the School Climate Scale—Student Versions, mentioned above
- Students' self-perceptions of their social competence measured by the SDP Behavior Assessment Scale for Students
- Student attendance, achievement, and, where available, behavior referral and dropout data from archival sources
- Classroom climate data to be collected in the second and third wave of data collection
- Self-concept data to be collected in the second and third wave of data collection

We hope to answer the following questions:

1. How has implementation of the SDP contributed to changes in school climate?
2. Are students' perceptions of school climate related to their perceptions of social competence, self-concept, behavior, attendance, and achievement?
3. Are changes in students' perceptions of climate related to changes in their perceptions of their social competence, self-concept, behavior, attendance, and achievement? (Because this is a longitudinal study, we expect to have some of the same students in each round of data gathering.)

Because the 21 schools involved in the cohort study are also involved with the implementation study, we will be able to examine the relationship between degree of implementation, quality of school climate, and student outcomes.

MODELING THE FLOW OF CAUSE AND EFFECT

Because the SDP is a school reform program, the aim of which is the optimal development of each child through positive change in the relationships among individuals, it is important for the SDP Research and Evaluation Unit to test the causal relationships among the SDP process, school climate, developmental pathways, and student outcomes (see Figure 6-1). Previous SDP research (Emmons et al., 1992) has supported the hypothesis that school climate influences student achievement through self-concept and behavior. In our current research we hope to answer the following questions:

1. Does level of SDP implementation influence student attendance, behavior, and achievement?
2. Does level of SDP implementation affect student social competence, attendance, behavior, and achievement through school climate?
3. Do students' perceptions of school climate affect their attendance and achievement through self-perceptions of social competence?

■■■■ DEVELOPMENT OF THE NATIONAL SDP DATABASE

This database, still in the process of development, contains information on initial year of SDP implementation, student demographics, student attendance and achievement, and socioeconomic index of the school. Level of SDP implementation and school climate perceptions will be included for selected schools. The purposes of this database are overall program reporting and monitoring, and tracking changes over time as part of longitudinal research efforts.

■■■■ EVALUATION OF THE LEADERSHIP DEVELOPMENT PROGRAMS

Week-long professional development programs are offered annually for SDP facilitators, selected parents, selected school staff, and other stakeholders as the school or district deems necessary; and the Principals' Academy is held for principals whose schools are in the initial stages of implementing the SDP. Evaluation of these programs consists of daily feedback forms completed by the participants to assess the adequacy of the models presented each day. The forms are reviewed at the end of each day and modifications are made as needed.

Evaluation also consists of a focus group meeting at the end of each day with the national faculty brought to assist with the training. During these meetings, presenters and national faculty reflect on the program for that day, concentrating on what did and did not go well, and making adjustments for the next day. This is an illustration of the assessment and modification process in action at the SDP national office level.

Another evaluation component is the distribution of the ASK (attitude, skills, and knowledge) inventory to Principals' Academy participants 6 months after the completion of the professional development sessions. The purpose of this inventory is to assess the relevance and effectiveness of the sessions in assisting the participants to implement the SDP in their schools and districts. We want to know if the attitudes, skills, and knowledge that the presenters intended to impart were received by the participants. Comments from participants on this instrument serve as input in the planning of sessions for the next year. Reports are prepared from the data collected from responses to the ASK, and shared with the relevant participants.

Conclusion

The four current activities of the SDP Research and Evaluation Unit are interrelated. The leadership programs provide training for building the knowledge base and skills necessary to implement the SDP in schools and districts. It is important to monitor and assess how effective the training is in preparing leaders and facilitators in the field. The implementation study provides the starting point from which we can make causal attributions with respect to the impact of SDP. The data collected through the impact study complement data contained in the national database. This serves both to expand the context in which implementation takes place and to provide us with school-level outcome measures such as attendance, suspensions, achievement, and, in some cases, referrals.

The interrelation among these activities is especially clear when modeling the flow of cause and effect. Preliminary analysis of the first wave of data collected this past year shows strong relationships between level of implementation and perceptions of school climate at the school level. It is especially interesting to note that student and parent perceptions of climate as well as those of staff were strongly related to perceived levels of implementation. Previous research studies (Emmons et al., 1992) have shown links between students' perceptions of school climate and student behavior and achievement. We expect in our modeling of cause and effect to establish the relationship between implementation, climate, student development, and student outcomes. It is clear from our research that where the program is implemented well, strong positive school-level and student-level outcomes result.

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