

Changing School Climate One Mediator at a Time: Year-One Analysis of a School-Based Mediation Program

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An urban middle school–university mediation program that emphasizes mentoring of middle school peer mediators by university students is described. Student social-cognitive dispositions, perceptions of school climate, conflict strategy choices, and related conflict behaviors are analyzed on the basis of assessments administered after one year of program implementation.

No Child Left Behind (PL 107–110-Jan. 8, 2002 115 STAT. 1425) is currently a significant catalyst for school reform. To the surprise of some, when academic gains are sought, school climate and student social-emotional learning issues eventually find their way into the prioritized objectives for change. This situation fairly describes the context for the work presented in this article. In the course of school improvement processes, changes in school climate and student social-cognitive dispositions also became goals. Further, as the mediation program developed, the team became interested in the relationships among conflict-positive behaviors being taught in the program and student perceptions of conflict-negative behaviors observed in other contexts. The school climate improvement process described in this article focused on (1) student disposition to consider the thoughts and feelings of others, (2) student perceptions of school climate, (3) student preferences for conflict strategy choices, and (4) relationships among



conflict behaviors and context outside school life. The purpose of the article, then, is to report and discuss progress made toward student empowerment and climate improvement goals.

Description of the School Community

The student body is approximately 10.1 percent Caucasian, 48.6 percent Hispanic, 28.5 percent Asian, and 11.3 percent African-American, and 1.6 percent of the student body includes Native Americans, Filipinos, and Pacific Islanders, with more than one fourth of the students classified as English Language Learners. The school community is characterized by low socioeconomic status (90 percent free or reduced lunch) and high unemployment.

Due to misconduct or poor grades, many students are not eligible to participate in extracurricular school activities such as sports, culture-specific clubs, leadership, and student government. A city police officer is present on campus during the week to assist administrators in problem solving and increasing the safety of the learning environment. The school district in which the middle school is located is the fourth largest K-12 system in the state, serving eighty-two thousand students with eighty languages being spoken. It is not surprising that school administration determined that reduction of destructive conflict should be one of its school climate improvement goals.

Pre-Implementation Considerations

In partnership with a mediation program at a neighboring university, a school staff survey ($n = 40$) was conducted that resulted in agreement on school climate goals. Teachers and administrators wanted students to become more frequent perspective takers and to consider the thoughts and feelings of others. School climate surveys in years past revealed that students did not perceive their campus to be particularly safe or friendly. In light of this, the staff reasoned that students who were engaged in improving school climate by facilitating conflict resolution would be more likely to rate the school climate positively. Thus, starting a mediation program was considered a step toward more favorable student perception of the school environment, as well as key to quantifiable effects (that is, reduction of discipline referrals).

A team of five of the school's most interested teachers, collaborating with university mentors, and two project coordinators committed themselves to peer mediation program development. Three-fourths of the staff believed that establishing a peer mediation program would have positive effects—specifically, uniting the school around a model in which listening to and appreciating divergent perspectives was inherent.

The following variables of interest and accompanying questions were explored at pre and post (year one) program implementation intervals by the Mediator Mentors team:

- *Student cognitive and affective (empathy) perspective-taking scores.* Does program implementation result in increases in empathy and perspective-taking scores? Are mediator scores different from those of nonmediators?
- *Student preference for problem-solving strategy.* Will program implementation result in change of problem-solving strategy preferences?
- *Student perception of school climate.* Will program implementation result in improved student perception of school climate? Are mediators' perceptions different from those of nonmediators?
- *Student perceptions of conflict positive and conflict negative behavior.* Will mediators answer questions about conflict resolution in their out-of-school environment differently than nonmediators?

Theory and Practice

Teachers of preadolescents are very familiar with the egocentrism that is demonstrated by their students. This phenomenon is *not* due to the inability to think abstractly (as in younger, concrete thinkers who cannot put themselves in others' shoes), but rather due to the fact that they can! Elkind (1967), Elkind and Bowan (1979), and Lapsley and Rice (1988) have described adolescent egocentrism. It is thought that as the formal operational capacity for abstraction emerges (Inhelder and Piaget, 1958), so does formal operational egocentrism. It is hypothesized by some to be a product of the interaction between increasing abstract reasoning and changing hormones. It is characterized by a preoccupation with self, self-perspectives, and distorted perspective taking. The adolescent's preoccupation with what others are thinking about the self (imaginary audience) influences behavior.

For example, in the context of the peer group, the preteen may be making frequent inferences about what is acceptable or admirable in the eyes of the peer group. This dynamic may mimic the intellectual rigidity of early egocentrism and result in a kind of social desirability suppressing self-reports of perspective taking. Davis and Franzoi (1991) add to the description of this aspect of development: "Virtually all normal adolescents possess the ability to empathize and the important differences among them lie in the *tendency* to utilize these abilities" (p. 74). So, although middle school students are easily abstract thinkers who perspective take frequently, they may not be doing so in a productive manner that would advance their individual maturity (as opposed to their group membership). This developmental phenomenon presents an additional challenge to CR programs in middle and high schools where authentic perspective taking is counted on as a correlate of empathy and prosocial behavior.

In the Mediator Mentors program, the tendency to consider the thoughts and feelings of others is socialized through the selection of mediator student cadres and training relying heavily on role-play. This process is repeated every semester. In this way, the communication and conflict resolution strategies permeate the student population with each year of implementation. The mediator cadre, too, is permeable. The loyalties and interests of middle school students change as they experience new ways of belonging to their school community. Mediation experience imparts knowledge, and skills are transferable to many leadership roles. The program requires students to inform mentor teachers in advance of their intention to remove themselves from the schedule. Developmentally appropriate practice guides our program's theoretical orientation and its implementation. Most program staff members treat students with the respect they earn through service, and students in turn respect the program—even if cheerleading, sports, or student council becomes their more immediate interest.

Mentors Model

Another aspect of socializing perspective taking and empathy involves the modeling of these dispositions by staff and mentors. In schools where a character education program interfaces with the CR program, values are frequently discussed. The district in which this study took place has recently adopted *Character Counts* (Josephson, 2000). Middle school is an important time for youngsters who are questioning family and societal beliefs. For these students, deciding what to believe in has much to do with behavior they observe in adults they respect. In an anecdote from the

authors' experience, a seventh-grade mediator asked for help with a harassment issue (she was being harassed by another mediator!). The seventh-grader had some confidence that she would receive caring assistance from the program staff. The assistance she received took a familiar form. Adult mentors facilitated a mediated solution between the girls while modeling the perspective taking and empathy required of all mediators. This resulted in increasing student respect for the program and its shared values. Jones and Sanford describe *teacher demonstration of respect for students* as a variable critical to program effectiveness (2003).

School-Based Mediation

The plethora of Peer Mediation models, familiar to the readers of this journal, have much in common. In both elementary and middle schools, the sequence of steps and phases enables students to master “what mediation looks like” and move on to “developing my own personal mediator skills on behalf of those I can help” quickly. It is our contention that the shift to altruistic helping behavior is facilitated by the seeming simplicity of the process (Lane and McWhirter; 1992; Lane-Garon, 1998). Experienced mediators know that the perception of apparent process simplicity is only an initial response to training; nevertheless, it allows youthful mediators the early confidence they require to later focus on disputant needs, specific resolution strategies, and responses to cultural differences in communication.

Developmental considerations, school climate concerns, and influences of mentoring are all important aspects of the program described here. Mediation itself contributes to adaptive human development in that it provides a model for considering another's diverging point of view, accurately inferencing another's feelings, cooperatively resolving a shared problem, and experiencing satisfaction with a mutually designed solution (Lane-Garon and Richardson, 2003). Additionally, the bicultural pairing of mediators on duty and the multicultural nature of the Mediator Mentor team allows students who may only “hang” with the familiar to experience cultural differences in thinking, expression, and values in the safety of the center and in the context of facilitated negotiation.

Research questions originated from two sources: the university partners and the public school partners. We remembered the advice of Jones and Kmitta (2000) and Crawford and Bodine (1996, p. 26): “Any program in schools today needs to establish performance goals and to measure progress toward achieving those goals.” Additionally, Jones and Kmitta's concern

was voiced by the team at this school as “a desire for more research to be done that would address specific practitioner interests (2000, p. 145). To the members of this partnership community, jointly posed research and evaluation questions were deemed as important as the collaborative program implementation itself.

All partnership constituents represented in this work were cognizant of the most powerful way to ensure support for the CRE program: through alignment of program efforts with state standards and academic objectives. As Jones and Kmitta (2000, p. 112) advised, “Institutionalization is facilitated in states where CRE can be linked to general standards or principles of education.” The information in Figure 1 was periodically distributed at the program site and attached to all communications associated with program implementation. Mediator Mentor teachers on the training team were especially helpful in publicizing the program’s support of academic goals.

The Mediator Mentors program aspires to “fit into the life of the school.” Although well-grounded in social-cognitive developmental theory, implementation is ultimately defined by the existing school culture. For example, a mediation center was initially designated as the location for mediation. With developmentally appropriate practice considered, it was thought that middle school students with boyfriend or girlfriend issues and so forth would require a private mediation environment. Mentors and students together discovered that program usage increased when one pair of mediators roamed the blacktop at lunch and assisted with disputes on the spot, while offering the privacy of the center to those who preferred it. What follows is a description of pre- and post-assessment, training, service, and analysis of data important to answering the programmatic questions originally posed.

Program Development

Participants included eighty-eight middle school students: twenty-nine were selected to be trained and to serve as peer mediators, and fifty-nine participated in assessment for comparison and in the program as either disputants or as students who recognized the program as part of the school’s function.

Student Mediator Nomination

For two weeks, the students were involved in the nomination process. This consisted of writing essays describing personal characteristics and motivation with respect to becoming a mediator. Self, peer, staff, and parent

Figure 1. California Standards Addressed by the Peer Mediator Facilitated Problem-Solving Process

Grade 7

Vocabulary

- 1.3 Clarify word meanings through the use of definition, example, restatement, or contrast.

Comprehension

- 1.1 Ask probing questions to elicit information, including evidence to support the speaker's claims and conclusions.
- 1.2 Determine the speaker's attitude toward the subject.
- 1.3 Respond to persuasive messages with questions, challenges, or affirmations.
- 1.6 Use speaking techniques, including voice modulation, inflection, tempo, enunciation, and eye contact, for effective presentations.

Analysis and Evaluation of Oral and Media Communications

- 1.7 Provide constructive feedback to speakers concerning the coherence and logic of a speech's content and delivery and its overall impact on the listener.

Grade 8

Vocabulary

- 1.3 Use word meanings within the appropriate context and show ability to verify those meanings by definition, restatement, example, comparison, or contrast.

Sentence Structure

- 1.1 Use correct and varied sentence types and sentence openings to present a lively and effective personal style.

Comprehension

- 1.1 Analyze oral interpretations of literature, including language choice and delivery, and the effect of the interpretations on the listener.
- 1.2.a. Paraphrase a speaker's purpose and point of view and ask relevant questions concerning the speaker's content, delivery, and purpose.
- b. Rearrange words and sentences to clarify the meaning.

Analysis and Evaluation of Oral and Media Communications

- 1.8 Evaluate the credibility of a speaker (hidden agendas, slanted, or biased material).
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nomination were all encouraged. These short essay nominations were then endorsed by at least two staff members with their signatures. The Mediator Mentor team of teachers and university program developers then made selections from the nominations on the basis of district-determined GPA requisites for cocurricular activity. Exceptions were made in some cases where it was felt that “the opportunity to try on being someone new” might make a critical difference for a particular student.

Training

The ten-hour training took place over two days: one at the university and one on the middle school campus. Twenty student teachers coached small role-play groups and related their personal and professional goals to the middle school students during planned activities wherein all shared information pertaining to (1) personal strengths that would contribute to success as a mediator, (2) goals for the school year and beyond, and (3) description of inspirational role models. Some of these training coaches also continued as mentors during the lunch periods throughout the year. Two curricula strongly guided the training: *Building A Peaceful Community* (Lane-Garon, Nelsen, and McWhirter, 1997) and *Community Boards of San Francisco's School Initiatives Mediator Training* (San Francisco Community Boards, 1999). For a complete description of the training process, please consult these resources.

Service

The effects of service learning have been examined in many contexts (Reiman, 2002; Buchanan, Baldwin, and Rudisill, 2002). Some positive effects cited include increased cultural sensitivity and improved conception of and commitment to professional roles. In the Mediator Mentors program, future helping professionals become mentors to children learning conflict resolution skills. These university students serve the elementary schools in the context of mutual benefit. The student peer mediators also serve their school settings by acting as facilitators for dispute resolution two days per month. The school is committed to training a new cadre each semester, and students serve as long as they are motivated to do so. The program maintains an eager team due to the philosophy that mediation is voluntary, service as a mediator is above and beyond, and service is appreciated by staff and classmates. Mediator appreciation field trips are regularly scheduled and, when mediators graduate, a professional letter of reference accompanies them to high school recommending them as potential leaders for similar programs. In the context of service, students increase multicultural awareness and competency. In one telling remark, a student mediator made a salient observation about students of different ethnic groups on campus: "They act like *all that* when they are on the blacktop at lunch, but when they are solving a problem in the center with our help, they are just like us" (personal conversation, 2003). Through service, this student has had intimate experience with what unites us: our shared human needs.

Mentor Influence

University mentoring on campus exceeded one hundred and fifty hours for the academic school year discussed in this article. The power of mentoring during the training and through the year cannot be underestimated. The use of cross-age mentors has been thoroughly researched and is considered an effective structure supportive of interpersonal learning (Johnson and Johnson, 1999; Lieberman, 1989; McLaughlin, and Hazouri, 1992). Teacher credential candidates at California State University, Fresno, have the opportunity to learn and practice communication and conflict resolution skills that will benefit them in their future professions. Mediator Mentors represents an ongoing collaboration between university and public schools. In the program's seven years, over one thousand students have been trained as conflict managers and seven Central Valley schools have been served. The correlation between years of program implementation and number of schools served is not a coincidence. The program director (and coauthor of this article) firmly believes that all learning takes place in the context of relationships. Further, effective collaborations, like all relationships, take time to grow. In our case, this means intense university presence on the public school campus for an entire year with unlimited consultation thereafter.

First-Year Findings

At the close of the first year of program implementation, assessments produced data on the four topics of interest outlined in the introduction of this article. Results of initial assessment are reported here in alignment with each program objective.

Perspective Taking and Empathy

The disposition to consider the thoughts and feelings of others was measured by the pre- and post-administration of the *Davis Interpersonal Reactivity Index* perspective-taking and empathy scales (Davis, 1983; Lane-Garon, 2000; Lane-Garon and Richardson, 2003). The instrument has been used in several studies with adolescents and in many with adults. For this population, culturally familiar stories were included to illustrate concepts. For example, "Before criticizing somebody, I try to imagine how I would feel if I were in their place" is also verbally illustrated by an unfortunate haircut story that appeals to middle schoolers' experience.

Prior to program implementation, no difference in scores was revealed between the students selected as mediators and those who participated as disputants or watched the program from afar. This was determined by assessing one class at each grade level, in blanket fashion, before the nomination process was begun. Said another way, mediators are not significantly different from their nonmediator peers when they respond to statements intended to reveal dispositional tendencies toward perspective taking and empathy. After one academic year, significant gains in perspective taking and empathy scores for the entire sample were observed: $F(1,87) = 37.29$, $p < .00$ for pre-to-post change in cognitive perspective taking and $F(1,87) = 27.31$, $p < .00$ for pre-to-post change in affective perspective taking. At posttest as well as pretest, there was no effect for mediators versus nonmediators on these social-cognitive dimensions.

Perceptions of School Climate

Posttest Pearson correlations revealed that more favorable ratings of school climate were related to mediator status. Mediators rated school climate more favorably than nonmediators at posttest, specifically in response to the following statements:

My family thinks my school is a good school. ($r = .26$; $p < .01$)

I have friends at this school. ($r = .24$; $p < .03$)

Students solve problems peacefully here. ($r = .24$; $p < .03$)

School climate was rated more favorably by more students at year's end than at the initial preprogram implementation assessment interval $F(1,86) = 42.87$, $p < .00$.

Conflict Positive and Negative Behaviors in Non-School Contexts

A small, positive effect was seen for conflict-positive strategies as perceived by students in their home lives: $F(1,84) = 4.01$, $p < .05$. "Talking it out" and "walking away" were among these. The other side of this coin was a predicted reduction in conflict-negative strategies, such as "yelling" and "hitting." A significant pre- to posttest reduction in these strategies was also revealed. The mean for conflict negative strategies was 6.22 at pretest and 5.84 at posttest. It should be noted that the stem for these Likert scale survey items was, "The people I live with resolve conflict by. . . ." The results

of this measure may offer some indication of program ability to generalize from school to home. Although not central to the hypotheses of this study, a question on the contextual survey was, “*How much time do you spend with a parenting adult?*” Students who answered this question with “a lot” had higher scores on conflict-positive behaviors than students who answered this question with “not much.” The Pearson correlation representing the relationship between perceived time spent with parenting adult and conflict positive behavior was $r = .23, p < .04$, and at posttest, $r = .41, p < .00$. It should be noted that this relationship was significantly stronger after one year of program implementation.

Experience with Violence

Three questions on the contextual survey asked students to rate their experience with violence. The item statements were:

In my life, conflict has, on occasion, turned to violence.

I have witnessed a violent incident that started as a conflict.

I watch TV shows with violent content.

As might be expected, reports of frequent experience with violence were negatively and significantly related to conflict positive strategies: $r = -.32, p < .002$.

Student Preference for CR Strategy

There was no change in student preference for problem-solving strategy for the sample. However, among mediators, analysis of variance revealed a significant difference between the responses of mediators and nonmediators. Additionally, this difference became more pronounced by posttest: pretest $F(3,85) = 640.151, p = .00$; posttest $F(3,125) = 988.747, p = .00$.

Discussion

The most remarkable findings from this year have to do with what change emerged for the whole sample (large and significant pre-to-post increase in perspective taking and empathy scores), improvement in perceptions of school climate (moderate and significant), contextual information surfacing about possible program effects on student home life (significant

relationships among conflict style, time spent with parent, and experience of violence), and mediator problem-solving strategy choice as different from that of nonmediators.

In general, we can conclude that Mediator Mentors is having a positive effect on student dispositional tendency to consider the thoughts and feelings of others. Eventually, with additionally trained cadres, this effect should be maximized as the number of mediators from different social groups on campus increases. Although these scores are no assurance of prosocial behavior, we are hopeful.

Also, perceptions of school climate are more positive for those who serve as mediators. This does not surprise us. Students who have the tools to resolve conflict peacefully feel more comfortable about engaging in that process and, as a result, feel safer. We realize that novelty may play a part in this perception improvement, and we will employ the same measure in year two. We will increase the number of respondents and add staff and parent perceptions to the database as well.

The relationships revealed by the data about conflict in the home, time spent with adults, and experience with violence were thought provoking. School administration and staff may consider these findings as a rationale for implementation of another program component—parent education groups around conflict in the home, for example.

Finally, mediators selected different strategies for problem solving than did nonmediators. At year one, their first preference is for mediation, with preference for speaking to the individual with whom they have a problem a close second. We expect these preferences to be reversed by the time year-two evaluation takes place.

Overall, our work ahead appears to center on spreading program participation and program effects wider on campus. Mediator Mentors is now a recognized part of school life, but usage may be expanded with more outreach and demonstrations of service. Students successfully mediated eighty-seven cases in the first year of the program.

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