



National Institute of Justice

Research in Brief

Jeremy Travis, Director

July 1999

Issues and Findings

Discussed in this Brief: A project to investigate a student-based problem-solving model for reducing crime in the Nation's schools. A quasi-experimental research design was employed that captured data in 3 waves from more than 450 students attending 11th-grade social science classes in 2 schools (1 experimental and 1 control) during the 1994–95 school year.

Key issues: As envisioned, school-based problem solving changes the attitudes and/or behaviors of group members and offers the skills and knowledge needed to bring about desired change. A guided group process can reduce school crime and disorder and improve the overall school climate. As students accept responsibility for their school environment, they develop improved attitudes regarding the police, their peers, the fairness and clarity of school and social rules, their own abilities to influence change, and even school itself.

A student-based problem-solving model has been successfully implemented in the Charlotte-Mecklenberg County (North Carolina) School District. Specific changes were expected in the actual rates of crime and violence; in the levels of fear among students, teachers, and staff; and in the overall attitudes of participants. Anticipated impacts related to teacher feelings of safety, evaluation of the school and educational environment, and subtle effects on student performance and the

continued...

Crime in the Schools: Reducing Conflict With Student Problem Solving

by Dennis Jay Kenney and Steuart Watson

Forty years ago, surveys of public school teachers indicated that the most pressing classroom problems were tardiness, talkative students, and gum chewing.¹ Far more serious complaints are currently heard from teachers, administrators, and students about the presence of drugs, gangs, and weapons on campus and the threat of assault, robbery, theft, vandalism, and rape.² The popular media, such as *Time* magazine and *U.S. News and World Report*, have reported that the problems in our Nation's schools may be paralyzing the system.³

Although rigorous studies producing reliable data on school crime and victimization are infrequent, some research is available. For example, according to a report from the National Center for Education Statistics, disruptive student behavior increased during the 5-year period from 1982 to 1987.⁴ Worse yet, survey research by the American Federation of Teachers suggests that the presence of drugs and weapons on campus substantially increases student violence.⁵ Similarly, the Federal Bureau of Investigation and the National School Boards Association reported that by the early 1990s, 3 million thefts and violent crimes were occurring each year on or near school campuses.⁶ Since then, most research on school crime and disorder has indicated

that disruptive incidents, the use of drugs, and the presence of guns and other weapons have been steadily declining.⁷ Still, the estimated incidence of campus-based crimes and disorder remains unacceptably high, leaving concerned individuals to suggest that it is difficult for many high schools to be the orderly, safe, and secure places they must be if effective learning is to take place.

Crime problem, crime crisis

With research suggesting a regularity of campus crime, and the occurrence of tragic incidents such as the 1997–99 shootings on campuses in Colorado, Georgia, Mississippi, Kentucky, Arkansas, and Oregon, some observers are now calling for swift and forceful action to make our schools safe again. Far from simply populist rhetoric, these calls for change must be considered carefully since some of the proposed methods for responding to school violence may create a restrictive and unnecessarily intrusive atmosphere in an otherwise safe school setting. Methods for responding to school violence are based on variations of just three distinct approaches—target hardening, violence prevention, and student-based problem solving. As illustrated in the sidebar “Approaches for Responding to School Violence,” these

Issues and Findings

continued...

willingness to accept responsibility for one's own "community."

Key findings: Project data revealed that the most significant school problems may not be what we often imagine. Although gangs, drugs, and armed agitators may receive the most attention, most of the conflicts uncovered during this project concerned everyday school interactions (e.g., an insufficient supply of pizza). Students desire a safer, more orderly school environment. Additional findings include the following:

- Substantial levels of fear among students and teachers were significantly reduced by the second and third waves of data collection.
- While nearly 1 in 5 students had to fight to protect themselves during the last school term before the start of the project, fewer than 1 in 10 did so by project completion.
- The number of students who saw teachers threatened by students declined by a third, and those who witnessed physical attacks on teachers dropped by more than half.
- By the end of the project year, 40 percent fewer students in the experimental school feared that someone would hurt or bother them during school hours.
- A 29-percent schoolwide reduction in incidents requiring student suspension included 70 percent fewer "student-student conflict" and 46 percent fewer "student-teacher conflict" suspensions.

Target audience: Teachers and other educational staff; staff of youth agencies; public health, juvenile justice, and criminal justice officials and practitioners; researchers and practitioners in conflict resolution and related areas; and others concerned with violence prevention.

approaches encompass conflicting programs often designed to accomplish dramatically different results, and the path selected will critically affect students, staff, and the educational process itself.

School Safety Program in the Charlotte-Mecklenburg County School District

This Research in Brief discusses a project supported by the National Institute of Justice in 1993 to test a student-based problem-solving approach in the Charlotte-Mecklenburg County (North Carolina) School District. Responsible for educating most of the youths of the Nation's 35th largest city, at the time of the study the Charlotte-Mecklenburg County School District included 109 schools and approximately 4,130 teachers, 9,680 employees, and 79,800 students. During 1992, the year before the Charlotte School Safety Program was implemented, the Charlotte Police Department reported a total of 1,409 events requiring police service in the city's 8 high schools. Although many of these calls for service involved order maintenance problems such as false alarms, disturbances, disorderly persons and fights, accidents, and requests for general assistance, such occurrences have been shown to contribute to a sense of an unsafe environment.⁸ Fortunately, such concerns are sensitive to community reaction and, in fact, are the primary focus of most community- and problem-oriented safety approaches.

The heart of the Charlotte School Safety Program required student participation in the problem-solving process. To develop an innovative program incorporating a student-teacher-police partnership, the school system agreed to add a problem-solving model to the regularly required 11th-grade government and history classes in one target high school. The

classes incorporating the problem-solving curriculum devoted an average of 1 to 2 days a week to student-teacher-police efforts to identify and solve school problems, especially those involving school safety. Although the research staff assisted with the curriculum design, the process itself was largely driven by the school's teachers because they were most familiar with the problems confronted by students, best understood the range of response options available, and had ultimate responsibility for implementing and facilitating the project.

Between 15 and 25 students were assigned to each participating social science class, allowing more than 250 students to participate during the project year. Eleventh graders had the advantage of both a vested interest in their school's future and a knowledge of its past. All participating students were graded and received credit as they would for any other subject.

The class design allowed students, teachers, and police to identify together the crime, drug, and order problems and concerns on campus. As the process continued, however, students carried increasing responsibility—an experience that many students reported to be more interesting than they had initially anticipated. As facilitators, the teachers assisted with materials and resources, offering overt guidance only when absolutely necessary. As a part of the regular classroom process, teachers also assigned out-of-class work, supervised data collection and analysis for the problems identified, and evaluated student input to the proposed solutions. Student grades for the course were partly determined by these factors. The police resource officer assigned to the experimental school regularly attended the problem-solving classes and participated as fully as requested. While police-student relations

appeared to be strong, little police involvement was actually required.

Key program elements, including the problem-solving process, individual roles, problem-solving model, and outcomes, are discussed below.

Problem-solving process. The goal of Charlotte’s problem-solving process was to attack specific crime-, order-, and fear-related problems using the resources of the school, students, faculty, and police. This approach was based on at least a decade of development in other settings where problems have been addressed with apparent success in areas as diverse as gangs; drugs; and the management of police calls for service in urban, suburban, and even rural communities.⁹

While the problem-solving process is straightforward and easily applied in a structured classroom setting, a few observations are appropriate. The process of structuring the student problem-solving groups is an important component that influences later group cohesiveness and effectiveness.¹⁰ Here, the amount of structure needed is decided by the group leader (i.e., the teacher). Generally, less structure is required if group members possess adequate interpersonal skills, and more structure is necessary if group members cannot sustain sophisticated interpersonal relationships.¹¹ Structuring is done within the group, where guidelines for acceptable behavior are established by participants before actual problem solving begins. This approach allows group members to “own” the guidelines governing their behavior.

Before beginning problem solving, the group leader outlines the group’s purpose and function to help group members orient their behavior to solving

school-related problems while decreasing the probability of nontask behaviors. Before introducing the problem-solving classes, participating teachers are advised to develop their group leadership skills, their methods of giving appropriate feedback, and their understanding of problem-solving behaviors.

Individual roles. The degree of support that each group receives is a significant factor in the outcome. In the Charlotte School Safety Program, participants received assurances of support from the administration, school board, teachers, and police. On the first day of school, the test school’s principal pledged his support and resources to student problem solving. Addressing the 11th-grade student body, the principal prepared students for the new work that was before them with the observation that they would “be engaging in research activities that might include devising and administering surveys and conducting interviews to determine what the real concerns at the school are.” Noting the importance of their efforts, he went on to promise: “[I]n your endeavors you will enjoy the full support of the school and extended communities.”

The school’s police liaison officer attended each initial 11th-grade history class meeting during the first week of school to introduce himself, explain his role as a participating group member, and give a brief presentation on community policing and its relationship to civic responsibility and the problem-solving model that had been added to the course curriculum. Observing that the community policing concept was nearly 4 years under way in Charlotte, the officer advised that his department was attempting to recreate an earlier, more small-town feeling in the city “by sending police

officers out to talk to the public to find out what kinds of concerns they have and what kind of changes they want.” Challenging the students to do likewise in their own school, he went on to ask each class to “work together to make your community a better one to be in.”

With the project’s introductions complete, each classroom teacher introduced the general concept of problem solving according to his or her own individual classroom schedule. Included, however, were common examples of how problems had been solved by prominent historical figures as well as a more current example from both the local and national media. Project groups were then assembled, and the “guidelines for acceptable group behavior” crafted earlier were explained to complete the introduction to the project.

Each teacher was careful to explain his or her facilitator/mentor function as one of guiding, rather than directing, the process. The teacher explained that whatever problems the students identified would be pursued; that teachers would not veto ideas or problems but, rather, would allow each student group to discover for itself whether a particular problem existed and the constraints that might prevent its satisfactory solution.

What problems to solve? Once the introductory work was completed, the four-stage problem-solving model, described below, was presented to the students. The teachers then divided the students into groups of four to six and began the introduction to problem identification. Each problem identification objective was discussed, as were the substeps involved in identifying legitimate problems. Students were

M Approaches for Responding to School Violence

Methods for responding to school violence are based on variations of three distinct approaches—target hardening, violence prevention, and student-based problem solving.

Target hardening: metal detectors, surveillance cameras, locks, and bars

Most of the more popular responses to school violence today involve the use of technology to secure each school and make it physically difficult for students to bring weapons onto the campus. Proponents of this approach utilize lessons learned from airport security and believe that a visible presence will deter students from attempting to carry weapons onto school property. Even where deterrence fails, however, these advocates argue that, if properly deployed, their methods will virtually ensure the detection of most weapons. They claim this approach will allow school security staff to prevent trouble before it occurs. Depending on each school's resources and physical design, target hardening usually involves not only tightened security procedures but also metal detectors—either mobile or stationary—at each campus entrance.

Many critics of target-hardening approaches to school safety recognize traditional conflicts between educators and police and speculate whether such an oppressive security environment might worsen relations and harm the educational process. Others question whether the potential for damage to the educational environment and process might threaten the very institutions such methods seek to preserve. As all students and other individuals are forced to enter a campus through a single point, unintended consequences may result as delays for false positives become common.

Concerns include the following:

- Will student conflicts be heightened as they often are when lunchroom procedures produce congested movement?
- Will school scheduling be adversely affected if security personnel cannot smoothly process the individuals attempting to enter?
- Will students purposely create false positives to slow the entry process and interrupt the schoolday? Many already use fire alarms to accomplish such goals.
- If the entry system is slowed, will searches be restricted, thereby increasing the likelihood of failure?
- Might weapons possession increase as students demonstrate their skills in beating the system?
- Is it possible to secure a high school campus not built (or designed) for tight security lockdown? Reported experience in securing prisons offers little optimism for success.

Although any of these events may occur, planning for such contingencies is infrequent. Critics of this approach contend that while implementation of such methods may be helpful, reliance on this approach alone may be ineffective and actually harmful to other educational goals.

Violence prevention

A second, treatment-centered approach includes efforts to identify the youths most likely to commit violent acts during school and to offer them counseling and skill-building support. Most often, these violence prevention programs focus on impulsive or aggressive youths who lack the social competencies necessary to adapt appropriately to the school environment and to peers. Even the most popular violence prevention programs focus their efforts at the individual level in the apparent belief that schools can be made safer if individual behaviors can be modified; while desirable,

the evidence of impact is questionable. Data show that, typically, the selected individuals have previously exhibited tendencies to behave aggressively and often come from families that model and endorse such behaviors. In addition, parents of these children often rely on coercive parenting techniques, an approach that has been established as a strong predictor of conduct problems in adolescence.^a

Two of the known violence prevention treatment programs are the Second Step curriculum, intended for preschool children through the fifth grade, and the Violence Prevention Curriculum for Adolescents, intended for high schoolers.^b Both are designed to be integrated into an existing curriculum.

Second Step targets empathy, impulse control, and anger management skill areas by presenting cards with pictures of children engaging in various activities. The reverse side of each card provides instructions that teachers may follow for a related lesson. Students learn appropriate skills by responding to teacher questions regarding the interactions on the card, watching the teacher model the skill, and role playing the same or similar scenarios. Additional instructional procedures embedded in the curriculum include problem solving, behavior rehearsal, self-instruction, and other forms of behavioral modeling.

The Violence Prevention Curriculum was designed to prevent fighting among high school students primarily by increasing knowledge about violence and its effects and then by introducing an anger management module. This curriculum focuses on data from homicides and other acts of violence, both nationally and in the student participants' own communities. Anger is explored as a natural emotion, the consequences of fighting as an expression of anger are evaluated, and the components

of fights are analyzed. The instructional methods offered include didactic presentation of statistics, videotaped student-scripted role-plays, and discussions of alternatives to fighting.

Despite the popularity of and generally good reactions to both Second Step and the Violence Prevention Curriculum, data to support claims of program effects on violence prevention over time are scarce.^c Although both programs may increase knowledge about violence and anger and improve short-term behavior, long-term behavioral changes are necessary and must be documented before either method can be properly considered effective. In fact, the assumptions supporting these programs—that students lack the appropriate social skills to avoid violent behavior—often do not hold true. For example, some students report violent acts that are intended solely to extort money, protect turf, or prove allegiance to friends.

Student-based problem solving

A third approach—student-based problem solving—fosters problem solving focused on system and environmental issues. Although some might argue that this approach is limited, the appeal of problem-solving models is intuitive and well supported conceptually from at least two important perspectives. The first lies within the criminal justice system. After

recognizing that crime and fear are closely linked to perceptions of disorder, many (perhaps most) reformers now accept the weaknesses of technological solutions to crime problems and promote, instead, increased roles for communities. For example, rather than assume a traditional reactive, or even proactive, approach to problems, these advocates call for a *coactive* function that stresses partnerships between officials and the citizens they serve.^d Since the formal justice system is empowered to intervene primarily only after an incident has occurred, prevention and early intervention efforts, they contend, are largely beyond its reach. Therefore, citizens working through informal norms of social control have the best chance to engage their fellow community members in the discussion and settlement of differences prior to an incident.^e Out of these informal resolutions comes the general sense of cooperation and civility upon which safe communities depend.

The second area of support for student-based problem solving stems from acceptance of the role of peers in the educational process and in the development of deviance careers in juveniles. Earlier, Sutherland theorized that delinquency and deviance are learned through intimate associations with peers who have attitudes favorable to misconduct.^f More recently, both the role of peers and the process of bonding to one's school have been established as important determinants of educational behavior and performance.^g

a. Reid, J., and G. Patterson, "Early Prevention and Intervention With Conduct Problems: A Social Interactional Model for the Integration of Research and Practice," in *Interventions for Achievement and Behavior Problems*, ed. G. Stoner, M. Shinn, and H. Walker, Washington, DC: National Association of School Psychologists, 1991.

b. Checkoway, B., "High Hopes for U.S. Youth: Which Image Will Prevail?" *Omaha World-Herald*, February 9, 1993; Prothrow-Stith, D., *Violence Prevention Curriculum for Adolescents*, Newton, MA: Education Development Center, Inc., 1987.

c. National Institute of Justice, *Preventing Interpersonal Violence Among Youth*, Washington, DC: U.S. Department of Justice, National Institute of Justice, 1994, NCJ 150484.

d. Oettmeier, T., and M. Wycoff, *Planning and Implementation Issues for Community Oriented Policing: The Houston Experience*, Washington, DC: Police Executive Research Forum, 1996.

e. Shonholtz, R., "The Citizen's Role in Justice: Building a Primary Justice and Prevention System at the Neighborhood Level," in *Social Problems: The Search for Solutions*, ed. F. Scarpitti and F. Cylke, Los Angeles, CA: Roxbury Press, 1995.

f. Sutherland, E., *Criminology* (4th ed.), Philadelphia, PA: Lippincott, 1947.

g. Steinberg, L., S. Dornbusch, and B. Brown, "Ethnic Differences in Adolescent Achievement: An Ecological Perspective," *American Psychologist* 47(1996):723–729; Cernkovich, S., and P. Giordano, "School Bonding, Race, and Delinquency," *Criminology* 30(2)(1992): 261–291.

given worksheets for each step of the process, peer evaluation sheets, and personal responsibility logs. The groups were then told to begin working.

The students expressed a variety of concerns about their environment, as described in "Addressing the Issues." Although the usual issues of drugs, guns, and gangs were included, more mundane (or everyday) problems (e.g., clean restrooms, cafeteria) consistently

emerged ahead of the more sensational (or rare) ones (e.g., weapons brought to school, fighting). This was anticipated based on problem-solving efforts in other community settings, where "quality of life" issues have consistently shaped "community safety" issues. In fact, from the problem identification worksheets used by each group, a consistent picture of school-based issues emerged. However, while problems in the restrooms, cafeteria, and parking lots were named by virtually

every group, more narrowly defined concerns such as a lack of vending machines and pay phones also emerged.

When all groups had finished all the steps of problem identification, each teacher held a large class meeting to allow each group to present the problems that had been identified and prioritized so that the class could select one problem to work on. Each group presented two to three problems before a problem to be designated as a "class project"

was selected by class vote. Two alternative problems were also selected.

Four-stage problem-solving model. The Charlotte School Safety Program was based on a problem-solving approach consisting of problem identification (or scanning), analysis, strategy formulation, and assessment (or evaluation). (Also see “Methodology” for a discussion of the research design and data collection process.)

- **Problem identification (scanning).** During the initial problem identification (or scanning) stage, group participants identify and discuss school issues and determine which are appropriate for further work. Issues of interest might include vandalism, drugs and their availability, physical attacks in restrooms, and the lighting or general accessibility of campus facilities.

During this stage, group members gather information about perceived problems in the school environment. Their own knowledge—combined with official records and interviews with teachers, administrators, parents, other students, and the police—may be useful. Members then present their findings, and the group determines which problems require further consideration and how they should be prioritized. Problems chosen for further investigation are more clearly defined so that little ambiguity will exist with respect to the identified problem. Problem identification is the most critical stage because it is here where a clear goal statement relative to each problem of focus is developed to assist the problem-solving group in later stages of the process.¹²

- **Analysis.** In the analysis stage, the group gathers more detailed information about identified problems. This stage consists of four steps:
 - Analysis of the forces related to the problem.
 - Brainstorming of alternative strategies.
 - Evaluation of alternative strategies.
 - Specification of the responsibilities of individual group members.

Clearly, the analysis step establishes the foundation for most of the decisions regarding action and sets realistic goals for subsequent efforts. Using Goldstein’s original model, goals may include the total elimination of the problem, substantial reduction of the problem, reduction of the harm created by the problem, and development of improved methods for dealing with the problem.¹³

- **Strategy formulation.** The strategy formulation stage encompasses three objectives: develop a set of response options consistent with the information gathered, select the response(s), and implement the response(s). During this stage, students call upon police resources; invite student and parental involvement (e.g., for cleanup, repair, or peer support); solicit faculty or administrative action; and request assistance from outside sources. Rather than relying on traditional responses alone, anyone who can help may be invited to do so. Widely ranging response options should be considered—no approach should be overlooked. Response options might include the following:

- Efforts to concentrate attention on those accounting for a disproportionate share of the problem.
- Approaches to convey accurate information.
- Efforts to alter the physical environment and thus reduce opportunities for recurrence of a problem.
- Activities to alter or increase rules and policies addressing conditions that contribute to a problem.¹⁴

Regardless of the response option selected, it is important to guide the problem-solving group toward manageable goals. Psychologist Karl Weick points out that as people begin to look at social problems, they often do so on a massive scale.¹⁵ In so doing, they define such problems in a way that overpowers all possible solutions. Participants then experience frustration, dashed excitement, and helplessness. A more effective response, Weick argues, is to break large problems into smaller ones, thus presenting a series of controllable problems of modest size that allow for development of specific responses that can succeed. Although these smaller “wins” may seem less important individually, when considered together they set an example that attracts support while reducing resistance to future efforts.

Finally, participants carefully document all response ideas, large and small, including the following:

- The problems to be addressed.
- The methods used to identify and understand the problems.
- The methods chosen to alleviate the problems.

- Participants’ respective roles in implementing the solutions selected.
- The outcomes determined during the evaluation phase of the process.

- **Assessment (or plan evaluation).** During the assessment or plan evaluation stage, group participants again collect data, this time to evaluate the effectiveness of their

responses. Group members compare problem-related data before and during intervention. Through this evaluation, group members decide whether the plan is working (based

A Addressing the Issues

As the Charlotte School Safety Program progressed, a student-led analysis suggested a range of responses to the concerns identified at the test school. For example, the groups addressing lunchroom conditions quickly agreed that at the core of the various problems identified were issues of school procedure. Since virtually all students eat during a single lunch period, conflicts over seating, order of service, and the availability of choice menu items were both obvious and inevitable. Frustrated students seeking a preferred entree item (pizza rather than salad, for example) were easily angered as they watched other students, usually older or larger, cut ahead of them in the cafeteria’s service line. The fights and generally hostile atmosphere that resulted were hardly surprising. While long-range solutions were developed and discussed, more immediate results were accomplished after negotiations with lunchroom staff opened additional service lines and significantly increased the menu items most frequently requested. Interestingly, these negotiations not only were student initiated but also involved lunchroom workers who were not involved in, or even aware of, the problem-solving classes.

Where lunchtime issues were straightforward, parking and restroom problems proved to be more complex. For classes concerned with parking congestion, problem analysis involved afterschool traffic counts and timing of traffic flow. From data that resulted, several suggestions for parking lot redesigns were developed. With their designs in hand,

however, the students soon learned that the school’s administration had already hired an architectural firm to address these same concerns and that professionally drawn plans were being developed. A commitment by the administration to include student participation in that process was offered.

While the attendance and tardy policies that they viewed as overly strict had been their primary issue, one group realized that many of these policies had been intended to reduce loitering in the student parking lots. Following several sessions, the group set out to build student support to petition for a return to the earlier, less restrictive school rules. As group members contacted their peers, however, they discovered that their fellow students agreed with the administration’s policies because they previously had been fearful in the parking lots—especially in the mornings as they walked past boisterous groups of students who often harassed them on the way to class. Of course, this problem-solving group included students who had gathered in the lots the previous year, leaving them to conclude that they had, in fact, been part of the problem. Declaring themselves to be harmless, this group at least conceded that solutions to accommodate everyone’s needs were necessary. Unfortunately, by the time this was acknowledged, the class time necessary to develop such solutions was no longer available.

In addressing restroom-related issues, the problem-solving groups focused primarily on cleanliness, smoking policies, and safety. The need for improved sanitation was demonstrated with photographs taken between class periods. Although several arguments

for designated smoking sections were offered, all were rejected because they would violate North Carolina State law and school board policy concerning minors in possession of tobacco and the use of tobacco products in public buildings. As for the safety issues, recommendations for increased monitoring were offered and accepted.

Finally, one group identified and became immersed in the more general problem of teen pregnancy and the supports available to help teenage mothers remain in high school. Citing national trends and the views of their fellow students, this class developed and proposed a program of student mentoring for junior high school students that included a sex education component. Soon, however, they encountered controversy.

After discussing their ideas with teachers and administrators, disagreements over the extent to which the proposed efforts might actually promote sexual activity among younger students emerged, leading to a requirement that abstinence be offered as the only advice during the sex education component. This, however, was not acceptable to the students developing the plan, leading the students to withdraw their proposed response. Although disillusionment could have resulted from this experience, the students were, rather, encouraged through their participation in the discussion as equals and their decision to stand on principle. Discussions about the significance of social problems and the positive view that “city hall can be fought” occupied much of this group’s remaining class time.

P Methodology

Project evaluation was designed to measure effects on students, teachers, and the experimental school itself. A four-stage problem-solving model was employed that encompassed problem identification (scanning), analysis, strategy formulation, and assessment (evaluation). The quasi-experimental research design used measures collected in three survey waves. During each wave, impact data were captured from more than 450 students attending 2 schools (1 experimental and 1 control). In each setting, project participants consisted of the 11th-grade students who attended each school's mandatory social sciences classes during the 1994–95 school year.

The data collection phase began during May of the 1993–94 pretest school year as participating students completed the 10th grade. Information was gathered from police records, school records, and demographic data, and the Effective School Battery—an instrument measuring school climate, student and staff attitudes, and self-reported behaviors—was initially administered to students and teachers.

The curriculum design process and schedules for the problem-solving classes

were also developed at this time, and the process evaluation began as well. The remaining planning and curriculum development sessions were held during the summer months before the start of the new school year.

The test school and a control school were chosen based on matching relevant variables, including student demographics, performance, participation, and discipline. Teacher characteristics, including percentage of staff assigned to teaching, teacher experience, and educational level of the teaching staff, were also considered.

Staff at the test school agreed to implement the School Safety Program, including the problem-solving classes. The police department agreed to participate in experimental classes by furnishing a police liaison officer and to commit additional officers as needed for problem solution strategies. Meanwhile, the control school agreed to participate fully in the project's data collection process while receiving only the existing levels of police services—one officer assigned to campus with no specific duties or tasks. To measure program outcomes, both process and outcome evaluations were conducted. The evaluation results allowed for comparisons

among individual participants and at the schoolwide level.

The actual experimental treatments were introduced as the 1994–95 school year began. As the project progressed, evaluation staff regularly visited both schools, paying particular attention to introduction and operation of the problem-solving classes. The second and third waves of data collection followed at approximately 5-month intervals to coincide with completion of the school year's two semesters. During each wave, data were collected from both schools, all teachers, and all participating students. From the students, all data were gathered on a single day as a regular part of class, in their regularly assigned classrooms. Data collection at the control school was scheduled so that the process could be repeated with staff and teachers as they attended their weekly afterschool faculty meetings. Since the test school's meeting schedule was less flexible, staff and teachers self-administered their data collection instruments during the school day and returned their responses in sealed envelopes to the teacher in charge of the school's history and social science department.

on the goal statement made during the problem identification or scanning stage) and make plans to solve other problems. If the plan is ineffective, the group revisits the problem-solving steps, beginning with scanning, to determine whether the problem was identified correctly.¹⁶

Outcomes. As envisioned, school-based problem-solving groups are established to change attitudes and/or behaviors of group members and to function as agents of change offering the skills and knowledge needed to bring about the desired change. If

successful, the guided group process reduces school crime and disorder and improves the overall school climate as well. As students accept responsibility for their school environment, they develop improved attitudes regarding the police, their peers, the fairness and clarity of school and social rules, their own abilities to influence change, and even school itself.¹⁷

While such improvements are generally anticipated, recent research suggests that they may be more pronounced among minorities and

youths who traditionally have invested the least in the educational process. Typically, ethnic minorities drop out at a rate higher than whites; studies indicate that, in some urban areas, as many as 40 to 60 percent of black adolescents drop out before completing their education.¹⁸ Although various explanations have been offered to clarify this disparity in outcome, considerable evidence suggests that minority students simply experience school in ways that differ qualitatively from the experiences of their white peers.¹⁹ In short, the process of “school bonding”

appears to be far weaker among minority adolescents. It is reasoned, and related research suggests, that empowering youths within their own environments significantly increases school attachment and student commitment—of both white and minority youths.²⁰ As students' investment in the school environment increases, school performance should be affected as well.

Findings

The critical element of the project was considered to be impact on the fear that students and teachers had been experiencing in the test school. Where substantial levels of fear among the students and teachers had been noted during the project's pretest, significant reductions had occurred by the second (December 1994) and third (May 1995) waves of data collection. By the end of the project year, the percentage of students in the experimental school who were afraid that someone would hurt or bother them during school hours decreased by more than 40 percent. In addition, the school's administration reported a 29-percent schoolwide reduction in incidents requiring student suspension, including 70 percent fewer "student-student conflict" and 46 percent fewer "student-teacher conflict" suspensions. For each item, no significant differences were found in the control school during the same time period. Additional findings included the following.

Fear among the students. At the end of the 1993–94 pretest school year, nearly 7 percent of the test school's 10th-grade class reported that they "almost never" felt safe while in the school building. Only slightly more than half (54 percent) reported "almost always" feeling safe, and at least 45 percent of these students were

concerned for their safety at least sometimes while attending school. Although many students may have witnessed and reported one or only a few student-teacher conflicts, the impressions of disorder were nonetheless considerable. Locations of specific concern included the school's hallways and stairs, cafeteria, and restrooms. Students from the control school felt only slightly safer. Where 27 percent of the test school's participating students had reported at the end of the 1993–94 pretest school year that they usually tried to "stay away" from school restrooms out of fear of being hurt or bothered, by December of the project year only 20 percent felt so, and only 16 percent felt so by project completion. Meanwhile, no significant differences were observed in the control school, suggesting that the results were not due to student maturation.

In addition, prior to the project, more than 11 percent of the test school's 10th graders had stated that they were "almost always" afraid that someone would hurt or bother them at school, and another 35 percent experienced such fear sometimes. Approximately 15 percent were similarly fearful on their way to and from school. To support these concerns, 22 percent reported that they had needed to fight to protect themselves during the current school term. By project completion, fewer than 1 in 10 students had to fight to protect themselves as compared with nearly 1 in 5 during the last school term before the start of the project.

At the end of the 1993–94 pretest school year, 51 percent of the students in the test school had seen a teacher threatened by a student, and more than 16 percent reported actually having seen a teacher hit or attacked.

By project completion, the number of students who reported having seen a teacher threatened by a student declined by one-third, and those who reported witnessing a physical attack on a teacher dropped by more than half.

Fear among the teachers. Personal safety at school was not merely of concern to students. At the end of the 1993–94 pretest school year, 29 percent of the test school's teachers reported that vandalism, personal attacks, and theft were either "very" or, at least, "fairly much" a problem. While fewer than 20 percent were personally the victims of property damage, theft of personal property, or physical attack, nearly two-thirds of teachers participating reported that they had received obscene remarks or gestures from students during the past month—36 percent were directly threatened by remarks from students. In evaluating their school environment, a significant proportion of the test school's teachers felt either very or fairly unsafe during school hours in their school's hallways and stairs, cafeteria, locker rooms and gym, restrooms, and parking lots. Nearly one-tenth expressed feeling very unsafe or fairly unsafe in their own classrooms while teaching. Because of such fear, 44 percent of the school's teachers admitted that they had hesitated to confront misbehaving students for fear of their own safety at least once or twice during the school year.

While effects on the teachers were more difficult to assess than effects on the students, by project completion a considerably increased percentage of teachers reported feeling "very safe" while in their classrooms, the school's hallways or stairs, restrooms used by students, locker rooms and the gym, and the school's parking lots, although

none of these improvements was statistically significant at the standard 0.05 level. Deteriorating conditions at the control school were significant, however, although actual victimization appeared to have changed little. Meanwhile, victimization at the test school showed considerable, although not statistically significant, improvement.

When asked to assess school safety more generally, the test school's teachers were even more positive. Where 29 percent reported during the project's pretest that vandalism, personal attacks, and theft were either "fairly much" or "very much" a problem in their school, by the project's end only 12 percent continued to feel so. Similarly, while in May 1994 nearly half felt that their teaching was disrupted either "a great deal" or at least "a fair amount" by the behavior (such as talking or fighting) of some students in their classrooms, this fell to 36 percent during the project's problem-solving activities. Not surprisingly, the willingness of test school teachers to confront misbehaving students rose sharply during the project year.

Conclusions

During the 1994–95 school year, the Charlotte School Safety Program was introduced to test the ability of students to organize into problem-solving groups and work with teachers, administrators, and the police to reduce the problems of crime, disorder, and fear on campus. Although the results are promising, a few general observations should be noted.

First, the most significant problems in our schools may not be as we often imagine them. Gangs, drugs, and armed agitators may receive the most

attention; however, most of the conflicts uncovered during this project were part of everyday school interactions. For example, an insufficient supply of pizza in a limited number of lunchroom service lines created far more campus disorder than any of the more frequently addressed concerns. In short, as has been often found in other community settings, taking care of the "little things" will often satisfy the larger issues.

Second, a school's students are interested in a safer, more orderly school environment. While many assumed that participation rates in the project's problem-solving efforts would be low, teachers and project observers were consistently impressed by the extent of involvement. Recall the group that discovered during analysis that they were themselves an important part of their school's problems—although their discussions were boisterous, even they acknowledged the need for policies to meet all community members' needs.

Finally, the environment where this effort was attempted was receptive, if not enthusiastic, about the project. Having encountered previous problems of campus disorder, the test school's teachers and administrators were open to increased student influence in school governance, and they were willing to invest the time necessary to modify their own class curriculums to support project activities. Administrators, meanwhile, received the students as legitimate members of the school community, giving full and fair consideration to their ideas for improvement. As a result, students' efforts were encouraged and reinforced. In a less supportive environment, however, it is equally likely that students' participation and commitment to self-

determination could be irreparably harmed if they perceived that their views were not considered seriously.

Notes

1. National Institute of Education, *Violent Schools—Safe Schools: The Safe School Study Report to the Congress*, Washington, DC: U.S. Department of Education, 1978.
2. National School Safety Center, "School Crime: Annual Statistical Snapshot," *School Safety* (Winter 1989).
3. Hall, J., "The Knife in the Book Bag," *Time* (May 22, 1993); Toch, T., T. Guest, and M. Guttman, "Violence in Schools: When Killers Come Home," *U.S. News and World Report* (November 8, 1993).
4. National Center for Education Statistics, *The Condition of Education, 1989*, Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, 1989.
5. National School Safety Center, "AFT Survey Validates Problems," *School Safety* (Fall 1989).
6. Federal Bureau of Investigation, *Crime in the United States, 1993*, Washington, DC: Federal Bureau of Investigation, 1994; National School Boards Association, *Violence in the Schools: How America's School Boards Are Safeguarding Our Children*, Washington, DC: National School Boards Association, 1993.
7. National Parents' Resource Institute for Drug Education, *Summary of Results—Students' Survey*, Atlanta, GA: Pride, Inc., 1998.
8. Skogan, W., and M. Maxfield, *Coping With Crime*, Beverly Hills, CA: Sage Publications, 1981.
9. Police Executive Research Forum, 1993; Eck, 1992; Sherman, 1989; Diamond, 1993.
10. Bednar, R., and T. Kaul, "Experimental Group Research: Current Perspectives," in *Handbook of Psychotherapy and Behavior Change: An Empirical Analysis* (2d ed.), ed. S. Garfield and A. Bergin, New York: John Wiley and Sons, 1978; Corder, B., T. Haizlip, R. Whiteside, and M. Vogel, "Pre-therapy Training for Adolescents in Group Psychotherapy: Contracts, Guidelines, and Pre-therapy Preparation," *Adolescence* 15 (1980): 699–706.

11. Bednar and Kaul, *Handbook of Psychotherapy and Behavior Change*.
12. Bergan, J., and M. Tombari, "Consultive Skill and Efficiency and the Implementation and Outcomes of Consultation," *Journal of School Psychology* 14 (1976): 3–14; Hollister, W., and F. Miller, "Problem-Solving Strategies in Consultation," *American Journal of Orthopsychiatry* 47 (1977): 445–450; Lazarus, A., *Multimodal Behavior Therapy*, New York: Springer, 1976.
13. Goldstein, H., *Problem Oriented Policing*, New York: McGraw-Hill, 1990.
14. Ibid.
15. Weick, K., "Small Wins: Redefining the Scale of Social Problems," *American Psychologist* 39 (1) (1984): 40–49.
16. Eck, J., and W. Spelman, *Problem Solving: Problem-Oriented Policing in Newport News*, Washington, DC: Police Executive Research Forum, 1987.
17. Smith, H., "Group vs. Individual Problem Solving and Type of Problem Solved," *Small Group Behavior* 20 (1989): 357–366.
18. Reed, R., "Education and Achievement of Young Black Males," in *Young, Black, and Male in America: An Endangered Species*, ed. J. Gibbs, Dover, MA: Auburn House, 1988.
19. Cernkovich and Giordano, "School Bonding, Race, and Delinquency," 261–291.
20. For descriptions of related efforts, see Koba, S., "What Works for a Prize-Winning Teacher: Building Community, Student-Centered Classroom, Quality World," *Omaha World-Herald* (March 5, 1993): 17; and Checkoway, "High Hopes for U.S. Youth: Which Image Will Prevail?"

Quick Access to NIJ Publication News

For news about NIJ's most recent publications, including solicitations for grant applications, subscribe to JUSTINFO, the bimonthly newsletter sent to you via e-mail. Here's how:

- Send an e-mail to listproc@ncjrs.org
- Leave the subject line blank
- Type subscribe justinfo your name (e.g., subscribe justinfo Jane Doe) in the body of the message

Or check out the "Publications and Products" section at the NIJ home page: <http://www.ojp.usdoj.gov/nij> or the "New This Week" section at the Justice Information Center home page: <http://www.ncjrs.org>

Dennis Jay Kenney, Ph.D., is currently Associate Director and the Director of Research for the Police Executive Research Forum.

Stuart Watson, Ph.D., is currently a Professor and Coordinator of the Clinical Intervention Services Pro-

gram in the School of Psychology at Mississippi State University.

This project was supported under award 93-IJ-CX-0026 from the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice.

Findings and conclusions of the research reported here are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

The National Institute of Justice is a component of the Office of Justice Programs, which also includes the Bureau of Justice Assistance, the Bureau of Justice Statistics, the Office of Juvenile Justice and Delinquency Prevention, and the Office for Victims of Crime.

This and other NIJ publications can be found at and downloaded from the NIJ Web site (<http://www.ojp.usdoj.gov/nij>).

NCJ 177618