"Heat and animosity, contest and conflict, may sharpen the wits, although they rarely do; they never strengthen the understanding, clear the perspicacity, guide the judgement, or improve the heart."[1]

I. Introduction

Teaching mediation skills and other alternative conflict resolution techniques to our youth today may prove to be a crucial investment for our society's peaceable future.[2] Peer mediation (PM)[3] and conflict resolution (CR)[4] training are being touted by school administrators, commentators, and researchers as the strategies of choice to resolve conflict, control discipline problems, and ultimately reduce violence in our nation's schools.[5]

The marketplace has responded to this conviction by making over 100 different conflict

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[1] Walter Savage Landor, Michael Moncur's Quotation Search Engine (visited March 2, 1997) http://www.starlingtech.com/quotes/qsearch.cgi

[2] Glenda L. Cottam, Mediation and Young People: A Look at How Far We've Come, 29 Creighton L. Rev. 1517 (1996).

[3] For the purposes of this paper, peer mediation is defined as a structured process that takes place in the school in which a student trained to mediate conflicts acts as a neutral and impartial third party to assist two or more students to negotiate an integrative resolution to their conflict. Usually, but not always, peer mediators are a cadre of students in the school who receive training and assist other students to resolve conflicts.

[4] For the purposes of this paper, conflict resolution is defined as a process where students learn to manage their own conflicts without help from adults, other students, or peer mediators. Instead the curriculum provides education and skill building in communication and negotiation as appropriate tools to recognize differences and resolve conflicts. Unlike peer mediation which trains only a cadre of students to act as neutral parties, conflict resolution training is usually available to the student body as a whole or entire classes.

[5] See generally, David Johnson and Roger Johnson, Reducing School Violence Through Conflict Resolution, Association for Supervision and Curriculum Development (1995); OER Report, Project Schools Teaching Options for Peace (STOP) Teen Mediation Project, 1993-1994 (ERIK Database, # ED380-750, 1995); Marie Rogers, Resolving Conflict Through Peer Mediation, Solutions and Strategies: National Dropout Prevention Center (No. 9, June 1994); and Brian Roy Harper, Peer Mediation Programs: Teaching Students Alternatives to Violence, 1993 J. Disp. Resol. 323 (1993).

management and violence prevention curriculums available to educators.[6] Estimates place the number of schools adopting some form of violence prevention curricula, conflict resolution program, or peer mediation training at more than 5,000.[7] Most conflict management programs in the marketplace advertise CR/PM as an effective strategy to address the conflict and violence in our schools. Unfortunately, few research studies examine the effectiveness of these programs to lower violence and reduce the number of discipline problems in the school setting. It may appear logical to some administrators that any school-based conflict resolution program will have an effect, especially if a major publisher is promoting the materials or the school planning to use the program does not currently have a program in place. In addition, anecdotal evidence demonstrates that CR/PM programs are effective,[8] but few evaluation studies support such a finding. Specifically, the goals of a CR/PM program often do not have in place a desired list of

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[6] Superteams Consulting Group, Reducing Violence With Peer Mediation Programs, (visited February 7, 1997) http://www.superteams.com/pub/doolittl.htm

[7] S. Massey, Schools Find Pupil Mediators Cut Violence, The Wall Street Journal, Feb. 24, 1994 as cited by Kenneth Powell, Lois Muir-McClain, and Lakshmi Halasyamani, A Review of Selected School-Based Conflict Resolution and Peer Mediation Projects, 65 J. School Health 426, 431 (1995).

[8] For example, "Resulting from the implementation of a conflict resolution program in the school this year, over 200 disputes were mediated by the peer mediation team and 95 percent resulted in a written resolution; of those nearly 90 percent of the disputing students agreed to avoid each other in the future." This is a common "result" measured by peer mediation programs and success is often measured from year to year by the number of disputes handled, and number of resolutions reached regardless of the outcome. While this is one measure, it provides little information to the school administrator or program critic about violence, conflicts, or discipline problems reduced by the program. In addition, PM programs that measure effectiveness based on parties agreeing to avoid each other in the future or encourage such resolutions do not consider the long term and continuing relationships likely to be developed by students in the school setting. It is likely such agreements may in the long run create more dissention among groups of students and promote clicks of students who can and cannot communicate with each other based on peer mediated agreements.

outcome criteria permitting an evaluator to measure whether the CR/PM program is effective or meets the schools desired needs. Determining measures of CR/PM program success is essential for evaluating CR/PM programs and can help decision makers in the school improve the program or make effective program planning decisions for future years.

This paper begins by examining the problem of violence in schools. Part II considers the epidemiologic data that justifies planning and implementing a CR/PM program in the school setting.

Part III of this paper examines the literature describing the effectiveness of CR/PM programs in the school setting. To identify the most relevant research studies available, a three step process was used. First, a review of the expert commentary identified specific desirable outcomes related to CR/PM programs[9]; next, research studies meeting the criteria were identified[10]; and finally, a careful review of the scientific rigor of the studies was performed.[11]

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[9] Commentators and experts suggest that school administrators, teachers, parents, and others interested in peer mediation seek two primary and one related outcome from CR/PM programs. First, administrators, teachers, and parents seek outcome measures showing lower discipline problems and violence in the school setting. The second desired measure is whether CR/PM programs can educate students about acceptable procedural steps to resolving personal conflict and more importantly translating this knowledge into practice during a real conflict situation. Relatedly, it is desirable to see increases in educational achievement related to the CR/PM program.

[10] To limit the studies reviewed to those demonstrating the greatest potential efficacy, three criteria were used to identify research studies evaluating CR/PM programs.

First, the research study had to evaluate an intervention in the school setting. Schools are the one institution in our society regularly attended by young people and has the greatest potential impact for teaching alternative methods of dispute resolution. Schools can provide long-term CR/PM training since students usually attend school for at least 12 years and schools provide not only a learning environment, but schools also creates a positive alternative to street activities, gangs, drugs, and boredom.

Second, the study must have been published as an articles in a peer reviewed journal. During the last decade there have been many reports published in newspapers, advocacy

During the review in Part III, this paper considers what criteria school administrators and researchers currently use to measure program success; what strategies show efficacy to reduce conflict and discipline problems in school-based CR/PM programs; and what barriers may exist to determine whether CR/PM programs make a measurable impact on violence and discipline problems. Part IV critically examines the findings from CR/PM peer reviewed research studies to identify specific strategies for implementing programs and developing protocols for evaluating the effectiveness of CR/PM programs in the school setting. Part V of this paper then summarizes the research and available commentary to help school administrators develop a needs assessment for CR/PM programs in their school, determine measurable criteria for evaluating the program, and selecting strategies for implementing a reputationally strong CR/PM program.

II. Background

Few would disagree that violence resulting from disputes among students in our nation's

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newsletters, or on the Internet claiming that specific PM/CR programs dramatically reduce school-based violence, related discipline problems, or increases appropriate dispute resolution skills and behaviors. However, these anecdotal program descriptions often lack formal evaluations, are based on perceived effectiveness and lack valid empirical evidence. Restricting this review to peer-reviewed articles helped to provide a minimum level of research quality.

Third, the research study must have evaluated specific, measurable criterion for success that either: a) measured changes related to reportable disciplinary actions such as disputes requiring teacher or principal intervention, suspensions, expulsions, or acts of violence; b) outlined a specific protocol for measuring the student's knowledge of the generally accepted steps of CR/PM and measure student's initiation of the CR/PM process over other alternatives when faced with a dispute; or c) measured an increase in educational achievement resulting from a CR/PM program.. Many project evaluations were excluded because they *exclusively* measure the number of conflicts referred to peer mediation, the percentage of conflicts reaching agreement, and the nature of the agreement, which resulted more often than not in a promise to avoid future contact. Although general PM data may complement evaluation efforts, the required data measure specific, desirable program outcomes including violence reduction and discipline problems.

[11] See infra, "Results."

schools is a significant problem with long term effects on learning, quality of life, and the community-at-large. Interestingly, however, the crime rates for the general population do not appear to differ from what they were twenty years ago.[12] Consequently, school violence may not be as rampant as some people believe. However, students who bring guns or other weapons to school[13] are serious threats to the learning environment and can initiate violent acts[14] or cause other students to avoid school.[15] Even when students do not use weapons, disputes have a detrimental effect on the school's learning environment,[16] or result in lost property.[17]

Most teachers, counselors and school administrators will agree that school policy should not attempt to totally prevent disputes. The differences among student opinions, culture, and

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[12] R. Craig Wood and Mark D. Chestnutt, Violence in U.S. Schools: The Problems and Some Responses, 97 Ed. Law Rep. 619, 620 (1995)

[13] Approximately 20 percent of the high school students nationwide carry weapons, however, this percentage decreases to 9.8 percent on school property. Laura Kann, et al., Youth Risk Behavior Surveillance - United States, 1995, United States Department of Health and Human Services, Public Health Service, 45 Morbidity and Mortality Weekly Report No. SS-4 p. 6-7 (1995). National representative survey of high school students used to identify priority health risk behaviors that contribute to the leading causes of mortality, morbidity, and social problems among youth.

[14] Id. at 8. (nearly 9% of students report they were threatened or incurred an injury from a weapon during a dispute with another student at school or on school property).

[15] Id. (throughout the United States, 4.5 % of students report missing at least one day of school because they felt unsafe at school or when traveling to or from school).

[16] Id. at 8. (in weaponless disputes, 15.5% of students reported being in a physical fight during the school year, a trend that appears to be more prevalent in male students in lower high school grades. . . male students in grade 9 (29.4%) were significantly more likely to have been in a physical fight on school property than male students in grades 10-12 (20.8%, 18.6%, 15.5%, respectively).

[17] Id. at 8. (one third of all students nationwide had property stolen or damaged on school property during the school year. . . items in the survey include damage to a car, clothing, books, etc.).

learning style along with differing standards of communication stimulate critical thinking and a learning environment with "healthy" disputes being a reasonable outcome. The manner in which the school administration chooses to address various disputes will vary greatly and with different results. Arguably, the appropriate goal in the school setting should not be dispute elimination, rather emphasis should focus on proper dispute resolution practices that can be implemented effectively by students.

Children who tread in fear (resulting in truancy), carry weapons, or rely exclusively upon adult figures as a means of dispute resolution at school may be perceiving these solutions as their only viable alternatives or lack more effective dispute resolution skills. Many schools respond to violence or discipline problems by implementing prevention strategies that are external to the student. For example, some schools conduct random locker searches for weapons, install metal detectors, draft zero tolerance policies for fighting, train faculty to intervene in disputes, target students who commit the most violent acts, or ask students to "just say no" to violence. But these strategies fail to meet students' needs for developing skills that support an effective alternative process for resolving their underlying disputes. CR/PM can provide students with an alternative process to use instead of verbal insults, threats, pushing, shoving, kicking, biting, or hitting someone with a fist.[18]

III. Results

Literature searches in the Medline, ERIK, Westlaw, and PsychLit databases indicate that limited documentation and few relevant studies exist about the implementation and success of

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[18] Wood, 97 Ed. Law Rep. at 621. (students noted these as the most frequent acts of aggression that occur on the school property).

available PM/CR curricula.[19] The majority of the documents were located on PsychLit and ERIK and included Ed.D. practicum papers, sponsored commentaries, professional non-profit organization sponsored papers, dissertations, books, and similar materials that did not reflect research based program evaluations. These documents from sources that were not included in peer reviewed journals provided insight to identify the desired outcomes of CR/PM programs, however they were not included in the review to demonstrate program effectiveness. It is clear that CR/PM programs need additional research to measure their effectiveness and future studies must include a more systematic approach to evaluating the effectiveness of PM/CR resolution programs.[20] Only two sources of identifiable peer reviewed and published studies have sound evaluation strategies and demonstrate promising results.[21] These programs may provide insight

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[19] Each of the listed databases were searched twice, first using the search term "peer mediation" and subsequently searched using the term "conflict resolution." The result was less than 80 total relevant peer reviewed articles, notes, commentaries, or editorials.

[20] See Kenneth Powell, Lois Muir-McClain, and Lakshmi Halasyamani, A Review of Selected School-Based Conflict Resolution and Peer Mediation Projects, 65 J. School Health 426, 431 (1995). (nine project study conducted in four states and supported with funding from the Centers for Disease Control and Prevention's National Center for Injury Prevention and Control); and see generally E. Altman, Violence Prevention Curricula: Summary of Evaluations. Springfield, Il.: Illinois Council for the Prevention of Violence (1994).

[21] First, the Centers for Disease Control and Prevention's National Center for Injury Prevention and Control (CDC) sponsored and published results from nine school CR/PM projects in four states. See Powell, supra note 20.

Second, two researchers from the University of Minnesota (UM) have published results from six individual studies examining CR/PM at the elementary and middle school levels that specifically examined the *My Mediation Notebook* containing lessons taken or adapted from the *Teaching Students to be Peacemakers* curriculum. In addition, adaptations of these curricula were studied at the high school level in a study recently published in the Fall 1996. See David W. Johnson and Roger Johnson, My Mediation Notebook, 3rd Edition, Edina, MN: Interaction Book Company (1995); and David W. Johnson and Roger Johnson, Teaching Students to be Peacemakers, 3rd Edition, Edina, MN: Interaction Book Company (1995).

for the direction of future research studies and provide practical information for implementing and evaluating CR/PM programs at the local school district level.

A. Centers for Disease Control Peer Mediation Studies.

The CDC studies were locally designed by different principle investigators and therefore demonstrated significant differences in the way the CR/PM projects were implemented.[22] However, each of the CDC studies attempted to evaluate behavioral outcomes resulting from the implementation of CR/PM programs. Specifically, can CR/PM reduce violence in schools and create a safer school atmosphere? Only the Florida, North Carolina, and Maryland projects collected sufficient behavioral data to suggest a reduction in disciplinary problems during the year the CR/PM program was implemented, therefore the results from the Missouri studies were not considered. Floridawas the only study to use both experimental and control groups, thus

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[22] Evaluators for the CDC noted primary differences in eight categories including: 1) targeted students, (projects were implemented in two high schools, three middle schools, and four elementary schools. . . size of the schools varied from 300 to 1,800 students and grade size varied from 50 to 450 per grade. . . schools were similarly located in poorer neighborhoods with higher crime rates); 2) project consultant, (all schools provided consultants for training however, at two sites the consultant also served as the overall project coordinator and met regularly with students, teachers, or both); 3) teacher and student training, (training for teachers varied from three to more than 20 sessions for CR training and one to six sessions for PM. . . session length ranged from 30 minutes to four hours. . . total training time varied from a minimum of two to sixteen hours); 4) teaching methods and curriculum content, (teaching in all schools combined formal instruction with participatory activities . . . but the length and duration of the classes varied); 5) complementary strategies, (some schools provided other violence prevention strategies such as parent involvement strategies and extracurricular mentoring); 6) mediation format, (all schools provided a specific location and permitted use of class time for mediation. . . time allowed ranged from 20-60 minutes. . . adults did not formally participate in the mediation process at any school. . . two middle and one high school program provided a teacher in a nearby room for consultation, if needed); 7) project costs, (project cost ranged from $4,200 to $8,000 per year); and 8) project evaluation, (only the Florida project used a randomized experimental design that included a control group while the others did not. . .the Missouri projects (6) did not retain data from disciplinary suspensions in prior years making it impossible to measure program impact). Powell, supra note 20, at 429-430.

making it easier to suggest that there was some level of correlation between the program's implementation and its success. The Maryland program used a locally developed curriculum designed specifically for the Baltimore City School District while the projects from Florida and North Carolina implemented a commercial curriculum[23] available in the marketplace.

1. Essential Elements. Key elements of the Maryland project included five, two hour training session for students in the PM program spanning over a period of two weeks[24]. The curriculum implemented in the Florida and North Carolina projects included *The Rules for Fighting Fair*[25] that were presented to selected classes. During a seven week period, students in the Florida study were introduced to conflict resolution training almost daily for 30 minutes, while the North Carolina study limited training to three 50 minute class periods. In addition, the North Carolina study combined 26 PM students who each received 16 hours of training over a two day period that focused on the ground rules for the mediation process.[26] Indicators of success varied between the projects.[27]

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[23] F. Schmidt and A. Friedman, *Creative Conflict solving for Kids*, Grace Contrino Abrams Peace Education Foundation, Miami, FL. (1991).

[24] The PM were taught listening and communication skills, problem identification and solutions, leadership and teamwork, conciliation, and conflict mediation. Training included role plays, simulations, games, and practice exercises. See Powell, supra note 20, at 428.

[25] The rules are: 1) identifying the problem; 2) focus on the problem; 3) attack the problem and not the person; 4) listen with an open mind; 5) treat a person's feelings with respect; and 6) take responsibility for your actions. Id. at 427.

[26] Id. (rules included 1) one person speaks at a time, 2) no name calling or put downs, and 3) be honest).

[27] The Florida project included staff observational data measuring behaviors on a relative scale including 1) disruptive behavior, 2) rude and discourteous behavior, 3) defiance of adult authority, 4) battery upon a fellow student, and 5) physical fighting between two or more students. In Maryland and North Carolina, project staff focused on reportable measures

2. Results. Results from these studies suggest CR/PM projects may reduce the frequency of fighting and other undesirable behaviors at school, increase knowledge and modify student's attitudes about conflict, improve school discipline, and increase attendance.[28] Unfortunately, the design limitations of all the studies, but Florida make it impossible to determine if the positive changes resulted from the CR/PM projects. The Florida study is also limited and the results cannot be generalized because the classes were not randomly selected and the teachers volunteered to participate.

B. University of Minnesota CR/PM Studies

Johnson and Johnson were the principle investigators in each of the six UM studies designed to evaluate the effectiveness of the CR/PM curricula they developed. Their research designs, implementation protocols and evaluation activities appeared to build upon each other to answer specific questions about CR/PM program implementation and effectiveness.

The first studies measured the student's ability to learn, retain, and use the steps of conflict resolution presented in the curriculum,[29] and assumed that no consensus exists among

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including student and staff attendance, disciplinary suspensions, and referrals to the principal's office. In Maryland, the PM project also collected data for the number of conflicts mediated, number of agreements reached, and the number of agreements still honored at the end of the school year. Id. at 428.

[28] Id. at 430-431.

[29] Their studies used pre-post research designs with experimental and control groups. The training was introduced to randomly selected classes and a series of dependent measures examinee differences between the control and experimental groups to determine the program's effectiveness. Each of the five studies at the elementary and middle school levels implemented the current edition of Teaching Students to be Peacemakers, Interaction Book Co., Edina, MN. (1991 & 1993).

school aged children about how conflicts should be managed.[30] The second level study examined two types of training models, the "cadre" and "total student body" approaches.[31] The most recent level of study in UM's continuing research efforts was implemented in the high school classroom setting. The purpose of this study was to determine whether CR can be integrated into the existing school curricula using a required English course.[32]

1. Essential Elements. The UM programs developed cooperative learning procedures

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[30] The studies attempted to better understand how children learn conflict resolution procedures and skills by determining a) the types of conflicts American children engage in and how frequently each type occurs, b) whether students need to be educated in how to manage conflicts constructively, c) whether students can be trained in how to negotiate and mediate, d) whether students would transfer the learned procedures to real conflicts, e) whether students would spontaneously use the negotiation and mediation procedures to resolve new conflicts that arise outside of the classroom context when adults were not present to prompt the procedures, and f) whether students would use the negotiation and mediation procedures and thereby decrease the number of discipline problems referred to teachers and administrators. See David W. Johnson, et.al., Effects of Conflict Resolution Training on Elementary School Students, 134(6) J. Soc. Psych. 803, 804-805 (1994).

[31] In the cadre approach, only a small number of students were trained to serve as peer mediators for an entire school's student population. In the total student body approach to PM, every student is trained as a PM and the teacher then schedules students to function as the PM on a daily rotational basis. See David W. Johnson, Roger Johnson and James Mitchell, Effectiveness of Conflict Managers in an Inner-City Elementary School, 89(5) J. Ed. Res. 280 (1996).

[32] Laurie Strevahn, David W. Johnson, and Roger T. Johnson, Effects on High School Students of Integrating Conflict Resolution and Peer Mediation Training into an Academic Unit, 14 Mediation Quarterly 21 (No. 1, Fall 1996).

including procedural learning, role playing, drill/review exercises, and small group discussions.[33] Foci of the programs included a negotiation process, [34] and peer mediation.[35]

2. Results. The UM studies suggest that students trained in CR/PM can learn, retain, and are more likely to use strategies for negotiating and mediating during conflict situations. This can significantly reduce the number of conflicts referred to teachers and or ultimately the principal of a school.[36] Possibly the most interesting finding of the UM studies suggest thatschools including the entire student body in CR/PM training are more likely to have students resolve their conflicts appropriately without adult intervention.[37] Finally, the UM studies note that conflict resolution can be integrated into the current curriculum with success and can

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[33] These educational activities/strategies were used to teach a) the nature of the conflict, b) how to engage in integrative negotiations, and c) how to mediate's schoolmates' conflicts. See Bruce Dudley, David Johnson and Roger Johnson, Conflict-Resolution Training and Middle School Students' Integrative Negotiation Behavior, 26(22) J. Applied Soc. Psych 2038, 2043 (1996).

[34] The negotiation procedure consisted of six steps: 1) describing what you want, 2) describing how you feel, 3) explaining your reasons underlying your wants and feelings, 4) reversing perspectives, 5) inventing at least three optional agreements for mutual gain, and 6) reaching an integrative agreement. Id.

[35] The mediation procedure consisted of four steps: I) ending hostilities, ii) ensuring commitment to mediation, iii) facilitating negotiations, and iv) formalizing the agreement. Id.

[36] Although the UM studies focused primarily on student skills for implementing conflict resolution strategies when confronted with a disagreement, data collected about teachers or principals intervening less frequently during a dispute suggests these curricula, when implemented as intended, can also decrease the number of hours teachers are required to facilitate resolving disputes, thus empowering the students to manage their conflicts and freeing teacher time to better serve the school's educational goals. See David W. Johnson, et.al., supra note 30.

[37] When only a cadre of students are trained in PM, other students, teachers and counselors most often serve as the referral agents and the students involved in the conflict rarely seek mediation on their own. Thus, teacher intervention time actually increases when the school employs PM strategies exclusively. See Bruce Dudley, supra note 33.

demonstrate increased academic achievement.[38]

IV. Analysis

Schools exist in a cooperative environment where students learn together and maintain long-term relationships. Even in large schools, students will continue to take classes together, meet during extracurricular activities, and see one another in passing between during breaks. PM programs that encourage avoidance as a resolution to conflict in the school setting fail to recognize the importance of maintaining long term relationships to sustain the optimum educational environment. Similarly, using metal detectors, random locker searches, or zero tolerance policies to prevent violence in the school setting may not be effective when implemented alone to eliminate violence. Schools that permit inappropriate conflict resolution behaviors such as name calling, fighting, threats, etc. do not foster the on going relationships that are conducive to learning. The goal of any CR/PM program should provide students with functional skills to resolve their conflicts in a manner that supports the cooperative learning environment.

Teaching students to manage conflict effectively, anecdotally appears to be a valuable process that is likely to improve the overall educational environment by building relationships, preserving peace, preventing harmful cliques and supporting "community" in the school. To

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[38] Although the level of success may not be as significant as stand alone CR/PM programs demonstrated in earlier grades, nevertheless, the results show that students can learn CR skills as part of other subjects. Extending the concept logically, this result suggests that schools may use integrated CR training to reinforce learning that took place as stand alone programs in the earlier grades. For schools that have more opportunity to integrate stand alone programs in the earlier grade levels, but still have more violence and discipline problems at the higher grade levels, this may provide a reasonable alternative for follow-up training. See Laurie Strevahn, supra note 32.

date, PM programs are strategies of choice among some school administrators to reduce the conflicts that currently exist in the school. However, there is very little empirical data supporting their effectiveness. Critical questions to consider include, 1) can students learn and retain the knowledge and skills needed to resolve conflict over time and more importantly will they use the skills as disputes arise; 2) does CR/PM reduce violence and discipline problems; and 3) can CR/PM have a positive effect of on academic achievement?[39]

A. Educating Students about Resolving Personal Conflict

The UM studies are the only studies to date, found using this search and published in peer-reviewed journals, that demonstrate sound scientific methods and examine a student's ability to learn, retain, and use CR/PM skills. It is noteworthy that the studies were designed to evaluate the curricula developed by the researchers. Although experimental and control groups were chosen within schools, it is unclear how school districts and buildings were chosen and until this curriculum is evaluated independently, a perception of bias exists. In addition, the reported methods used volunteer teachers to implement the CR/PM curriculum that may favorably skew the results. Thus, conclusions from this research should be considered in light of these limitations. For example, teachers required to teach the curricula in addition to their current daily teaching load, who did not volunteer, and have less interest in the program may not produce similar results. However, the UM studies provide great insight to the CR/PM process in the school setting.

The UM studies demonstrate that students can learn, retain, and use CR/PM methods to

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[39] These are the three outcome criteria, numbers one and two are primary while number three is related, that commentators, scientists, academics, and school administrators desire most from a CR/PM program. See supra note 9 and relatedly Part I.

resolve personal conflicts. Months after learning the basic steps to negotiation and mediation, students accurately described the steps and procedures of negotiation and mediation. Following this to a logical conclusion, students who received training appeared more likely than comparison groups to use negotiation skills in a conflict situation. But, observers evaluating the students' use of CR skills in real conflict situations were volunteer teachers responsible for the students' initial training. It is likely the trained students performed better than the control groups to resolve their disputes but, there is significant potential for bias in reporting the results. Therefore, while it appears clear that students can learn and retain the knowledge to resolve conflicts in the school setting, it is necessary to further explore the question of whether students can translate learned CR skills to performance in real conflict situations and the degree trained students out perform students in control groups.

Another aspect of the UM studies addresses the needs of older students by integrating CR training into the existing high school English curriculum. In contrast, during the elementary and middle school studies, teachers were required to implement CR/PM training as stand alone, add on programs. The findings from UM indicate that while integrated programs at higher grade levels demonstrate an increase in knowledge and a positive effect on the attitudes of students in support CR, the results are not as dramatic as stand-alone programs implemented in the elementary grades. In a school environment, especially at higher grade levels where teachers have serious time constraints on the curriculum, receive regular pressure to increase academic test scores, and may resent the addition of new non-academic programs into the existing curricula, CR may be less than enthusiastically welcomed. The high school program demonstrates that CR training can be integrated into the existing curriculum, if not as initial

training, at least as a reinforcing follow-up program. This is a dramatically important finding. It demonstrates that schools given the opportunity to implement a program at earlier grade levels as a stand-alone subject are likely to demonstrate better results than implementing a CR program within the existing curricula of another subject at higher grade levels. This finding also demonstrates that integration of CR is possible and can provide a program with desired, although less pronounced, results. In the best CR programs, stand-alone programs at the early grade levels that include a PM component can provide the best base of knowledge among students, while integrated programs for older students can provide initial training, but may better support the overall district CR/PM program by reinforcing the CR process during a period of adolescence when the risk of violence from conflict increases. Further research should measure the effect of integrated approaches in English as well as other subjects. Research in this area should also focus on whether school administrators should reasonably expect integrated CR at higher grade levels to serve as initial training for students or be limited to reinforcing existing CR/PM programs.

Possibly the most interesting finding of the studies considered PM cadre training compared to a CR/PM total student body approach. In cadre programs, a significant factor acted as a barrier to program success; students rarely refer themselves to mediation. Thus, teachers and counselors may be loosing significant teaching time to resolving conflict or referring students to PM even though a protocol for student self-referral is in place. Alternatively, programs that offer CR skills training or PM to the entire class appear to reduce the number of referrals to teachers, counselors, and principals. The total student body model can also help students understand from a personal perspective why mutual conflict resolution builds a relationship through understanding

each others interests and builds self esteem.

An unstudied concern for cadre programs is the impact it has on students in the program. Students who receive PM training and regularly mediate disputes retain a myriad of skills. For example, they have an enhanced awareness of conflict resolution strategies and possibly better communication skills compared to their untrained peers. However, is there a price the cadre member "pays" for this training and the privilege of mediating disputes? It appears that researchers should examine the academic and social impact of a PM program on trained students. No studies were identified that considered whether time spent mediating and social group status has either a positive or negative impact on the cadre in terms of academic performance or peer acceptance in social groups.

Total student body training models for CR/PM would logically minimize the effect on students compared to cadre programs. The social affect of being a PM would be equal among all students. For PMs time away from academic subjects may be lessened when all students receive training. Similarly, when all students have CR training, fewer disputes may give rise to a level requiring mediation. Nevertheless, even if an equal number of disputes required mediation compared to cadre-trained models, sharing PM responsibilities among all students insures that they miss less academic class time. In addition, when all students receive training, the program is not likely to suffer or benefit merely because of the student type selected or attracted by the cadre. For example, a student may avoid mediation or be influenced by members of his social group to avoid mediation if members of the cadre appear biased.

Costs and benefits exist for both cadre and student body approaches to CR/PM and must be considered by school administrators deciding on the type of program best suited for their

school. Total student body approaches to CR/PM appear to have a better reputation for lowering overall discipline problems. This is especially true in the elementary and middle school levels where teachers have the time and resources to implement stand-alone programs. But stand alone programs designed for the entire student body require a significant commitment of teacher time and training, curriculum time, a higher level of administrative support, and greater economic costs. In contrast, cadre PM programs can be implemented with relatively little economic costs, it involves fewer students, and usually training for the PM's is extra-curricular, thus academic time to implement the program is not necessary.

B. Reducing Violence in Schools

The translation from CR/PM research to lower violence rates and discipline problems in schools remains unclear. The CDC studies demonstrated lower violence rates and disciplinary suspensions in schools where CR/PM programs were implemented. However, CDC points out the methodology of the studies severely limit the generalizability of their findings. Thus, similar results may not be demonstrated in other schools. The CDC data suggests that CR/PM may reduce the frequency of fighting and disciplinary suspensions in school, and clearly further study is justified. The UM studies did not measure reductions in school violence.

This paper suggests that schools should implement better strategies for evaluating the effectiveness of CR/PM programs. Currently, the existing data collected to evaluate CR/PM programs cannot permit school-based decision makers to say that CR/PM reduces violence in the school setting or decreases the number of disciplinary actions during the school year. Schools implementing CR/PM programs are collecting too few and often inappropriate data to measure whether CR/PM lowers violence and discipline problems. While it is clear that more research in

this area is needed, schools can begin identifying the data that are non-burdensome to collect and give decision makers enough information to determine the CR/PM program's effectiveness and needs for future planning.

C. Improving Academic Achievement

The data is insufficient to determine whether CR can have a positive impact on academic achievement. The UM high school study noted that students studying both the English literature unit and CR experienced a synergistic effect as they practiced CR while role playing major conflicts in the novel, and this activity further enhanced their understanding of both subjects. The concept of using CR to expect increases in academic achievement is in its infancy and was only observed in one subject, in an international setting, within a relatively small school setting, and during a very short intervention period. This result justifies further study that examines strategies integrated into other subjects that last throughout the school year. But, school administrators and teachers must approach integrated curricular models cautiously until additional data is available.

Future research should consider whether CR can be integrated into other academic subjects at the high school level. In addition, studies should attempt to examine whether integrated sessions are more useful as follow-up to stand-alone programs at lower grade levels or should continue as a strategy for initial CR training. The focus of future studies should also consider if integrating CR in other subjects may actually decrease academic scores by distracting students from the substantive subject matter.

V. Recommendations

This examination of the literature may help guide the development of reputationally strong CR/PM programs.[40] In addition, by examining the weaknesses and barriers outlined in these research designs, lessons can be learned to outline evaluation strategies that will help determine whether CR/PM is effective in reducing violence and discipline problems in the school or can have a positive effect on educational achievement.

A. Needs Assessment

A noteworthy observation about the research studies is that not one study identified planning steps prior to the program's implementation in the school setting. In each of the studies it appeared the researchers implemented the curricula before determining whether it was needed or whether the school had "total"[41] support for a CR/PM program. Although not clearly stated in the literature, this paper advocates that before any school implements a CR/PM program, school decision makers should take enough planning time to specifically determine the school's needs and resources to support the program. Information to consider:

1) What kinds of conflict occur most frequently (threats, name calling, fights, battery, adult defiance, etc.)?
2) Where do conflicts occur most frequently at school (classroom, cafeteria, gymnasium)?
3) Is there an underlying cause to conflicts at your school (cultural, status differences)?
4) What statistical data does the school collect regarding disciplinary actions, academic achievement, violence, and conflict resolution? What data should the school collect?

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[40] Reputationally strong programs are not scientifically proven to decrease violence or disciplinary suspensions or improve academic achievement etc. , however, the strategies if implemented may increase the likelihood of achieving desired results.

[41] This implies that support includes acceptance by the teachers implementing the program, administrators of the school and district, parents of participating students, the students themselves, and school decision makers identify community resources that may prove helpful during the program, (ie. businesses, community agencies, the health department, police, etc.).

5) What percentage of school discipline problems is conflict related?
6) What is the current conflict resolution procedure?
7) What community, parent, and district resources are available to address violence and conflict related issues?
8) What is needed to gain administrative support for the program?
9) Can the curricula be integrated or can time be established for a stand alone program?
10) How much time can be committed to the CR/PM program?
11) Are the resources adequate to implement a program for all students or must the school rely on a cadre approach.?
12) Most importantly, what are the realistic, measurable outcomes desired from the program and what data is necessary to measure those outcomes.[42]

B. When Possible Combine Strategies

Programs that stand alone, provide both knowledge and skills training for CR and PM, and are taught during the earlier grades appear to have the greatest impact on discipline problems. Even when using integrated approaches, exposing students to both CR in the full classroom and PM opportunities appear to be far superior to offering cadre PM alone. Programs should combine negotiation skills, communication skills that focus on resolving differences, and methods of mediation. Each of the two commercial curricula studied by the researchers at CDC and UM describe specific steps that should be minimum standards in any new CR/PM program.

Integrated approaches to reduce violence and discipline problems in school appear promising, but require more study and may be better suited to use as a follow-up strategy to reinforcing existing skills. Advantages to integrated approaches may include reducing strain on the academic schedule insuring additional CR training at higher grade levels where they may be

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[42] See Part V (C), Indicators of Success, infra page 20-21.

needed most to reduce violence. Integrated approaches also may represent a compromise to school systems who can only afford to integrate some CR training into the curriculum for the total student body, and offer a cadre PM program to supplement the total conflict resolution program.

The effectiveness of cadre peer mediation programs is limited by their exclusive focus on PM and their inconsistency encouraging self referral to the process. But a cadre approach prevails over no program, if time, curricular, or financial resources are scarce. Any combination approach that provides skills training to greater numbers of students about communication, negotiation, and mediation strategies is more likely to benefit the school's overall conflict resolution program.

Schools should strongly consider implementing approaches that combine conflict resolution and peer mediation training. Training every student in the classroom to be a PM appears to be beneficial to the overall conflict resolution program. These approaches appear promising to enhance self esteem, teach critical conflict resolution skills, and ultimately may reduce violence in schools. In a total student body approach, the burden of being a student mediator is shared and any potential stigma associated with being a mediator in cadre programs is eliminated. The academic and financial costs appear to be the greatest barriers.

At a minimum, CR/PM programs must have the support of administrators, teachers and the students. Faculty training is essential and schools need to identify counselors to act as program contacts to facilitate the PM process. PM whether implemented as a cadre approach or for the entire student body needs a specified place for mediations to occur, adequate time for the parties to negotiate, available resources for creating written agreements, and policies for referral,

operations, and confidentiality. Without significant administrative support, it is not likely a CR/PM program would have any significant effect on school discipline.

Finally, schools should reach out to the community to identify available resources for the overall CR/PM program. Although this paper does not address the issues of conflicts that spill over into the community or conflict at home, these are legitimate concerns that affect school discipline and overall academic achievement. Building partnerships with parent groups, non-profit public service agencies, the business community and others with an interest in reducing community violence can be a significant addition to your conflict resolution program.

Indicators of success. Data collection is the key to determining success of any CR/PM program. Program evaluation need not be lofty or all-encompassing, but it should have clearly defined measures that are objective. Consider for example:

1) When designing a program, document the content and procedure.
2) When using a commercial curriculum, use it in its entirety or document modifications.
3) Document the training required for staff.
4) Document the cost.
5) Collect measures related to your intended outcome?
    - differences in academic performance among participating students
    - in-school suspensions
    - out-of-school suspensions
    - expulsions
    - # of conflicts requiring teacher intervention
    - # of conflicts requiring principal intervention
    - # of conflicts requiring parental intervention
    - # of violent acts occurring on school property
    - attendance records for student and teachers
    - observational data of students using CR/PM skills
    - knowledge measures of student learning for CR/PM
    - reports of weapon carrying at school.
5) Collect PM measures
    - number of disputes referred to PM
    - who made the referrals
    - did PM result in a negotiated agreement
    - what was the agreement

- was the agreement honored throughout a given time period

Using specific indicators of the program's impact will not only measure it's intended success, but can also serve as a planning tool for improving ongoing programs. For example, if students are not using PM, but conflicts are occurring, improvement in marketing the program may be needed or the peer mediators may be perceived by other students as lacking adequate training.

School administrators and decision makers need information to assess the program's overall effectiveness. CR/PM programs at any level require staff time and financial resources. Schools must make budget choices and on the priority list, CR/PM can be considered "extracurricular." Having the appropriate data to show school program decision makers that your CR/PM program is meeting its goals and making a positive impact in the educational setting is critical to avoid budget cuts. Data about your CR/PM program is one primary method to measure effectiveness, although it is not the only method.[43]

During the planning stage of the CR/PM program, the school should complete a thorough needs assessment. The school should retain collected needs assessment data and a summary of the results as a planning tool for the current program and also as a tool for measuring baseline data about violent acts, discipline issues, or any other expected outcome of the program.

Measuring program success requires the school to document program design, content, procedure, cost, and staff training time. This will provide decision makers with information

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[43] For example, secondary measures may include surveys that measure student satisfaction with the program or teacher morale before and after implementing the program. But note, these measures do not directly measure the three expected outcomes of CR/PM programs and should not be your only sources to evaluate the CR/PM program.

needed to determine whether, for example, lower rates of violence and disciplinary actions are attributable to the CR/PM program. If the school's budget is an issue and the program is facing potential cuts, this data can also provide decision makers with a cost/benefit analysis. Information about the curriculum, instructional methods, and teacher time needed to increase student knowledge and skills provides program supporters with excellent process evaluation data that can demonstrate immediate changes attributable during the early stages of the program.[44]

Specific and measurable outcome-type program objectives, such as reducing violence, decreasing teacher intervention time during conflicts, increasing attendance, reducing expulsions, or any other outcome reasonably anticipated by a CR/PM program must have identifiable and collectable data to measure the outcome. As noted in the CDC studies describing program evaluations in Missouri,[45] retaining data in individual student files can make analysis impossible. The counselor or teacher coordinating the program should collect anonymous data that only identifies specific and necessary data maintained collectively in files. By omitting student specific data, the program coordinator may collect the information in a manner that permits easy access without breaching student confidentiality.

If program success requires observational data (ie. To measure student skills using

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[44] Unlike "outcome" evaluation which measures a program's final impact (ie. lower rates of violent acts), "process" evaluation measures whether the program was implemented as intended. Using process evaluation, reporting the number of teachers trained - for how long, and the number of students receiving training, the curriculum, class time spent teaching the curricula, etc. does not measure outcomes, but nevertheless can measure program implementation during the early stages of implementation and provide rationale for continuing the program to measure outcome objectives. Collecting this data can prevent your program from loosing resources mid-year..

[45] Find and refer back to.

CR/PM), observers should be neutral to the program, if possible. For example, to avoid the appearance of bias, teachers who do not have the responsibility for training students should make any observations for the purposes of evaluating program effectiveness. This can also have a secondary effect of building additional program support through increased awareness.

Finally, collecting information about the PM process including the number of disputes referred to PM, who made the referrals, the result, and resolution maintenance is useful, but cannot be the exclusive measures to evaluate the program. These data do not measure outcomes related to violence, discipline, PM skill building, or academic achievement. Alone, these measures provide little information to decision makers about CR/PM program success. When collecting PM data in the school setting, it is also important to monitor resolution agreements. As noted earlier, most PM resolutions in the school setting include avoidance as the manner to avoid future conflict. This result may indicate a need to train program participants about the value of long-term relationships in the school setting.

VI. Conclusion

Studies suggest that CR/PM in the school program may be successful to increase the knowledge and skills of our young people to resolve personal conflicts in a non-violent manner. To better determine the success of CR/PM programs, schools should identify their specific needs, set measurable CR/PM objectives and collect data that measures the impact on measurable outcomes. CR/PM programs are subject to strict scrutiny by school administrators and other school decision makers, Thus, it is important to measure program success in an objective

The student's ability to learn, retain, and demonstrate CR and PM strategies in a free-standing program appear successful. Future research must begin to focus on measuring the

success of CR/PM as a strategy to minimize violence and reduce disciplinary problems. The integration of CR/PM into the existing curriculum should also be evaluated as a method to increase academic achievement or as a supplement to reinforce and maintain CR/PM skills learned during elementary and middle school.

As a priority issue, future research should focus on the differences between a total student body and cadre approach for CR/PM training. This question appears to be central to the success of CR/PM programs and the potential impact on students selected to participate as peer mediators. Relatedly, priority future research should consider the impact PM has on students participating in the programs that use the cadre approach.