The Effects of a State-Wide Conflict Management Initiative in Schools

Author

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Abstract

This study examines the impact of a grant package designed to assist schools to implement conflict management education programs in effecting lasting change within the schools. Participating schools received $3,000 the first year and $1,450 the second. In addition, schools received four days of training for a core team of school leaders, as well eight hours of follow-up consultation, a mid-year reunion of schools, and a large notebook of curriculum materials and program development resources. Results indicate that teachers perceive a moderate to a great deal of change in their schools and that implementation was positively related to school climate, collective efficacy and faculty trust.[1]

Conflict is an inevitable part of any collective activity or organization, including schools. People are in conflict when the actions of one person are interfering, obstructing or in some other way making another's behavior less effective (Tjosvold, 1997, p. 24). Conflict can emerge when interdependent parties perceive incompatible goals or as the result of competition for scarce resources (Boulding, 1963;

[1]Portions of this manuscript were a part of a program evaluation initiated by the Ohio Commission of Dispute Resolution and Conflict Management and are available as Seeds of Peace: Ohio's School Conflict Management Grant Program, at http://www.state.oh.us/cdr/brochures/publicationb

Deutsch, 1962, 1973; Hocker & Wilmot, 1991; Rubin, Pruit, Kim, 1994). There are two major considerations when disputants face a conflict situation–the value of the goal and the value of the relationship (Johnson & Johnson, 1997). In conflict situations, constructive outcomes depend on the individual's ability to diagnose the importance of goals and of the relationship and act accordingly. Disputants who lack conflict management skills tend to resort to "fight or flight" when faced with conflict. In the "fight" condition, disputants press hard to achieve their goal, often through distributive or "win-lose" solutions that are likely to damage the relationship. These solutions tend to be temporary as the loser seeks an opportunity to redress the loss. In the "flight" condition, disputants act in ways that value neither the goal nor the relationship, giving up on both. A disputant that values the relationship more highly than the goal may engage in accommodating behavior, giving in to the other's wishes. However, people who are engaged in a conflict where they value both their goal and the relationship with the other party, need the skills to engage in negotiation toward an integrative or "win-win" solution. Durable solutions tend to result when integrative strategies are employed (Johnson & Johnson, 1996).

Conflict pervades the lives of adolescents. Conflicts in school often center around name calling and disrespect; gossip and rumors; stolen or damaged property; and dating or friendships issues (Burrell and Vogl, 1990; Ohio Commission on Dispute Resolution and Conflict Management, 1993). Although it is often unsettling, conflict has the potential for such positive outcomes as promoting personal growth, generating interpersonal insight, and clarifying personal identity and values. Most of the time, however, potential positive outcomes are never realized because adolescents often have poor conflict management skills and consequently tend to manage their conflicts in destructive ways (Johnson, Johnson, Dudley, Mitchell & Frederickson, 1997).

Students with inadequate conflict and anger management skills who are striking out violently have created a crisis for schools across the nation. The Centers for Disease Control found that one in 25 high school students carried a gun to school (Bodine & Crawford, 1998). The resultant fear experienced by students impairs the learning process. Teachers also are negatively impacted by students' poor conflict management skills. One out of every five teachers could cite incidents of verbal or physical threats from students in the past twelve months (Bodine & Crawford, 1998).

In the wake of a series of highly publicized school shootings, schools are understandably more security conscious. But metal detectors and security checks can

only go so far. They fail to get to the root of the problem. Some educators are coming to question the practice of suspending and expelling students who engage in violent activities as inadequate solutions because those young adults remain in our society and yet have not learned adequate strategies for coping with conflict.

Students can be taught skills to resolve their differences with others in constructive ways. Conflict management programs in schools are providing concrete strategies to help students gain these skills. Conflict management is a philosophy and a set of skills that assist individuals and groups in better understanding and dealing with conflict as it arises in all aspects of their lives. Students are trained in negotiation and mediation skills to enable them to work toward integrative solutions where the needs of both parties are met without damage to the relationship (Johnson & Johnson, 1996).

Although conflict management education has been used in schools since the mid 1970's, there are relatively few studies that examine its effectiveness. Many of those studies that do exist suffer from weak methodologies (Johnson & Johnson, 1996). In the studies that have taken a systematic look at the effects of these programs, the results are promising. In a study of middle school students, 88% of students trained in negotiation techniques listed three or more of the negotiating steps in describing how they would manage a conflict, whereas only 1% of the control group students who did not receive training could do so. When the same students were asked how they would respond to two conflict scenarios, 50% of the trained students indicated they would initiate negotiations to resolve the conflict on both scenarios, while fewer than 10% of the control students indicated they would do so. Thus, there were significant differences in the change scores and in the outcome measures of both knowledge of and intention to use conflict resolution strategies after training (Johnson, Johnson, Dudley, Mitchell & Frederickson, 1997). Similar results were found among elementary school students (Johnson, Johnson, Dudley, & Magnuson, 1995). A 4-week multi-media violence prevention computer program used to teach anger management and conflict resolution skills to seventh grade students indicated that trained students reported greater knowledge of and intention to use prosocial behaviors such as using discussion to de-escalate a conflict. Students also reported a significant increase in use of actual prosocial behaviors such as helping others and a decrease in name-calling (Bosworth, Espelage, & DuBay, 1998).

There is intriguing evidence that teaching conflict management skills not only helps students get along with one another, it also can improve their comprehension of core curriculum subjects. High school English students in one study received

conflict training in conjunction with the study of a novel during a two-week unit. A control group spent the same two-week period studying just the novel. At the end of the unit the students who had received conflict training scored significantly higher on a test over the novel than the students who had spent the whole time studying the novel. The trained students not only learned the factual information better but also were better able to interpret the information in insightful ways (Stevahn, Johnson, Johnson, Green, & Laginski, 1997).

Although there is evidence that conflict training can have a significant impact on individual students, school-wide effects have not often been explored. In addition, little is known about effective means of cultivating conflict management programs in schools. Through stories and statistics, this study explores the impact of a grant program that gave 50 high schools access to resources and training to begin to implement a program of conflict management education in their schools. The grant program offered schools a package of services to schools, including an initial grant of $3,000 followed by second-year funding of $1,450 for those schools that demonstrated sufficient progress toward implementing the action plans laid out in the grant application. In addition, schools received four days of training in the summer for a core team of 4 school leaders that had to include an administrator, as well as access to 8 hours of follow-up training with a consultant and a mid-year reunion of schools in which participants shared the successes they had achieved as well as the challenges they still faced. Schools also received a large notebook of curriculum materials and program development resources. This study examines whether this delivery method was successful in cultivating lasting change in the schools beyond the end of funding and the effectiveness of the programs in making schools safer and improving school climate. The relationship of these programs to the collective sense of efficacy and the level of faculty trust in the school were also explored.

Method

This study utilizes both qualitative and quantitative methods to investigate the impact of conflict management education in 50 high schools. Three primary sources of data were collected: document analysis, interview data, and faculty surveys.

The Sample

The sample for this study was 50 high schools in Ohio that participated in a grant program sponsored by The Ohio Commission on Dispute Resolution and Conflict Management and The Ohio Department of Education to initiate conflict manage-

ment programs in their schools. Fifty schools received initial grants of $3,000, and 43 of them received follow-up grants of $1,450. Document analysis was made of the grant applications and action plans from all 50 schools. Schools were asked to complete a Program and Fiscal Report at the end of the first year of funding, and data from 37 of the 50 schools were available for analysis. In addition, interview data were collected from 30 schools. Site visits were made to ten of the recipient schools –3 urban high schools, 4 suburban schools, and 3 rural schools. Between one and three teachers and administrators were interviewed at each site visit school for a total of 16 interviews. Telephone interviews were conducted with core team members from an additional 20 schools. Interviews were conducted in the spring of the third year after initial funding. These 36 interviews were audio-taped and transcripts were analyzed.

Also during the spring after the end of funding, 452 teachers from 14 schools completed surveys on the implementation and impact of the programs as well as on several school-level variables such as school climate, collective efficacy and faculty trust. These data were analyzed using descriptive statistics and correlational analysis. The survey instruments are described below, followed by the results of both qualitative and quantitative investigations.

The Survey Instruments

Faculty surveys on the degree of implementation and impact of the conflict management programs were sent to schools to be administered during a regularly scheduled faculty meeting (Lindsay, 1998). Perceptions of school climate (Hoy, Hannum, & Tschannen-Moran,1998), the collective sense of efficacy among teachers (Goddard, Hoy & Woolfolk Hoy, 2001), and the level of trust in the school (Hoy & Tschannen-Moran,1999) were also assessed.

Implementation and impact. Implementation and impact of the conflict management programs were measured using twelve items. Responses were on a four-point scale with anchors of: To a great degree, To a moderate degree, To a small degree or Not at all (Lindsay, 1998). Sample items include:

- To what degree has the conflict resolution program contributed toward a safer school environment?
- To what degree have you integrated the skills and concepts from the conflict resolution curriculum into the curricula you teach?

School climate. School climate was assessed using the School Climate Index (SCI) that captures important shared perceptions of group functioning (Hoy, Hannum & Tschannen-Moran, 1999). The SCI consists of four subscales including Collegial Leadership, Teacher Professionalism, Academic Press and Community Pressure. The scale consists of 42 items with responses on a six-point Likert scale from strongly agree to strongly disagree. Sample items include:

- Teachers accomplish their jobs with enthusiasm.
- The school sets high standards for academic performance.

Collective efficacy. Collective efficacy is the shared sense among teachers that they have the capacity to make a positive difference in the lives of students, even those students that may be difficult or unmotivated. Perceptions of collective efficacy were captured on a 21 item scale with responses on a six-point Likert scale from strongly agree to strongly disagree. Sample items include:

- Teachers in this school are able to get through to difficult students.
- Teachers here are confident they will be able to motivate their students.

Faculty trust. The degree of faculty trust was measured in three referents: faculty trust in the principal; faculty trust in colleagues; and faculty trust in students and parents. Faculty trust in students and in parents converged statistically to form one subscale of trust. There were 31 items with responses of a six-point Likert scale from strongly agree to strongly disagree. Sample items include:

- Teachers in this school can rely on the principal.
- Teachers in this school have faith in the integrity of their colleagues.
- Teachers in this school trust their students.

In the following sections, qualitative and quantitative results regarding program implementation, impact and implicationsare reported. Program implementation includes a description of the need schools perceived for conflict management education, as well as a description of the three main types of implementation: curriculum infusion, peer mediation and special events. Next, data on program impact are reported, including the relationship of the implementation of these programs to school climate, collective efficacy and faculty trust. In this section, the challenges and successes at parent and community involvement, as well as impacts that went beyond the initial plans are also discussed. Finally, implications and directions for future research are offered.

Program Implementation

When asked why they had pursued the grant program in conflict management education, the school personnel interviewed said they were concerned about the level of fighting and disrespect that they saw in their schools and were dissatisfied

with the traditional means they had at their disposal for addressing these behaviors. The grant program gave them hope that more productive strategies could be found. One teacher aptly expressed the sentiments of many:

> Clearly violence has gotten out of control. Kids are scared and our hands are tied. We have to do something as an entire country about violence and certainly we need to take a stand. But just saying we have zero tolerance hardly solves the problem. Kids have to learn better ways to solve problems without knives or fists.

For schools to fulfill their mission of educating young people and preparing them to function effectively in adult society, learners must feel both physically and psychologically safe. Students need to be free from threats and danger. An advisor for a conflict management program in one high school reiterated the urgency he felt to communicate these conflict management skills:

> It is a critical part of education. You can't learn when the environment is conflicted or when there is a lot of hostility and tension. Kids can be present physically here, but that doesn't mean that education is taking place. I don't see this as a option. We've got to do this program.

There was flexibility within the grant program for schools to select which strategies of conflict education they wanted to implement in their schools.

Three approaches characterized the means schools used to instruct students in conflict management philosophy and skills. Some schools emphasized the infusion of conflict education into the regular curriculum, others chose to train a cohort of students to serve as peer mediators, and still others organized special events to teach and publicize alternative conflict resolution strategies and attitudes. Schools in the grant program often combined two or more of the approaches.

1. CURRICULUM INFUSION

Curriculum infusion is an approach that seeks to make students aware of conflicts and choices for negotiating and resolving conflicts across the curriculum in academic as well as applied classes so that most or all of the students were exposed to conflict management strategies. In this approach, teachers make use of conflict management concepts and strategies to enhance students' learning of the curricula they teach. They also make use of the conflict management skills to discipline

students and to foster their ability to discipline themselves. Of the teachers surveyed for this study, 71% said they had integrated the skills and concepts from the conflict management curriculum into the curricula they taught to some degree. Some schools were able to train the entire faculty in conflict management techniques so that they could use them in their classrooms and so there would be a consistent approach throughout the school.

About half of the schools reported a school-wide program and a quarter said that they had instituted programs grade-level wide. One approach schools used was to incorporate conflict management training into a health class or some other class required for all entering freshmen. Eighty-six percent of the schools reported that their teachers designated class time for special lessons in conflict management. A mean of 8 teachers per school (with a range between 2 and 30 teachers) implemented such lessons on conflict in their classes during the first year of the program. Almost three quarters (73%) of schools indicated that they utilized "teachable moments" as a strategy to get across conflict management skills. That is, when conflict was evident in the lesson they were teaching, such as an episode from history or from a novel, or when student conflict erupted in class, they used those moments to discuss the relevant concepts of conflict management and how they could be applied to the current situation. A mean of 20 teachers per school utilized the teachable moments strategy, with a range of between 3 and 83 teachers in each school during the first year of the program.

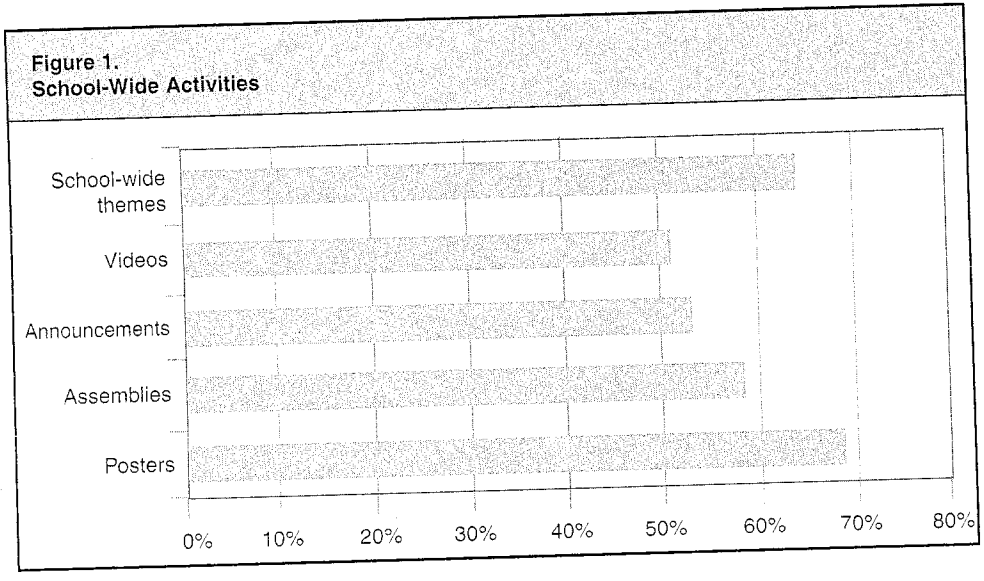
Because of the newness of this approach, schools chose a variety of means to get the message out about their conflict resolution efforts. Two-thirds (68%) of the schools reported using posters to encourage the use of constructive nonviolent conflict management strategies, to advertise the mediation services available in the school, and to remind students about the steps of conflict resolution. About half held assemblies to educate students about alternative conflict management strategies, to demonstrate the mediation process, and to give testimonies to the power of these ideas. One principal described the assembly at his school:

> We have an assembly at the beginning of the year. We talk about respect. We talk about accepting people who are different than you. With 600 people in a building for 180 days, there are going to be people problems. We tell them that. And we give them an option for handling those problems constructively. We have seen a reduction in the number of fights. We believe in this. We believe this is a nice option.

Announcements to promote conflict management and sometimes to recognize students who had demonstrated random acts of kindness or other peaceful acts were a strategy employed by 43% of the schools. Professional videos demonstrating conflict management concepts and strategies were used by 41% of the schools. Over half of the schools (54%) said that they used school-wide themes, such as Peace Week, to teach and publicize their conflict management initiatives. (See Figure 1.)

Some subject-matter teachers were easily able to see how issues of conflict could be incorporated into their subject matter. English teachers were able to see the connections to literature and writing and were among the early adopters. Almost 75% of the schools reported having at least one English teacher who was using the conflict management curriculum at the end of the first year. Two thirds of the schools reported that Social Studies teachers had made use of the curriculum in their classes. Health and Family and Consumer Science teachers reported that conflict management was already represented in their curriculum to some extent. Some used the materials offered at the grant program training to supplement the curriculum. One teacher particularly liked the introduction of the idea of seeing a situation from different perspectives:

Figure 1.
School-Wide Activities



> We spend a lot of time working on seeing other people's perspective. That's one of the strongest things that's happened in the class, next to developing skills for conflict resolution, is to see a situation from multiple perspectives. To be able to respect their diversity. Not seeing it as something that's horrible that somebody is different, but seeing how exciting it is and how wonderful.

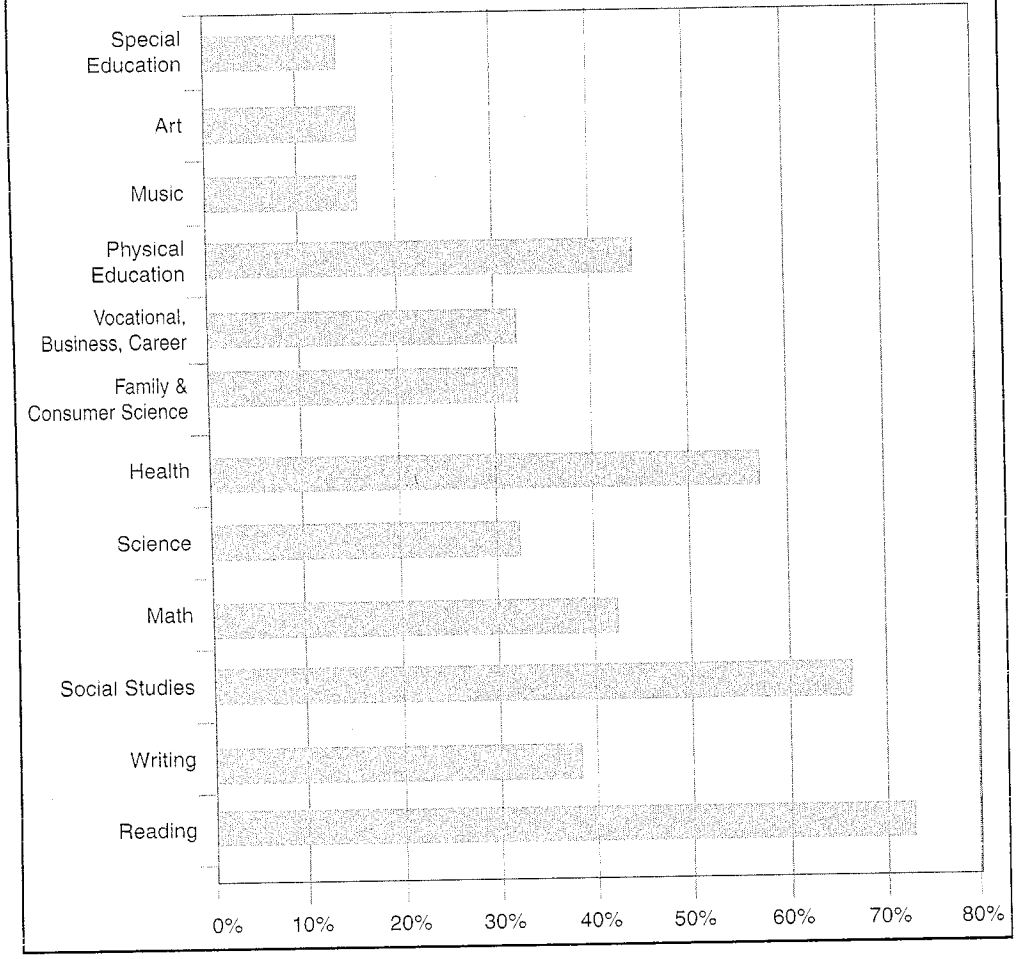
Physical education, math, and science teachers made use of conflict management skills, because their students were expected to work together cooperatively on teams, doing labs, or challenging one another's conceptions in order to provoke cognitive growth. Science teachers were also able to make use of conflict skills in exploring ethical issues within science that invite debate, generate options, and lead to thoughtful examination of the consequences of possible strategies. Teachers of vocational, career, and business courses acknowledged the importance of having constructive means of dealing with conflicts that inevitably emerge in a work setting as an important skill contributing to student employability. Finally, special education teachers found it valuable to teach their students kills to get along with others. (See Figure 2.).

In addition to using the lessons from the Ohio Conflict Management Resource Guide (Ohio Commission on Dispute Resolution and Conflict Management, 1996) for regular classroom lessons, several schools indicated that the supervisors of in-school suspensions and Saturday School made use of the materials to give students who were being punished skills to make better choices in the future. One urban high school offered a six-week anger management class that students could elect as an alternative to reduce out-of-school suspension time. The coordinator of this program described the process:

> I have a prevention specialist who comes in and handles the anger management classes we have as alternatives to out-of-school suspensions. He has been here consistently for two groups a week for every week after the second week of the school year....The size is generally six to eight per group.... I am estimating that 75 percent of the kids have not had further difficulty or just minimal difficulty.

This urban high school has instituted a comprehensive violence prevention program that includes a variety of support groups, services, and prevention initiatives. The school was being restructured into four houses, in which the last class period of the day for all ninth and tenth graders was to be devoted to a variety of intervention strategies, including tutoring to assist students to pass proficiency tests,

Figure 2.
Curriculum Infusion



and support groups for a variety of the traumas faced by the students, such as living with a drug-addicted parent or being the victim of sexual assault. Building on the success of a pilot program with one group of ninth graders, one day a week was to be devoted to teaching conflict management skills.

Teachers in these high schools had capitalized on conflict management concepts and skills in their classrooms to increase students' interest and understanding of the subjects they taught. Teachers perceived it as working smarter, not harder (Bodine & Crawford, 1998). They made use of the conflicts that emerged in the subjects they taught and between the students in their classes to polish their students' negotiation skills and to reinforce constructive means of responding to conflict.

2. Peer Mediation

Peer mediation is another strategy that schools employed to teach effective conflict management and prevent violence. Peer mediation involves a small group of students who are trained to mediate conflicts among fellow students. Students who have an unresolved dispute are referred to a student mediator who assists them in finding a mutually acceptable solution to the dispute. Advisors reported durable solutions to conflicts that had been mediated; very few conflicts had had to be addressed again. Peer mediation can be a powerful means of addressing sometimes intractable problems of violence and fighting in schools. Of the teachers surveyed for this study, 86% reported that students had begun to use peer mediation to resolve conflicts to some degree, and 54% stated that they had referred students to mediation. In interviews, most schools reported a reduction in fighting and physical violence as a result of peer mediation and conflict management training. One assistant principal described the effect the peer mediation program was having in his high school:

> I tell them that this is the last stop before the bus stop because if they don't [go to mediation], they will get some sort of punishment. I cannot think of one incident where we've had two kids get into a fight, gone to peer mediation, and then some time down the line gotten back into a fight with each other. That just does not happen. All the kids have been able to come to some common ground and not lose face. ... We just don't have as many fights as we did, say, two years ago. Now I can count on two hands the number of students I have suspended for fighting this year. That's easily an all-time low. I would say, if it weren't for

the program, you could easily double the number of suspensions this year. It's been very good.

Peer mediator advisors talked about trying to get a diverse group of students trained as mediators, and making use of that diversity in assigning mediators to disputants. One advisor commented that when he had two students from one peer group fighting he might use a student of a different race or economic level as the mediator. He felt it helped the disputants to gain a new perspective on their dispute. In selecting mediators, advisors also were sensitive to who would have credibility with their peers. One assistant principal explained:

> We chose the kids that probably had been in a few fights themselves, instead of taking what some might call "the really good kids" that really don't understand what it's like to get in a fight. If we get some kids involved that have a reputation that they've been a little bad from time to time, then some of the kids that go in there will be more open to an equal, somebody who understands what they are talking about. And it's funny how those kids who are now trying to keep peace in the school are taking a different approach to what their role is in the high school.

Sometimes being referred to mediation has turned out to be a life-changing event, a moment of conversion. For one student in an urban high school, this was the case:

> One of my peer mediators is just dynamic. She's a junior this year. I don't think anybody thought she was going to make it because her behavior was so out of control her freshman and sophomore year. At the very beginning of the year, she was referred to mediation. She and her best friend had separated because her friend, who's a senior this year, had matured and thought that her behavior was so outrageous that she couldn't be around her. And that affected her a great deal. We went through the mediation process. This young lady was impressed by that. I invited her to the training and she came. She has been wonderful this year. She doesn't skip school this year. She's passing with good grades. There have been no disciplinary actions against this girl this year, which I just find amazing if you could look at her past records. We had a celebration at Christmas before we went on winter break, and she thanked the group for including her. She said, "I never thought I could be a part of a positive group."

An advisor in a rural school told of another instance where becoming a peer mediator made a significant difference for a student for whom many people held low expectations. She described this special mediator:

> One of my most successful mediators in terms of really being able to help students work through things, to understand other students, to kind of see the peripheral problems and work through them, is a DH [Developmentally Handicapped] student. He is very strong in mediation. He won recognition within the state. He was on stage accepting his award with all of the kids that are getting scholarships and going off to Harvard and Yale, and he was up there, too! The newspaper picked up on that — put his picture in the paper and did a story on what he was doing. That was very exciting! He was number eight out of eleven children in his family, and he was the first one to graduate from high school.

Many schools reported that they used peer mediation as an alternative to reduce time spent in suspension. Most found it to be a useful option to reduce the amount of learning time lost when students missed schools due to suspensions. Several administrators and teachers expressed the desire to eliminate out-of-school suspensions altogether, seeing the teaching of conflict and anger management skills as a much more constructive response to student misbehavior.

Mediation services in schools have not been limited to resolving student-to-student conflicts. Some schools have used the mediation service to mediate conflicts between students and teachers. They have also used the adults trained as mediators to resolve conflicts between cafeteria workers or other adults within the school. A few schools have made it a priority to train bus drivers, cafeteria aides, secretaries, and custodians and other non-certified personnel in these skills.

Peer mediation has proven to be a powerful mechanism for responding to conflicts within schools. Several factors seem to be of particular importance in making peer mediation programs work. These include gaining administrative support, winning over reluctant faculty, breaking into the peer culture, training, overcoming logistic challenges, and empowering students to make broader use of the skills they have gained. These factors are discussed below.

Administrative support. Advisors repeatedly commented on the importance of having administrative support in order to make a peer mediation program work. They said that it was the principal who set the overall vision and philosophy for the school, and that if peer mediation was not a part of that vision it was difficult to get

cooperation from other faculty members. To be most effective, conflict management philosophies need to be written into the school discipline code and reinforced through the kinds of disciplinary actions taken. Without administrative support it is very difficult to overcome logistic obstacles such as scheduling, finding space, and facilitating communication. One teacher reiterated the importance of administrative support:

> Oh, I think that's the whole issue. If you don't have administrator support, the staff isn't going to buy into it. It's just not going to happen. You have to have some leadership who believes that this has some value. [If not,] you just don't get the referrals. You don't get the buy in from the faculty.

Principals of effective programs talked about the benefit they had felt personally from the success of the peer mediation program. It freed them up from the time consuming task of addressing student disputes themselves. They saw the value of giving students the skills to work through problems on their own as an effective means to prevent violence. A student body that was skilled in positive conflict management strategies made their lives and work easier.

Winning faculty over. One challenge to program implementation was to convince faculty members that peer mediation was a realistic approach and to get them to make referrals for mediation. Teams attempted a variety of strategies to get the word out about the value of the services offered. They conducted mock mediation demonstrations at faculty meetings and at school-wide assemblies. One teacher used drama students and student mediators to produce a video tape of the mediation process, so that administrators and teachers could observe the process outside of busy school hours. She also used it as a way to have mediators critique their own performance. One media specialist had teams of students produce public service announcements demonstrating the use of conflict management strategies in realistic conflict situations. These tapes were broadcast as part of the morning announcements to teach and promote the use of conflict management skills. One spot was selected to air on the local public access channel on television. Other schools made announcements and sent memos to continually remind the faculty that their services were still available and to encourage referrals. Despite these efforts, communication to a large faculty was a challenge.

Winning over fellow faculty members can be a slow process, but those schools with an active peer mediation program reported steady progress once teachers and administrators began to see positive results. One teacher told the story of persuading

an entire department in one incident:

> I'm still lacking in the support of all the faculty. One by one we're winning them over, when they've had the opportunity to actually see how it can help solve problems and see what the impact is in their classrooms. We ended up doing a mediation of an entire class. The whole class had divided into two factions and nothing was getting done because there was this constant bickering. And it was a class that was dependent on doing projects and working together. We had each of the groups select a spokesperson and make a list of their grievances. Then the two spokespersons went to mediation and worked out all of the issues. Everyone in the class signed the agreement. And it did work. Well, then the entire department was sold on it. We also mediated the percussion section of the band. They weren't speaking to each other and they really have to be in sync or the band doesn't function. The music reflected the fact that the percussion section wasn't together in many ways. We worked that one out, too.

Once teachers made referrals that were successfully resolved through mediation, many of them became believers. But this process can take a number of years. The most well established peer mediation programs in the sample had been in place for five years or more.

Peer culture. Breaking into the youth culture, making it acceptable to use peer mediation can be one the most challenging obstacles in implementing a peer mediation program. As more elementary and middle schools are implementing peer mediation programs it is in some cases having the unintended consequence of making high school students less willing to make use of the service. One assistant principal explained:

> I think the most frustrating thing was that although now we have kids in this building who have been exposed to mediation from about the sixth grade up, it's still culturally not acceptable for the high school student to use mediation. When we have, they have been very satisfied. But it's very difficult to talk a student into using mediation. What they say, when you press them hard enough, is "That's kids' stuff."

Yet, mediators have been able to diffuse some emotionally charged and very complex situations. Occasionally, the adult advisors will stay present during a mediation if they feel that it is a potentially volatile situation. In most cases, however, the

adults are just on call in a nearby office or hallway. That's what mediators and disputants alike seem to like about the process– that it is student led. One student found a creative way to make mediation more acceptable in her school:

> One student had the idea to go into the lunch room because that is where the conflict happens. She would start a mediation right there in the lunch room. She began to change the way she thought about it because she was so excited about what she was doing. She started getting it more into the school culture.

Once students experience a successful mediation, they are more willing to use the process again in the future.

Training. On-going training is an important part of sustaining a peer mediation program. Many of the schools used the grant money to have students and adult advisors trained in the peer mediation process. Some of the adults received additional training in order to be trainers themselves. Where that hadn't happened, schools experienced difficulty once their trained mediators began to graduate and move on. Finding additional funds to pay for training proved difficult. One advisor spoke in frustration of having made a request for $250 from his district to pay to have more student mediators trained. The request was denied due to serious budget constraints within the district. As a result, the future of a program that this advisor felt had begun to make a significant impact on his school was uncertain. Several schools addressed the issue by incorporating the training into an already established class. One high school developed a semester-long class devoted to conflict management skills. Students who completed the class could be recommended to become peer mediators. Not all the students from the class had the time or were interested in becoming peer mediators. Others who wanted to be mediators and were not able to work the class into their schedules were trained through the more common workshop method. Two schools of the thirty interviewed reported offering students a quarter credit for 30 hours of service in mediation.

Logistic challenges. Schools struggled with a variety of logistic challenges in implementing their peer mediation programs. Even when advisors were committed to making the program work there were a number of obstacles to be overcome. Scheduling was a major problem in some schools. Finding time when a mediator and the disputants could all meet was often difficult. Some teachers were unwilling to have students leave class for mediation. Some schools began by just offering mediation during lunch periods, or sometimes just during the first period of the day. In schools where the advisor was a classroom teacher, it was difficult to work around

that teacher's schedule. One school had trained enough teachers to have them available throughout the school day during their preparation periods. But budget cuts forced those teachers to have to supervise study halls during their free period so they were no longer available for mediation. One faculty advisor recommended that the advisor be someone in the administration, or someone with some level of authority. Otherwise it could be difficult to get the cooperation of other faculty members. Finding private space was also a challenge for some schools, as one teacher related:

> We don't have space for this. You have to have a room designated for the activity to go on. Because we are saying to the kids that this is a private situation, that we want you to be at ease and what you say is going to stay in the room. We tried to get an old, defunct bathroom, but there were problems with that. We tried to use the AV room, but then when that didn't work I had to do mediations in a stairwell. That was tough.

These challenges hampered programs from being as active or as effective as the participants would have liked. However, most were struggling to continue because of the value they saw the programs bringing to the students and to the school community.

Probably the biggest obstacle faced by schools was when key members of the core team left the school. Changes in leadership were not always detrimental to the program, however. In at least two schools, struggling programs were revived by new leadership. In one case a new principal arrived who was sold on the program from his work in a previous school. Only two schools of the fifty reported that the programs were not continuing. One was an urban school that was being converted to an alternative program. All of the faculty on the core team, including the principal, were either leaving or had left the school. Other schools had managed to maintain their programs to some degree but were struggling under budget constraints and had difficulty finding even minimal resources to cover the costs of copying, paying for training for new students or faculty, or buying incentives for student participants. Some schools were finding it a challenge to maintain their conflict management programs in the midst of restructuring to block scheduling, houses or teams.

Empowering students to train others. Another stumbling block to fledgling peer mediation programs was that they did not have enough referrals to keep all of their trained mediators busy. When they weren't being used regularly some mediators became discouraged and dropped out of the program. One of the positive ways that

schools found for using their trained mediators was to have them do outreach into the community to teach others the skills they have learned. Several schools began by teaching mediation skills to teachers and students in the elementary schools in their own districts. One suburban high school decided that they could increase their impact by reaching out to the nearby urban school district to train elementary students.

We have been training elementary [students as] "Playground Pros" and they do mediation on the playground. The young kids really look to our kids as leaders and that really reinforces our kids ... It's the outreach and the helping others that keeps our program going strong. We had a group visiting from Ireland. There was a situation of conflict and we were able to show them how peer mediation worked. It gave our students an opportunity to share and be affirmed. There is nothing more empowering. That experience was so vital for students. At this age, it's important for kids to feel needed and useful. They begin to look at themselves differently.

These students were also asked to do a mock mediation for students at a nearby law school. Outside recognition of their work and of the value of the skills they possessed helped students in several schools to recognize for themselves the power of these processes. Empowering students to reach out to train others in the skills they had gained generated renewed excitement and vigor in the programs. One advisor talked about the dynamic of empowering students through the mediation process:

> It's the peer mediation programs that make everything come alive. If you just do infusion into the curriculum and classroom management, these kids aren't empowered to use the skills themselves. It's just "the teachers told me to do it this way," another adult-to-kid, telling them what to do. It's the peer program that empowers the kids.

Schools that had taken the risk to empower their students to act as peer mediators enthusiastically reported the many positive benefits they had gained.

3. SPECIAL EVENTS

A third approach which schools employed to publicize their conflict management programs and to raise awareness of issues of diversity and tolerance was to sponsor special events. These events were used to teach alternative methods of resolving conflicts, to celebrate diversity, to motivate students to make a commitment to choosing peaceful alternatives, and to publicize other conflict resolution initiatives

in the school. One high school held a Peace Breakfast and invited parents, central office personnel, and community members who they looked to for support of their work. Another held an annual Multicultural Fair, a day-long event in the spring that celebrated different cultural traditions represented in the community. Booths included food, games, and cultural artifacts from various countries and cultures around the world. Among those from the community who attended were students from the elementary school that the high school worked with on conflict management activities.

Several schools designated a whole week of activities as Peace Week or Conflict Management Week. During Peace Week at one urban high school, the students were encouraged to sign a pledge, adapted from Martin Luther King's Birmingham Pledge, committing themselves to eradicate racism, to live nonviolently and to utilize nonviolent techniques in interacting with others. The school held a poster contest on the theme of peace, diversity, and nonviolence, and daily announcements on nonviolence began each day. The week culminated in a celebration assembly. At a suburban high school, Peace Week activities included creating a Unity Quilt in which all of the groups in the school, from various clubs to cooks and custodians, decorated a square to become part of the quilt. There was a Peace Vigil and a Peace Rally as well as a door decorating contest on the theme of peace. Another school designed a "Peace Graffiti Walls" and distributed "Random Acts of Kindness Cards" to students for something they did to make the school a better place. Students were also recognized, during the morning announcement, for their contributions to the community.

Another kind of special activity was putting students in a situation where they are forced to cooperate with a diverse group of students. One rural high school used the grant money, in conjunction with other funds, to take students to a camp that offered a high ropes course and ground initiatives. They have taken groups of 35 to 40 students twice a year for the past three years. They have been careful to select a diverse group of students who do not generally have much to do with each other. The principal explained:

> They are forced to work together to solve these problems. We've seen unbelievable things happen. We've seen people who would not even talk to each other and it's like an equal partnership by the end of that day. They learned cooperation and trust were important.

The number of fights in this school has declined by more than half. The principal felt that the combination of conflict management training and the camp program had had a significant impact on the school culture.

Program Impact

The impact of the conflict management education programs were felt at a variety of levels. Teachers changed the way they taught, and saw changes in student behavior. Schools also witnessed school-wide changes in the level of school safety, as well as school climate, collective efficacy and faculty trust. As the result of the enthusiasm generated among both students and teachers, some schools also experienced a snowball effect.

Program Elements

The grant program investigated in this study included a four-day training in August, an extensive collection of curriculum activities, grant money that could be spent for the resources the school felt it needed, with the possibility to reapply for a second year as long as progress had been made, and access to eight hours of consultation. That seemed to be an effective combination of resources and services, far more effective than any one component alone. Although a few of the fifty schools already had conflict management programs in place and used the grant to expand or build new facets into the program, for most of schools this program provided an introduction to conflict management skills.

Training

Most of the schools found the training to be helpful. When asked how beneficial was the initial training team leaders completing evaluations gave it an average rating of 7.0 on a ten-point scale. For those schools that were new to conflict management concepts, the training provided a good introduction and overview. Others who were already familiar with the concepts felt that it was too much of a review and wished there had been more flexibility in meeting the needs of teams who were at different levels. Participants also reported uneven quality in the break-out sessions. Some were very practical and well-run by presenters whose enthusiasm was contagious. Others were lackluster and disorganized. In general, teams appreciated having time to work together on planning and time to meet with their consultant.

Almost all of the participants gave positive ratings to the follow-up training in which schools shared what progress they had made and what challenges they still

faced. The mean rating was 8.4 out of 10. The comments of one team leader was typical:

> The one-day follow-up training was especially helpful because schools shared so many ideas of things they had done throughout the year. It was also very helpful to see all the resources available. It helps to hear what has been successful and what has not worked very well. This follow-up gave us the opportunity to see where we are in comparison to other schools.

Advisors wished that teams had been asked to bring a one page summary of the best things they had done.

Consultation

In general the feedback on the consultation portion of the program was quite positive. The mean rating for the consultation was 7.3 out of 10. However there was a wide discrepancy of opinion. Some found their work with the consultant extremely valuable, as was the case for this teacher:

> At least for our school, we found this part of the grant to be extremely important...perhaps worth more than the money! We would be thrilled to see additional consultation hours provided in any renewal grants.

Other schools did not find their consultant as helpful. Some schools experienced difficulty in access, complaining that they had only had telephone contact with their consultant or no contact at all. On-going technical assistance in the form of consultants seemed to be a valuable part of the program.

Grant Money

Schools used the funds in a variety of ways. The most important resource that the grant bought was time, in terms of stipends and travel expenses for teachers and administrators to come to the training. It also bought access to expertise. Schools used the funds to bring in outside trainers to train their faculty and students. It bought instructional resources such as videotapes, books, and games. Schools also used grant money for incentives for their peer mediation program. These included name badges, and jackets or T-shirts for peer mediators. Students who successfully mediated a conflict were sometimes given pencils, with slogans like " Don't hate —

Mediate" or book marks with "Ten ways to effectively revolve disputes nonviolently." Although these items were small, programs that were not able to find the money to continue purchasing these items missed having them after the end of the grant.

The grant program was a positive experience for the schools involved. They were very appreciative of the kinds of resources and support they had received. They were excited by the results they were having with students. Receiving the grant not only provided schools with necessary resources, it also provided legitimacy and prestige. Schools reported that their efforts were taken more seriously because of the grant and because of the sponsorship of the Ohio Commission on Dispute Resolution and Conflict Management and the Ohio Department of Education. These schools said that receiving the grant was crucial to getting the program underway. One administrator explained:

> The funding was very important for the project. It was the spark, the seed that got this thing going. It gave us a focus, a goal to shoot for to implement something we felt was needed. We felt like our kids were beating up on each other and squabbling all the time. We thought this was something we could use to help us to cut down this problem. If the grant hadn't come along, we probably wouldn't have peer mediation here, I'd almost bet you. I would have to say that it has significantly helped us bring peace to our students and give them a positive way to resolve conflict. This has given us hope that there is a way to deal with our kids other than dealing out punishments, that we can help resolve problems in a positive way.

As the result of the enthusiasm generated by faculty and administrators who were impressed by the results, these programs have grown and flourished. Many of the grant recipients became passionately committed to the conflict management philosophy, provoking teachers and administrators to go well beyond the hours for which they were paid to teach students constructive nonviolent means of resolving conflicts. Summing up her experience with the grant program, one teacher concluded:

> It seemed at the time like it was a lot of work, but the students benefitted so much. It was a minimal amount of time for me compared to what we got.

As important as the grant was to getting schools started with conflict management, it did not last long enough to get programs solidly established. Most schools felt that two years was too short a time to get a new program institutionalized and to persuade reluctant administrators to come up with the money from internal sources to continue the program. A teacher explained:

> I don't think that two years is really enough time to institute a major change in a building where the whole culture has to change. You're changing a whole system of beliefs so it takes longer than two years.

The most successful programs had combined the resources from this grant program with other prevention initiatives such as Safe and Drug Free Schools money. One overwhelmed guidance counselor expressed a desire for a more integrated approach to funding programs for character education, conflict education, anger management, drug, alcohol, and tobacco prevention, and pregnancy prevention because the underlying skills in all these initiatives were related. One of the biggest unmet needs schools reported was staff time. Few schools were able to provide release time to teachers for their involvement in this program. It was difficult to expect faculty members to sustain a program on volunteer time above and beyond their regular responsibilities. Most high schools felt the need for a full-time prevention specialist or coordinator to oversee these programs and keep them functioning over the long haul.

Program Effects

Long Range Effects

Results of the survey on the degree of implementation and impact of the conflict management programs in schools indicate the ways that these relatively small grants were making a discernable difference. A year after the end of funding,

- almost 90% of the teachers surveyed said that the school was safer to some degree as a result of the implementation of the conflict management program, and
- nearly half (47%) said that the conflict management program had contributed to a safer school environment to a moderate or a great degree.
- more than 80% said that the degree of physical fighting had decreased in their school to some degree since the start of the conflict management program, and
- 40% of the teachers saw a decrease of a moderate or a great degree.

Not only were schools safer as a result of the implementation of these conflict management programs, teachers saw benefits extend to their classrooms.

- 70% of the teachers surveyed said that the conflict management program had reduced the amount of time they spent resolving student disputes, and
- 87% said that they had used conflict management techniques for dealing with classroom management and discipline to some degree.

Teachers also witnessed changes in their students as the result of instruction in conflict management.

- 87% saw an increase in students' willingness to cooperate with each other, thought students had begun to use the skills taught, and observed students begin to use negotiation skills to deal with interpersonal problems to some degree.
- 86% had seen students begin to take responsibility for solving their own problems without asking for adult help.

These are remarkable results given the typically poor track records of programs continuing past the end of funding and the modest size of the initial grant awards.

School-Wide Effects

The degree of implementation and impact of conflict management programs had an impact that was felt schoolwide. It was significantly positively correlated to teachers' perceptions of a number of important variables such as school climate (Hoy, Hannum, & Tschannen-Moran,1998), the collective sense of efficacy among teachers (Goddard, 1998), and the level of trust in the school (Tschannen-Moran & Hoy,1998).

School climate. Teachers who witnessed a greater degree of implementation and impact of conflict management programs also tended to perceive a more positive school climate ($r=.37$, $p<.01$). Degree of implementation was also linked to the subscales of school climate, including collegial leadership, teacher professionalism, and academic press. Implementation was significantly positively correlated to the collegial leadership of the principal ($r = .31$, $p < .01$), to the degree of teacher professionalism ($r = .30$, $p<.01$) and a greater emphasis on academics within the school ($r = .38$, $p<.01$).

Collective efficacy. Conflict management implementation was related to the collective sense of efficacy, that is, the degree to which teachers believed they and their colleagues could have a positive impact on student learning, regardless of external environmental factors ($r = .28$, $p<.01$). Collective efficacy has been shown to have a positive effect on student achievement (Bandura, 1997; Goddard, Hoy, & Woolfolk Hoy, 2001).

Faculty trust. Finally, the degree of implementation was positively related to the level of trust in the principal ($r=.26$, $p<.01$), fellow teachers ($r=.17$, $p<.05$), and trust in students and parents ($.30$, $p<.01$). Faculty trust in students and parents has been positively linked to student achievement (Goddard & Tschannen-Moran, in press). These correlations demonstrate the potentially far reaching impact conflict management programs may have in contributing to overall school renewal.

Community and Parent Involvement

Fostering community and parental involvement was a challenge for almost all of the schools. Some schools included parents and community members as part of their core team that did the initial planning for the grant, but many said they wished that they had been more successful at sustaining this kind of involvement. One suburban high school initiated a Community Advisory Board for their conflict management efforts. They made it a district-wide, K-12 committee and invited a wide variety of community representatives to try to keep the momentum going throughout the district.

Core Teams made a number of efforts to inform parents of their activities. They made presentations at the parent association meetings and wrote articles in the parent newsletter. A few were successful in getting local newspapers to write articles on their conflict management services. Getting parents directly involved was more of a challenge because parent involvement typically lags in high school. When schools offered workshops in conflict management strategies that parents could use in the home, typically few parents attended. Since most of the advisors did not have release time for the conflict management activities and so were pressed for time, one thing that frequently suffered was finding ways to celebrate with the community and with parents. One teacher told the story of a parent who was taken aback when he witnessed his daughter mediating a conflict.

> On Saturday we had a big fair down at the convention center and schools could bring down displays. One of my friends who teaches at [another high school] came by, so I gave him one of our [Conflict Management] shirts to wear. He had one of his students with him. When he went out on the sidewalk a little girl

> came over and said, "I have one of those shirts. I do that." He said, "Well, I have a conflict with this girl. Could you work it out?" So they did this fake conflict for this little girl. She said, "Well, first you have to agree to ground rules." And she went right through the steps. Her father was amazed. He said he had not a clue that she knew how to do that.

A few schools sent letters home to parents of peer mediators, and some sent notification to the parents of students who had successfully mediated a conflict.

One way that schools were successful in getting large numbers of parents to turn out was to invite them to special events. One high school had over three hundred parents and community members attend a Peace Breakfast, while another had over four hundred attend a talk by a guest speaker on "Parenting and Strategies for Saving Your Sanity." Parents may not have been used to finding parenting help at school. One rural high school offered mediation services to parents and teens, and although not many families had utilized the service, those that had were very pleased with the outcomes. Some schools reported that parents had told them they had noticed a positive change in their children's demeanor at home after training in conflict management skills.

Cultivating positive community involvement is especially important for building community support in the current climate when schools often feel under attack. Teachers and administrators don't always feel like their hard work on behalf of students is appreciated. One administrator expressed his frustration:

> We save kids' lives. But then those kids don't necessarily pass the proficiency tests, then that's a black mark on our record. We're working hard, developing relationships, and we keep getting bashed. We get bashed by the media, we get bashed by the legislature.

Letting the community know about the positive efforts that schools are making to teach constructive conflict management strategies may be one means to bridge that gap.

SNOWBALL EFFECT

In light of the price tag on other school reform initiatives, the amount of money involved in these programs was small. One teacher had to overcome resistance from district leadership to get started given the limited grant money available:

> I laugh because when we first applied to get the grant I had to [meet with] the superintendent and get his approval. He looked at me and said, "That is such a small amount of money. Think about it, in two years when they aren't supporting you anymore, will it survive?" He really didn't think that it was enough money. It is a secret pleasure of mine to realize that it was worth doing. We've done all that we planned and more.

This school, as many others in the program, was able to stretch a small amount of money to make a significant impact in their school. Despite skepticism from her superintendent, this teacher was able to extend the resources she received through the grant program to create a larger impact than expected. Because of her contagious enthusiasm, the effects of the grant program were felt not only in her school but the entire district. She recounted:

> It was an unusual process because I had to keep filling out new budgets. Every time I would plan something, I would get so much enthusiasm from the speakers that I had come in or the community, that they would say, "Oh, no, I'm not going to charge you." Because they believed in it so much. And so at the end of the year, I had almost all of that $3,000 left and we were able to compile a library of resources which we shared with the elementary schools who were interested in starting up a program. So now we have resources that are used by the whole system.

Not only was a program begun in the high school, but participants were able to assist in the start up of programs in all five elementary schools. In this school, conflict management became a passion for students as well. Due to some ingenuity on the part of students, the program was then extended to the middle school:

> We started that [conflict management program], and it's now in all of the elementary schools. The missing link was the middle school. It is at the middle school that the five elementary schools come together for the first time. The cultural background of those five schools is very different, so the middle school is their introduction to diversity. Some of my student mediators came to me and said, "We're sending these letters [explaining the program] out to the school board and the administration and some teachers at the middle school." I didn't change a word. It was a little rough, but that was the charm of it. So just in the last week they went down, all by themselves, and [the middle school principal]

has been convinced. The students have volunteered to spend part of their summer training mediators and doing workshops for the teachers in the middle school. I was really excited that they took that kind of initiative.

Although the superintendent thought the grant was too small, there has been an impact district-wide. Peer mediation programs are in place in all the schools in the district and at least several departments of the high school have incorporated concepts and ideas about conflict management into their regular curriculum.

Clearly, these small grants had a positive and lasting impact. Teachers made use of these strategies because they felt a need for help dealing with student conflict in their schools. They continued to use them even after the end of funding because of the positive results they saw in their schools, in their classrooms and in their students.

CONCLUSION

Conflict management education is an important and effective strategy to help schools combat the problems of youth violence and to give students essential skills that they need to be productive citizens. These strategies were effectively disseminated through the grant program. Of the 50 schools that received grants, 48 of them still had programs in place three years later. In some schools, the programs had grown and flourished. Others were limping along, struggling to cope with obstacles and challenges that made implementation difficult. Some schools noticed only modest improvements as a result of these programs, while others experienced dramatic reductions in the number of fights and suspensions.

Providing constructive nonviolent alternatives for students to resolve the conflicts they faced has become an imperative for schools. One administrator commented:

> This sort of program is key. It is more effective than trying to lock your school up. It's a people thing. You're a lot better off spending your time trying to get to the root of the kids' problems than you are trying to make the place a prison, you really are.

Clearly, conflict management education had the potential to make for positive change in school safety and climate. The package of services combined with cash awards was a useful mechanism for initiating these programs in schools. At a time when youth violence is a major concern for school personnel and society at large,

it is encouraging to find evidence of a cost-effective intervention that is having a lasting impact in school.

While previous studies have demonstrated the effect of training on individual students, few studies have examined school-wide effects. This study demonstrates the value of conflict management education in making schools safer. It also demonstrates the link between these programs and a more positive school climate, a greater sense of efficacy among the teachers as well as greater faculty trust in the principal, in colleagues, and students and parents. Future research could attempt to discern which elements of the grant program, such as training, follow-up or consultation, had the greatest impact and how that impact could be enhanced. It would also be useful to discern the separate and combined effects of the various delivery methods, e.g., curriculum infusion, peer mediation and special events. Expanding on the findings of school-wide effects, it would be useful to explore how the conflict management training among the adults in a school building contributed toward the professional community of teachers. Conflict management education is a promising innovation that warrants further study.

REFERENCES

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: W. H. Freeman & Co.

Bodine, R. J. & Crawford, D. K. (1998). *The handbook of conflict resolution education: A guide to building quality programs in schools.* San Francisco: Jossey Bass.

Bosworth, K., Espelage, D., & DuBay, T. (1998). A computer-based violence prevention intervention for your adolescents: Pilot study. *Adolescence, 33,* (132) 785-795.

Boulding, (1963). *Conflict and defense.* New York: Harper and Row.

Burrell, N. & Vogl, S. (1990). Turf-side conflict mediation for students. *Mediation Quarterly, 7,* 237-250.

Deutsch, M. (1962). Cooperation and trust: Some theoretical notes. In Jones, M. R. (Ed.). *Nebraska symposium on motivation.* (pp. 275-319). Lincoln: University of Nebraska Press.

Deutsch, M. (1973). *The resolution of conflict.* New Haven, CT: Yale University Press.

Goddard, R. Hoy, W. K., & Woolfolk Hoy, A. (2001). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal, 37,* 479-507.

Hocker, J. L. & Wilmot, W. W. (1991). *Interpersonal conflict* (3rd edition). Dubuque, IA: William C. Brown.

Hoy, W. K., Hannum, J., & Tschannen-Moran, M. (1998). Organizational climate and student achievement: A parsimonious and longitudinal view. *Journal of School Leadership, 8,* 336-359.

Hoy, W.K. & Tschannen-Moran, M. (1999). The five faces of trust: An empirical confirmation in urban elementary schools. *Journal of School Leadership, 9,* 184-208.

Johnson, D. W. & Johnson, F. (1997). *Joining together: Group theory and group skills* (6th ed.) Englewood Cliffs, NJ: Prentice-Hall.

Johnson, D.W. & Johnson, R. (1996). Conflict resolution and peer mediation programs in elementary and secondary schools: A review of the research. *Review of Educational Research, 66,* 459- 506.

Johnson, D.W. & Johnson, R., Dudley, B., Mitchell, J. & Frederickson, J. (1997a). The impact of conflict resolution training on middle school students. *The Journal of Social Psychology, 137* (1), 11-21.

Johnson, D. W. Johnson, R. Dudley, B. & Magnuson, D. (1995). Training of elmentary school student to manage conflict. *Journal of Social Psychology, 135,* 673-686.

Johnson, D.W. & Johnson, R., Green, K. & Laginski, A. M. (1997b). Effects on high school students on conflict resolution training intergrated into English literature. *The Journal of Social Psychology, 137* (3), 302-315.

Lindsay, P. (1998). Conflict resolution and peer mediation in public schools: What works? *Mediation Quarterly, 16,* 85-99.

Ohio Commission on Dispute Resolution and Conflict Management (1993). *Dealing with conflict in Ohio's schools.* Columbus, OH.

Ohio Commission on Dispute Resolution and Conflict Management (1996). Ohio Conflict Management Resource Guide, Columbus, OH. Now available as a set of guides at http://www.state.oh.us/cdr/schools/resourceguides/resourceguides.htm

Rubin, J. Z. Pruit, D. G. & Kim, T. (1994). *Social conflict: Escalation, stalemate, and settlement.* New York: McGraw-Hill.

Stevahn, L., Johnson, D.W., Johnson, R., Green, K. & Laginski, A. (1997). Effects of integrating conflict resolution training into English literature on high school students. *Journal of Social Psychology, 137,* 302-315.

Tjosvold, D. (1997). Conflict within interdependence: Its value for productivity and individuality. In K.W. C. De Dreu & E. Van de Vliert, *Using Conflict in Organizations.* Thousand Oaks, CA: Sage.