
An Evaluation of Peace Education Foundation's Conflict Resolution and Peer Mediation Program

For 20 years, the Peace Education Foundation (PEF) has been educating children and adults in conflict resolution skills throughout the world. The PEF model contains grade-specific classroom-tested curricula for prekindergarten through Grade 12 that are being used in more than 20,000 schools internationally. This developmentally appropriate curriculum model is designed to teach social competency and conflict resolution skills and create a school environment based on trust, caring, and respect (Peace Education Foundation, 2000).



The School District of Palm Beach County is the 14th largest school district in the nation and the 4th largest in Florida. The county has over 1 million residents and over 150,000 students in the district's 143 schools (Florida Department of Education, 1998). A wide range of cultures and socioeconomic backgrounds is represented. Currently, there are 88 elementary, 27 middle, 18 high, and 12 alternative schools in the district (School District of Palm Beach County, 2000b).

This article will focus on trends in student incident referral data in four Palm Beach County area high schools to determine whether the PEF conflict resolution and peer mediation program had a potential impact. These four high schools are within a 20-mile radius of one another and are similar in demographics and student performance. The four schools are Olympic Heights High School, Boca Raton High School, Spanish River High School, and Atlantic High School.

The high school that will specifically be examined for changing trends in student behavior, Olympic Heights, received the PEF model conflict resolution program through the Safe Schools Center of the School District of Palm Beach County's partnership with the Peace Education Foundation. The other three high schools that will be examined for within-school trends did not receive the program or any alternative programs. If there are changes in Olympic Heights that did not occur in the other three high schools, there is stronger evidence that the PEF model had an impact on Olympic Heights student behaviors. Before examining the program's impact, it is important to understand the program objectives, how the program fits with school safety efforts, curriculum contents, and how the program is delivered in schools.

PEF Conflict Resolution Program and School Safety Efforts

The PEF mission is to provide educational materials, training, and innovative programming that will make conflict resolution a lifestyle choice. The general purpose of the conflict resolution program is to create a positive

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school climate conducive to enhancing school safety. By promoting peacemaking skills and educating children and adults in the dynamics of conflict, the PEF model strives to provide a comprehensive and systematic curriculum with a unified scope, sequence of content, and skill-building exercises. The program is closely aligned with four major aspects of school improvement: (a) a safe, disciplined environment; (b) a positive school climate and culture; (c) promising instructional strategies; and (d) resiliency (Adler, 1993).

CONFLICT RESOLUTION, PEER MEDIATION, AND A SAFE SCHOOL ENVIRONMENT

To change student behavior, school crime and violence must be addressed with new, nontraditional approaches. Exposure to violence and extreme stressors in other environmental areas of an at-risk child's world—such as in his or her home, neighborhood, and community—may lead to an increased tolerance that negates the effects of less severe school-level punishment. School-administered punishments, such as suspensions, do not affect at-risk students sufficiently to produce the kind of desired effect that will lead to long-term behavioral change and improved overall school environment. Consequently, although dramatic changes in the number of disciplinary actions were reported in Florida over the last 10 years (Weitzel, Shockley, & Goltry, 1997), there is evidence that in-school and out-of-school suspensions do not reduce incident rates (Barnett, Israel, & Harrison, 1999). It is becoming increasingly important, therefore, to implement and use programs and tools, such as conflict resolution training, to gain a safe, disciplined school environment.

Conflict resolution training is a process used to change attitudes and behaviors by teaching skills that equip youth with the ability to use a nonviolent approach when dealing with conflicts (Schmidt, 1994b). It has been touted as a successful strategy toward safe schools (Florida Department of Education, 2000). In the PEF model, knowing how to deal with conflict is portrayed as a positive behavior that can serve to enhance important relationships. Through an emphasis on peer mediation, students are taught to solve problems in a nonviolent manner. The program seeks to gain students' cooperation and goodwill. This continuum of strategies provides an alternative to the punish-reward system and culminates in a safe, disciplined environment.

The fundamental training curriculum model, *Handling Student Conflicts: A Positive Approach* (Grace Contrino Abrams Peace Education Foundation, 1997), provides the supporting theory and rationale for teaching the content. The program is described as having three main objectives: (a) to give participants an overview of conflict resolution, (b) to motivate participants to begin a conflict resolution program, and (c) to suggest a systematic approach for teaching conflict resolution.

CONFLICT RESOLUTION AND A POSITIVE SCHOOL CLIMATE AND CULTURE

By linking school improvement and school climate initiatives to conflict resolution, the program becomes institutionalized as a standard school procedure, rather than as a short-term program. School climate may be described as "how the school feels," including such aspects as respect, morale, trust, caring, and social growth. School culture may be described as "how things are done," including policies and procedures, social norms, and formal and informal practices. Conflict resolution programs have a strong connection to these environmental aspects of school improvement because the application of beliefs and skills is aimed at mutual respect, caring, and responsibility, which will certainly enhance the school's sense of community. By continuing to build social competency skills, the school climate also becomes more positive (Adler, 1993).

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CONFLICT RESOLUTION AND INSTRUCTIONAL STRATEGIES

Skills used in conflict resolution are similar to those used in innovative instructional strategies, such as cooperative learning. When students work together on academic exercises, they learn to use the positive interpersonal skills of caring, leadership, trust, and conflict management. The ability to employ these skills in one facet of daily interaction will enhance the ability to use them in others. Indirectly, there is a compound effect on these instructional and conflict resolution strategies used across academic and interpersonal dimensions in the learning environment (Adler, 1993).

CONFLICT RESOLUTION AND RESILIENCY

The ability to overcome adversity is the basic premise of being a resilient youth. Resiliency works to negate risk factors, such as a negative school climate, economic and social deprivation, and parental conflict. A successful conflict resolution program will promote resiliency through skill development, skill application, and promotion of social competency. The ability to become competent in dealing with stressors enhances a child's self-esteem and thereby fosters resiliency (Adler, 1993).

How the PEF Curriculum Works in the School Setting

The curriculum used for conflict resolution for Grades 9-12, *WinWin!*, addresses teen-related issues, including violence, anger, cultural differences, and sexual harassment. The materials incorporate activities that foster cooperation and problem solving as a means of minimizing aggression and violence (Schmidt, 1994b). A video provides students with opportunities to analyze realistic conflict situations. Interactive techniques, including group work and role playing, allow students to learn prosocial skills, such as anger management, perspective taking, peer resistance, effective communication, and problem solving (Peace Education Foundation, 1997).

The conflict resolution program content comprises six essential components. These components provide teachers, students, parents, and administrators with a common ground for working together to resolve conflicts constructively and peacefully (Peace Education Foundation, 1997).

- ◆ *Community building* includes content on building trust, exploring common interests, and respecting differences.
- ◆ *Rules for fighting fair* is the framework for appropriate behavior and the associated skills (I-messages, listening, assertion, and problem solving). It also includes the six principles of nonviolent conflict resolution: (a) identify the problem; (b) focus on the problem; (c) attack the problem, not the person; (d) listen with an open mind; (e) treat a person's feelings with respect; and (f) take responsibility for your actions. These principles provide a constructive alternative to inappropriate student behaviors ("fouls," such as put-downs, sarcasm, bringing up the past, hitting, not taking responsibility, getting even, not listening, making excuses, etc.) that attack the dignity of others and escalates conflict.
- ◆ *Understanding conflict* addresses defining conflict, elements of conflict, and escalation and de-escalation and explains different conflict management styles.
- ◆ *Perception* discusses the understanding of different points of view to enhance empathy and increase tolerance.
- ◆ *Anger management* explains the pros and cons of anger, triggers, anger styles, increasing tolerance of frustration, and anger management plans.
- ◆ *Effective communication* provides instruction in the use of I-messages and related basic skills of expressing feelings to help resolve conflicts constructively and peacefully.

Teaching Conflict Resolution for Social Competency

The competency model of child social development is promoted by the PEF program through the development of protective factors necessary to mitigate the effects of risk: caring and support, high expectations, and opportunities for meaningful success (Bernard, 1921). An essential concept of the program is the focus shift from what is wrong with youth to the facilitation of healthy development through skill building.

The premise of the PEF program is that although children are not born with these skills, they can be taught to resolve conflicts peacefully through the social competency skill-building program. PEF conflict resolution skills are taught by providing youth with the opportunities to observe behaviors that can be modeled, to apply these skills, and to receive feedback and recognition regarding the use of their skills (Peace Education Foundation, 2000). Research has found that violence prevention programs should begin at an early age and continue over the course of multiple years (Hawkins, Von Cleve, & Catalano, 1991; Tolan & Guerra, 1994; Zigler, Tuassing, & Black, 1992). To promote long-term use of prosocial skills, the PEF model provides long-term violence prevention education through up to 43 lessons per curriculum from prekindergarten through Grade 12.

The delivery of the program in the school environment requires that teachers facilitate the skill-building process in their students. There are five strategies, or steps, in the teaching process (Lewis, 1998).

- ◆ *Step One: Model.* Teachers model the desired attitudes and expected behaviors for students to let them know how to use the rules and skills in real life. This includes reflective listening, I-messages, and problem solving.
- ◆ *Step Two: Teach.* Teachers break the skills down into understandable parts. Students learn the vocabulary and practice vital techniques in role-play scenarios. They learn what to do and why to do it.
- ◆ *Step Three: Coach.* Students practice translating mental knowledge into practical application. Teachers assist students in the use of techniques in real-life situations.
- ◆ *Step Four: Encourage.* Students learn to use appropriate behavior and expand on their ability independent of the teacher or adult presence. Teachers provide confidence-building support by recognizing students' appropriate use of skills, giving them brief reminders to use the skills, and encouraging them in their ability to succeed.
- ◆ *Step Five: Delegate and Export.* Students demonstrate their competence. They acknowledge the value of using the skills regularly. Those students with more advanced proficiency coach the less experienced students.

Teaching Peer Mediation for Resolving Conflict

The PEF peer mediation program is the next step in providing skilled, neutral intervention by trained mediators when youth cannot resolve conflicts. At this point, the conflict has escalated and requires the next step. The PEF peer mediation curriculum used for conflict resolution for Grades 8-12, *Mediation: Getting to WinWin!*, is the model of the mediation process and empowers students to resolve conflicts fairly and amicably. The materials provide techniques for improving communication skills and becoming an effective listener. A video demonstrates each step of the mediation process (Schmidt, 1994a).

The PEF Mediation program recognizes three basic mediation models; (a) classroom, (b) schoolwide, and (c)

adult. The first model, the classroom approach, trains all students in a class in mediation. Conflicts are resolved at a “peace table” located in the classroom. The schoolwide model trains a limited cadre of students as peer mediators. The program is monitored schoolwide. The adult approach trains adults to intervene in student conflict, either formally or informally.

Two curricula provide step-by-step instructions for the training and monitoring process. The first, *Mediation for Kids*, is for Grades 4-7 and includes a series of activities to help students improve their communication skills and understand the causes of conflict. The second, *Mediation: Getting to Win Win!*, is for Grades 8-12 and includes a more comprehensive look at the mediation process and advanced mediation techniques, such as caucusing (Schmidt, 1994).

A Review of Conflict Resolution: What the Research Says

Youth violence is an ever-increasing dilemma, and parents and educators alike are searching for ways to protect their children and prevent the spread of violence. The National Longitudinal Study of Adolescent Health (2000) recently reported on survey responses by 10,000 students aged 12-17. One out of four students reported having used either a gun or knife, having carried a weapon, or having been involved in an incident in which someone was injured by a weapon in the past year.

These data are in keeping with trends in juvenile crime data-reported injuries. From 1986 to 1991, violent crime arrests for youths aged 10-17 rose 48%. During the same period, juvenile crime rose in 44 states (Giuliano, 1994). In 1990, approximately 1.5 million adolescents over the age of 12 suffered injuries from assault. In 1991, 130,000 youths were arrested for rape, robbery, homicide, and aggravated assault. By 1992, 12% of all violent crimes occurred in schools or on school property. Today, 25% of the patients under age 19 that are treated at emergency rooms are victims of violence, and 25% of those emergency room cases occur on school grounds (Kandakai, Price, Telljohann, & Wilson, 1999).

Until recently, violence prevention programs in schools relied on metal detectors, increased policing, and stricter punishments, including zero-tolerance policies. Although an estimated 5,000 schools have violence prevention programs (Powell, Muir-McClain, & Halasyamani, 1995), most mothers believe that the deterrents that accompany the programs are ineffective. This ineffectiveness is supported by the increase in juvenile crime. Keeping children after school, referrals to principals and counselors, and out-of-school suspensions are all viewed by the majority (70%) of mothers as inadequate methods for reducing violence. These are the most common methods used by schools nationwide. As the number of violent crimes in schools increases and cases such as Columbine become

front-page news, education policy makers are facing the ineffectiveness of current policies (Kandakai et al., 1999).

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Aggressive behavior in childhood and adolescence can often lead to antisocial and violent behavior later in life (Grossman et al., 1997), and this violence threatens the property, education, and lives of children (Shepherd, 1994). Antisocial behavior is linked to an increase in the dropout rate and is strongly correlated with the risks for violent behavior, which include academic failure and alienation (Johnson & Johnson, 1995). The benefits of early education and breaking the “cycle of violence” are well documented. What is not documented is perhaps the most effective way to resolve aggressive behavior: conflict resolution and peer mediation. Although methods of conflict resolution are taught in schools, they are often not reinforced at home and with peers. Although parents can ensure that the reinforcement comes at home, schools are seeking ways to increase the reinforcement of peers since “the peer group may be a more powerful determinant of [children’s] school competence than their parents” (Masten & Coatsworth, 1998). Increasing prosocial actions, which reflect competence in peer interactions, friendships, and conflict resolution skills, can bring about the prevention of aggression (Grossman et al., 1997). Educators agree that problem solving, communication, and nonviolent conflict resolution must be taught to address the problem of youth violence (DeJong, 1994).

Researchers agree that interventions must stress nonviolent problem-solving and conflict resolution skills. Educational administrators and policy makers insist that any solution must emphasize prevention (Giuliano, 1994). The combination of these factors makes peer mediation possibly the fastest growing type of conflict resolution program being implemented in schools today. In fact, the National Association for Mediation in Education has documented a 40% increase in conflict resolution programs since 1991 (Shepherd, 1994). Many policy makers are still wary of peer mediation, citing a lack of evidence of its effectiveness. According to leading researchers, however, the effectiveness is not documented because so few studies have been done (Powell et al., 1995).

Peer mediation allows educators to create safe school communities and combine “teachable moments” with experiential learning strategies to encourage students to find peaceful ways to resolve conflict (DeJong, 1994). Peer mediators then reinforce the skills that teachers instill through use of the peer group. In this way, peers act as a protective factor, rather than a risk. Positive parenting can be constrained by deviant peers, but if prosocial peers surround prosocial children, these peers give both emotional and academic support (Masten & Coatsworth, 1998). David Hamburg, president of the Carnegie Corporation, stated that “the reversal of the trend of violence among the young depends on teaching students how to work cooperatively with others” (Hamburg, 1992). Peer mediation and conflict resolution programs do just that, by reaching all students effective conflict resolution methods, role-playing and practicing these methods, and applying them to everyday situations with the assistance of peer mediators.

Protective factors, such as a positive orientation to school, positive relations with adults, awareness of friends who model conventional behavior, involvement in prosocial behavior and a perception of strong sanctions for transgressions, all lessen problem behavior and moderate risk factors (Jessor, Van Den Bos, Vanderryn, Costa, & Turbin, 1995). Conflict resolution and peer mediation provide all of these protective factors. Involvement in peer mediation strengthens a student’s positive orientation to school by providing a caring environment that is free from violence and encourages working together. Positive relations with adults are fostered through the interactions of peer mediators and teachers who train and supervise. The peer mediators that serve as the peer group also serve as the friends who model conventional behavior. Involvement in prosocial behavior comes from the school’s participation in the peer mediation and conflict resolution program. Successful peer mediation programs recognize that conflict can be positive, it increases achievement, motivation, and reasoning, as well as social and cognitive development. Relationships are enriched and resilience is promoted through conflict. It is important to note that attempts to deny or suppress conflicts may actually contribute to violence (Johnson & Johnson, 1995). If conflict is not addressed, it is not resolved, so it may grow into violence or some other act of aggression. Conflict resolution programs are most successful when the entire school is involved, and the program continues for many years (Grossman et al., 1997; Johnson & Johnson, 1995). Rather than teach one small group, or cadre, it is important that all students receive training in conflict resolution and peer mediation skills. One group can receive additional training to serve as peer mentors without affecting the rest of the school negatively.

Educators must rely on the “teachable moments” that come with academic controversies, or when ideas, information, conclusions, theories, and opinions of one stu-

dent differ from another (Johnson & Johnson, 1995). The importance of distributive conflict resolution must be stressed in training and in practice. Rather than be a “win-lose” negotiating situation, both sides involved in peer mediation must learn to find a solution that benefits both parties. Mediating conflicts is the best teacher of conflict resolution, and it takes years to become competent (Johnson & Johnson, 1995). The best educational strategy is to teach more complicated and involved methods of conflict resolution as students advance in grade. Rather than train one class or grade, these lessons must be repeated and built on over the years to have a long-term effect.

Studies on peer mediation and conflict resolution show promising results, in addition to the need for more research. In a study done by Grossman et al. (1997), the intervention group was given lessons in empathy training, impulse control, and anger management. These lessons were strengthened through role playing and other forms of creative reinforcement. Both the intervention group and a control group were tested before the curriculum began, 2 weeks after the beginning of the curriculum, and 6 months after the completion of the curriculum. Students were monitored on the basis of prosocial behavior, aggression, and negative behavior — both physical and verbal. Overall, there were a decrease in aggression and a significant increase in prosocial behavior. Both effects persisted over 6 months. Although aggression increased somewhat over the 6-month period, it was attributed to the 6-month period’s including summer and the intervention group’s not having its positive behavior reinforced at home or with peers. Most interestingly, while the rate of negative behavior decreased in the intervention group, it increased in the control group. The negative behavior manifested itself through both physical and verbal avenues, suggesting that “the change scores reflect not only small to moderate decrements of aggressive behavior rates in the intervention group, but also prevention of a substantial rise in aggressive behavior” (Grossman et al., 1997).

Grossman et al. (1997) reported on the effectiveness of a violence prevention curriculum among children in elementary school. In its review of similar research, the Seattle Social Development Project (1981) had similar findings, with scores on aggressive and externalizing behavior significantly improving (Hawkins et al., 1991). Similarly, Dolan et al. (1993) found a decrease in both teacher- and peer-reported aggression. According to Johnson and Johnson (1996), “the frequency of student-student conflicts teachers had to manage dropped 80% after the training and the number of conflicts referred to the principal was reduced by 95%.”

Powell et al. (1995) reviewed recent conflict resolution and peer mediation studies in four states. A study on a pilot project at one elementary school in Dade County, Florida, found a dramatic decrease in disruptive behavior, rude and discourteous behavior, defiance of authority,

battery, and fighting after the implementation of the *Fighting Fair* model conflict resolution and peer mediation program (designed by the Peace Education Foundation). A 2-year study of a Maryland conflict resolution and peer mediation project determined that the program brought about fewer incidents of fighting, hitting, name-calling, referrals, and suspensions at one at-risk elementary school. Of all of the incidents that were peer-mediated, 93% came to an agreement, and that agreement was followed for the remainder of the school year 95% of the time. In North Carolina, a project conducted in a middle school incorporated aspects of the PEF *Rules for Fighting Fair* and the California-based Community Board Program curriculum. The experimental group (which was introduced to the conflict resolution curricula) showed an 82% decrease in referrals, a 42% decrease in in-school suspensions, and a 97% decrease in out-of-school suspensions. Schoolwide during the same period, in-school suspensions increased 25%. In St. Louis, Missouri, health department peer mediation projects in two elementary, two middle, and two high schools found that discipline referrals of sixth-graders declined 82% in one school year, and in- and out-of school suspensions of sixth graders declined 42% and 97%, respectively, whereas in- and out-of-school suspensions for the entire school decreased by 25% and 2.6%, respectively.

According to Johnson and Johnson (1996), "Training every student how to negotiate and mediate will ensure that future generations are prepared to manage conflicts constructively in career, family, community, and national and international settings." This is shown through the ambient positive effects that come from peer mediation and conflict resolution. A reduction in fights leads to a more peaceable environment for learning (DeJong, 1994). This positive school climate is associated with lower rates of misbehavior (Kandakai et al., 1999). Learning conflict resolution improves interpersonal problem-solving skills, such as cognitive processing and generating nonaggressive solutions. Peer teaching leads to increased self-esteem, increased social skills, a willingness to talk rather than fight, and an increased acceptance of differences (Shepherd, 1994). Peer mediation promotes ongoing and informal educational opportunities and can be used outside of the classroom (Giuliano, 1994). Conflict resolution training allows students to apply negotiation and mediation skills that are maintained throughout the school year (Johnson & Johnson, 1995).

The learned prosocial behavior is fundamental to successful functioning in society (Masten & Coatsworth, 1998). Peer mediation develops critical thinking skills, encourages students to resist peer pressure, and helps them to distinguish between "real" violence and "TV" violence (Kessler, 1993). The positive peer reputation earned predicts future competence with peers, achievement, job competence, increased self-worth, and better mental health. Beliefs and attitudes about school, self-perceptions about one's academic abilities, and motivation to succeed also

influence academic competence. These factors are all bolstered by peer mediation. Antisocial behavior undermines academic success and job competence. However, "if behavior is improved, there [is] no evidence of lasting consequences of conduct problems in childhood" (Masten & Coatsworth, 1998).

In addition, most mothers believe that such programs would also benefit parents and teachers (Kandakai et al., 1999). To continue these programs and reinforce their validity, government agencies and private foundations must fund long-term evaluations of such programs (Dejong, 1994).

PEF/Palm Beach County Plan to Minimize Aggression and Violence in Schools

In Palm Beach County schools, there is a focused effort to foster school norms of cooperation and problem solving as a means of minimizing aggression and violence (Adler, 1993). The Palm Beach County Safe Schools Center approach is to establish the norm of behavior for students early, preferably during the first year at each of the three school levels (elementary, middle, and high). The second phase of this approach (during each following year) is to reinforce the cooperative and problem-solving behavioral norm with highly interactive programs that focus on skill development and application. Safe Schools Center professionals have determined that norms for positive student behavior need to be established particularly at the entry level to high school (Grade 9) and the reinforcement of positive behavior — such as through recognitions and awards — must be continued over the next 4 years to maximize the safe school environment. This effort is initiated by conducting a wide range of programs sponsored by the Safe Schools Center, including an exposure to selected conflict resolution lessons at the middle school level.

PEF and the Safe Schools Center of School District of Palm Beach County formed a collaborative partnership in 1995 to create a districtwide "implementation laboratory" where best practices in this approach were refined and enhancement methods were developed. Palm Beach County's school district has the largest implementation of conflict resolution programs in the United States (Kelly & Adler, 2000). The PEF model has affected approximately 129,000 students, 6,500 teachers, and thousands of parents in 12.5 Palm Beach County schools during the years 1995-1998. This collaboration created a districtwide model that has been replicated in school districts throughout the United States.

PEF Program Affects School Safety: The Olympic Heights High School Case

In 1995-1996, the Peace Education Foundation *WinWin!* program was implemented schoolwide in Grades 9-12 at Olympic Heights High School as a direct attempt to establish a positive high school norm based on conflict resolution and problem-solving skills. Due to its high

total student behavioral incident referral rate, the Palm Beach County School District selected this school for program implementation. As shown in Figure 1, the incident referral rate of student crime and violence at Olympic Heights was significantly higher in Year 1 (1995-1996) than in the other three schools.

During Year 1 (1995-1996), all Olympic Heights teachers were trained in the PEF conflict resolution program. Teachers from each academic department taught a particular curriculum component such that all students received the same lessons from each of the six components at a specified period from the same teacher and in a similar sequence.

In Year 2 (1996-1997), the *WinWin!* program and video were implemented schoolwide in Grades 9-12. During Year 3 (1997-1998), the *WinWin!* program was implemented schoolwide in Grades 9 and 10 with a follow-up video delivered in Grades 11 and 12. The 3-year intensive program delivery ended by the 1998-1999 school year. School district administrators noted that the effects of ending the program were felt immediately. The incoming group of freshmen did not benefit from the positive norm setting and reinforcement that past freshmen received during the previous 3 years. Since no expectations were set for behavior at the beginning of the school year, the number of student behavioral incidents for these incoming freshmen began culminating in referrals in the fall.

The impact of the program can be explored by examining the total number of behavioral incidents resulting in discipline referrals. Olympic Heights incidents began a sharp and steady overall decline for each of the 3 years in all categories of student discipline referrals, leading to a marked reduction in the total number of incidents for the 3-year period. As indicated in Figure 1, the other area high schools had substantial increases in the total number of incidents per 100 students for each of the 3 years (excluding Spanish River High School for Year 3, which experienced a slight decline in reported incidents).

The effects of the PEF conflict resolution program will be explored by examining changes in the within-school

data for Olympic Heights. It will also compare the trends and changes in student referral data at Olympic Heights to three other area high schools that did not receive the PEF program or an alternative program. A specific examination of enrollment trends, demographics, and certain student behaviors associated with conflict will be conducted on these four similar schools.

STUDENT ENROLLMENT TRENDS

The four high schools examined in this study (Olympic Heights, Boca Raton, Atlantic, and Spanish River) are similar in enrollment trends and demographics. Enrollment data for all four high schools indicate that there is an increase in population, similar to the growth trends in the student population for Palm Beach County. The enrollment data for Olympic Heights indicate that the student population increased steadily in each of the last 5 years. Data from the May 2000 Olympic Heights summary report indicate that the student population has increased 38% over the past 5 years, from 1,830 students in the 1996 school year to 2,521 students in 2000 (School District of Palm Beach County, 2000a).

Although the current student population for Olympic Heights is below those of Atlantic and Spanish River, with 2,691 and 3,029 students, respectively, the rate of increase over the past 5 years was greater for Olympic Heights. Boca Raton High School has the lowest student population at 1,881 in the 2000 school year with only a 13% increase in the population over the past 5 years. The percentage of male and female students remained relatively consistent within all four schools over the past 5 school years. Each school reports that half or slightly over half of its students are male.

The racial profile of Olympic Heights has also remained consistent over the past 5 years with approximately 70% white non-Hispanic, 15% African American, and 11% Hispanic students. The same general trend can be seen at both Boca Raton and Spanish River. Atlantic High School has a somewhat different racial student profile with approximately 53% white non-Hispanic, 30% African American, and 10% Hispanic. These enrollment trends indicate that these four high schools are very similar in terms of student demographics.

Data comparing the four area high schools for 1999-2000 show that Olympic Heights has fewer free- and reduced-lunch students (potentially indicating a higher socioeconomic student population) and limited English proficiency students. It is similar, however, to the other schools in the percentage of exceptional student education and gifted students.

INCIDENT REFERRAL DATA

Specifically of interest in this study are district-defined incidents, such as disobedience, disruptive behavior, and disrespectful language (known as the three Ds), and more severe state-reported incidents, such as threats and fights,

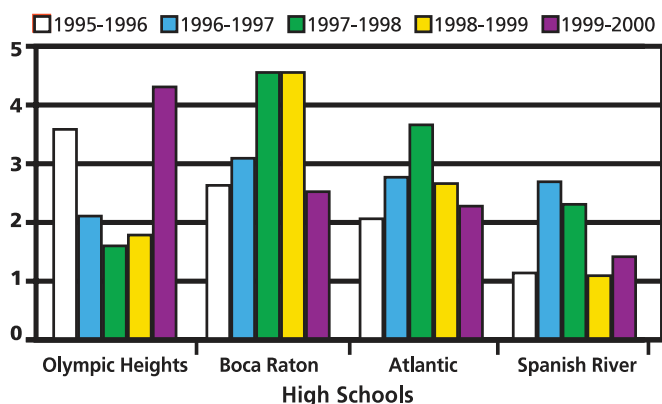


Figure 1. Number of incidents per 100 students reported to the state system.

These incidents are addressed by the PEF conflict resolution and peer mediation intervention programs. Consequently, an examination of each of these specific referrals at Olympic Heights tells more about program impact than the data would for all student behaviors.

Disobedience

Disobedience data at Olympic Heights (Figure 2) indicate a decline in incidents from a high of 1,675 (1996-1997) to 1,286 (1997-1998) followed by a further decline to 988 (1998-1999) after the third year of the program. At this point, the program was completed and formal reinforcement techniques were withdrawn from the school. One year after the completion of program implementation (1999-2000), data indicated that disobedience was again on the rise with a sharp increase to 1,164 total reported incidents. The lack of traditional program structure this fourth year infers that the conflict resolution program had a direct and immediate positive impact on incident rates, causing a decline in disobedience during Years 1 through 3 of program implementation. This was followed by a negative impact caused by discontinuation of the program in Year 4 (Safe Schools Center, 2000c).

Incident data from the four area high schools show that while incidents of disobedient behavior at Olympic Heights declined from 1996-1997 through 1998-1999, the incidents in other schools rose (Safe Schools Center, 2000a, 2000b, 2000c, 2000d). As shown in Figure 3, the incident rate standardized by population for 1996-1997 at Olympic Heights is 81 incidents per 100 students. This standardized data cannot account for repeat offenses; however, they indicate an exceptionally high rate of disobedience. By 1998-1999, the number of incidents per 100 students at Olympic Heights had declined to 42.

The incident rate accelerated during the fourth year, once the program had been withdrawn. This is atypical of high school disobedience behavior, as maturity and adjustment to the school behavioral norms typically occur during the early years. In other words, as maturity increases, disobedience decreases. The rise in data for 1999-2000 may reflect the withdrawal of the program, as well as a different set of norms established by the incoming

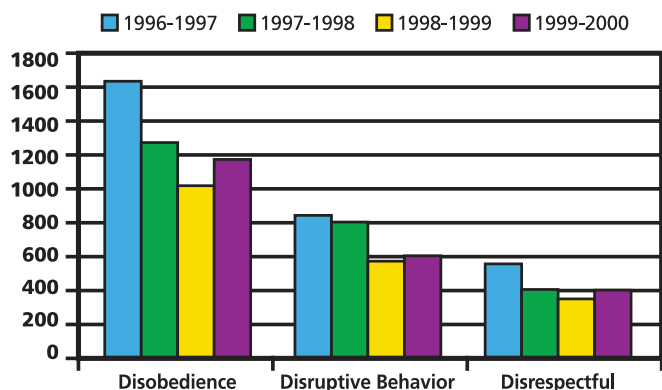


Figure 2. The 3 Ds for Olympic Heights High School.

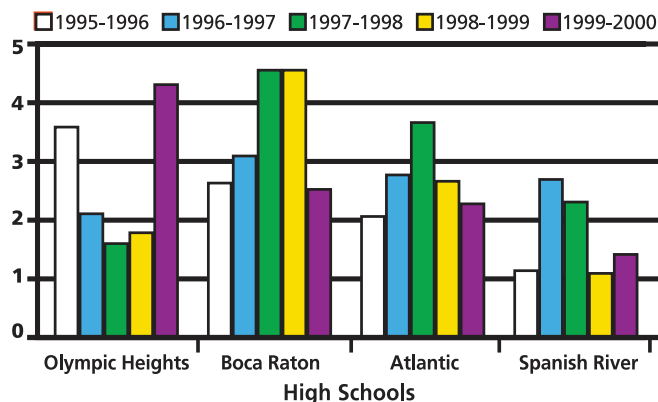


Figure 3. Incidents of disobedience per 100 students in four high schools.

freshman class that had no PEF conflict resolution program experience.

In contrast, the general trend for the three other high schools shows the number of incidents rising from 1996-1997 to 1997-1998 and then decreasing. Boca Raton High School had fewer fluctuations in the number of incidents reported over the 4-year period, whereas Atlantic and Spanish River had considerable declines from 1997-1998 to 1999-2000.

Disruptive Behavior

As shown in Figure 2, disruptive behavior at Olympic Heights followed a similar trend over the 4-year period. Disruptive incidents were at a high in 1996-1997 with 852 incidents, and then declined to 574 in 1998-1999. For this particular behavior type the sharpest impact occurred during the last year of the program. Again, without formal reinforcement in the 1999-2000 school year, the number of disruptive behaviors escalated to 640.

Comparing Olympic Heights standardized data to the three other high schools, Olympic Heights has fewer disruptive behaviors per 100 students. As Olympic Heights showed a decline in disruptive behaviors from 1996-1997 to 1999-2000, the disruptive behavior in the three other schools increased from 1996-1997 to 1997-1998 and then made notable declines by 1999-2000 (see Figure 4).

Disrespectful Language

The third behavior examined at Olympic Heights, disrespectful language, was also at a high during Year 1 (1996-1997) with 542 incidents reported (see Figure 2). Again, after Year 2 of program implementation, there was a sharp decline of incidents to 336 in 1998-1999. The fourth year showed an increase to 403 incidents after program implementation had concluded.

Once again, standardized comparison of the three schools shows an increase in incidents in Year 2. Then the incident rates begin a gradual decline (except at Boca Raton, which continued to have an increase until the

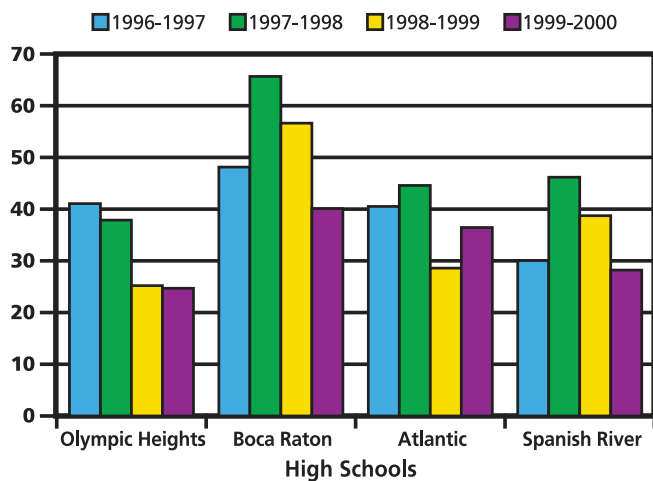


Figure 4. Incidents of disruptive behavior per 100 students in four high schools.

third year), whereas Olympic Heights started out with high rates and experienced a decrease each year until the program ended (see Figure 5). This same reverse pattern between Olympic Heights and the three comparison schools repeated itself throughout the three Ds, indicating the distinct possibility of PEF program impact.

Fighting

According to the School Environment Safety Incident Report (SESIR) for school years 1995-19% through 1999-2000, the number of fights and threats for Olympic Heights decreased during the years the PEF program was in place but escalated again in 1999-2000 after the program was discontinued (see Figure 6). In 1995-1996, when the program was introduced, there were 67 incidents of fighting, which decreased to 41 incidents in 1998-1999 and rose again to 113 in 1999-2000 (School District of Palm Beach County, 2000d).

The number of threats and intimidation at Olympic Heights reported by the SESIR rose from 50(1995-1996) to 66 in 1996-1997. A sharp decline was noted in 1997-1998, which remained stable in 1998-1999 with only 26

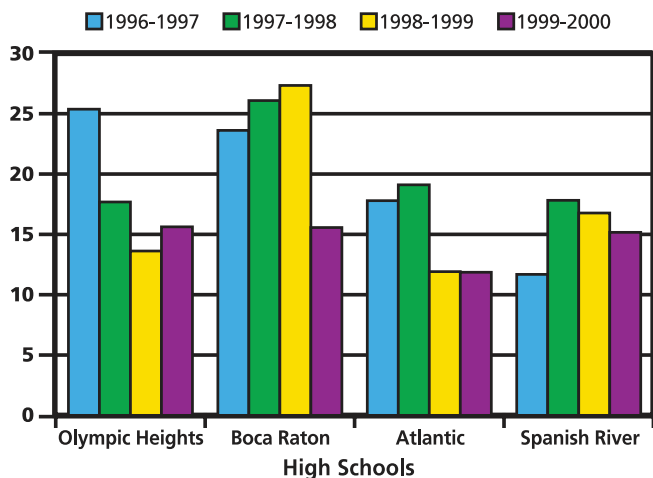


Figure 5. Incidents of disrespectful language per 100 students in four high schools.

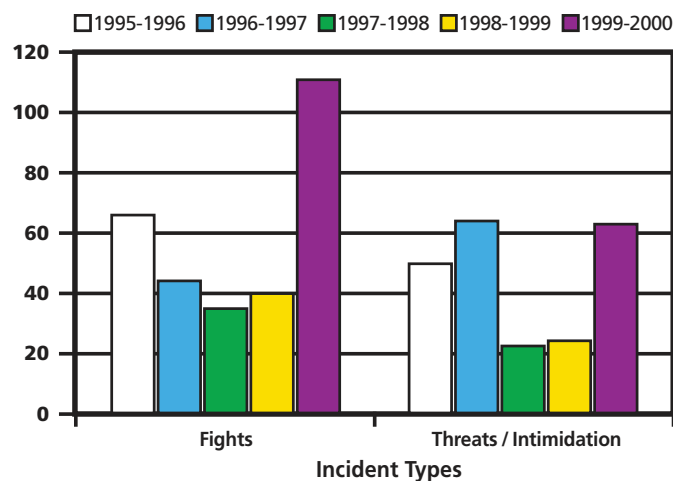


Figure 6. Reported incidents of fights and threats at Olympic Heights High School.

incidents of threats reported. In the 1999-2000 school year the number of threats more than doubled to 64.

A comparison of the number of fighting incidents per 100 students in the four high schools again reveals a reverse trend in the number of incidents occurring within Olympic Heights and the three other high schools (see Figure 7). Boca Raton, Atlantic, and Spanish River generally show a steady increase in the number of incidents from 1995-1996 to 1997-1998 and a subsequent decrease in 1999-2000. Barnett and Israel (2000) found that internal reporting procedures for individual high schools in Florida vary. The significant increase in fighting incidents may be due in part to a change in reporting procedures; however, these changes may not account for all of the increase in reported incidents.

Suspensions

Another interesting indicator of student behavior — and certainly of school safety in general (Israel, Harrison, & Barnett, in review) — is the number of suspensions in a school year. Suspensions are actions taken in response to an inappropriate student behavior and serve as a function in

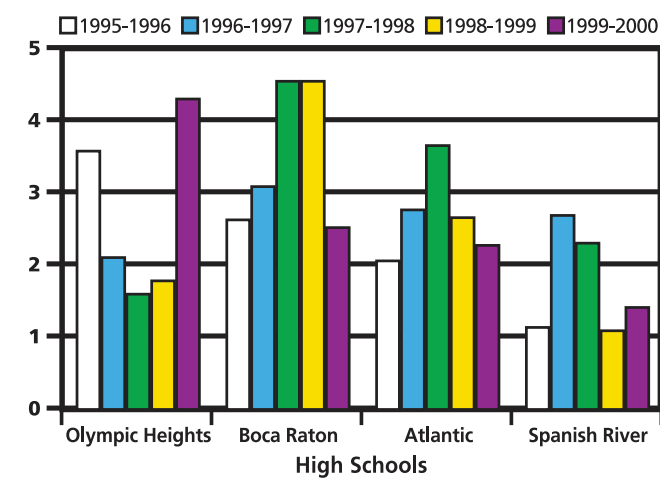


Figure 7. Incidents of fighting per 100 students in four high schools.

the reward-punishment system of daily student behavioral management. Suspensions may not always correlate highly with total numbers of behavioral incidents, as they may not be accurately recorded in the reporting system (Barnett, Israel, & Harrison, 1999). They are generally given for higher severity levels of behavioral incidents. Consequently, they are an indicator of incidents that have either escalated or are most closely associated with more serious incidents of crime and violence. However, they continue to add to the profile of general trends of behavior within a given school.

For total school suspensions, Olympic Heights followed the same general trend as reflected by the incident data. Total suspensions declined by 35% after the first year (from 858 to 561 suspensions), maintaining the same rate of total school suspensions for the following year (558 suspensions during 1998-1999) and then increasing by 32% during the year that the program was discontinued (to 739 suspensions in 1999-2000). The other three high schools all show increases in 1996-1997, followed by declines. A wide range of suspensions occur at the three schools the following year, as Boca Raton remained consistent, Atlantic increased, and Spanish River decreased, indicating either a wide range of variance, or differences in punishment reporting procedures.

RESULTS OF PROGRAM IMPLEMENTATION AT OLYMPIC HEIGHTS

The PEF conflict resolution and peer mediation program specifically targets incidents of disobedience, disruptive behaviors, and disrespectful language. Evidence of PEF's programmatic impact can be seen in the decrease in each of these behavioral incidents in Olympic Heights High School from 1996-1997 through 1998-1999 and the subsequent rise in the number of incidents in 1999-2000 after the programmatic reinforcement was discontinued.

A marked 3-year decrease in all of the three Ds — as well as downward trends in fighting, threats and intimidations, and suspensions — is evidence that something occurred in the school climate that affected student behavior positively. The greatest single implication of impact can be seen in the decrease of disobedient behavior at Olympic Heights by 40% from 1996-1997 to 1998-1999. The overall trend indicates a positive change in the norms of student behavior from one of disobedient, disrespectful, and disruptive behaviors to one conducive to solving problems and minimizing conflict. Although it is possible that other factors may have had some influence on lowering incident referral rates, such as students graduating who were multiple offenders or staff changes, they would result in only minor negative impacts. Program implementation and reinforcement coincide with these data. Consequently, the evidence strongly supports the hypothesis that the PEF program was effective in influencing student behavior. Using PEF's conflict resolution and peer mediation program to minimize aggression

and violence improved school safety efforts at Olympic Heights, culminating in a more positive school climate during those years.

Summary and Conclusions

The PEF conflict resolution and peer mediation program appears to have affected the school climate, as evidenced by downward trends in incident referral rates during the 3 years of program implementation at this particular high school. It appears from the data that as a result of program implementation, the students who received the full 3-year program experienced either direct or indirect effects, culminating in a more positive emotional climate.

Discussing conflict resolution within the school culture resulted in better anger management or diplomatic communication such that reported incidents were reduced. An increased understanding or tolerance on the part of school staff and the student body may have also resulted in judgments made differently about conflicts. Such judgments may have resulted in less of a need to report these incidents and an increased ability to handle the conflicts before escalation.

Further research on the PEF conflict resolution and peer mediation program might explore these changes in the perceptions and empathy level of school staff, as well as the long-term effects of the program on other indicators of an improved school climate. An examination of factors, such as student academic performance, attitudes, peer relationships, and self-concept, will lead to an increased understanding of these deeper effects. Perhaps by exploring these other student outcomes, total program impact may eventually be assessed. □

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