

Evaluation Plan

PeaceBuilders® Implementation

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Introduction

This document describes a planned evaluation of PeaceBuilders 2001 and Beyond (PeaceBuilders), a community-based program that the staff at Maryland Avenue Elementary School are implementing under the guidance of Principal Jack Reed. The study will be conducted by Kristin Gibson, a graduate student in the Department of Educational Technology at San Diego State University. The time frame for the project is September to December 2003.

Background Information

PeaceBuilders 2001 and Beyond

PeaceBuilders 2001 and Beyond is a proactive intervention for elementary schools designed to reduce discipline problems and create a peaceful environment. Developed by developmental psychologist Dr. Dennis Embry, the program is produced and distributed by HeartSprings, Inc., based in Tucson, Arizona. PeaceBuilders maintains that its research-based tools impact risk factors that predict violence, drug abuse, and academic failure. The results of a consistently implemented program are positive social skills and improved scholastic achievement. Embry (1997) notes that the U.S. Centers for Disease Control and Prevention consider PeaceBuilders an effective strategy for reducing youth violence.

PeaceBuilders and Resiliency

Resiliency Characteristics

Many children in the United States are identified as *at-risk*. Educators associate them with poverty, abuse, community and domestic violence, trauma, and chemical dependency. Yet not all children in this category succumb to such adversity. Those who are able to recover from negative environments and go on to live fulfilling lives are described as resilient. PeaceBuilders aims to promote resiliency in students. The program is based on studies that identify the characteristics of resilient individuals. According to PeaceBuilders, these characteristics include:

- An active approach to solving life's problems
- A tendency to perceive their experiences constructively
- The ability to gain others' positive attention

- The ability to maintain a positive vision of a meaningful life

PeaceBuilders believes resilient children can excel in life despite unfavorable circumstances. Children who are at risk for violent behavior do not demonstrate resiliency and, in fact, differ significantly from their socially competent peers in a variety of ways (Embry, 1997). For more information on these differences, see Appendix A.

Resiliency and Neurobiology

PeaceBuilders is based on the psychological and medical research of neurotransmitters and hormones. The PeaceBuilders Leadership Guide (1994-2001) details how the neurotransmitters serotonin, dopamine, norepinephrine, and the hormone testosterone all impact behavior and the degree of resiliency an individual possesses. Abnormally low or high amount of these naturally occurring chemicals in the body can result in anxiety, depression, hostility, and aggression. Thus these neurotransmitters and hormones regulate human behavior and thought processes. However, social experiences can in turn alter the level of neurotransmitters and hormones. The PeaceBuilders premise is that positive human interactions can promote a healthy, balanced neurobiology associated with resiliency over time. For more information on the relationship between brain chemistry and behavior, see Appendix B.

PeaceBuilders and Self-Efficacy

The program claims to enhance resiliency and its action-oriented counterpart, self-efficacy. Productive self-efficacy behaviors include self-monitoring and self-talk. These metacognitive strategies allow individuals to interpret life's experiences positively and approach problems constructively. According to PeaceBuilders, self-efficacy develops under four conditions:

- When you experience your behavior actually changing the world around you; when your actions directly produce social and material rewards (*Performance accomplishments*)
- When you see real people (and read stories of people) making changes using behaviors you can copy (*Vicarious experience*)
- When everyday language focused on the positive goal to be achieved (*Verbal persuasion*)
- When you experience internal sensations of pleasure and accomplishment (*Physiological states*)

PeaceBuilders thus prescribes a series of positive human interactions designed to enhance both resiliency and self-efficacy in children, therefore reducing current discipline problems, as well as future incidence of youth violence and criminal behavior. For more information on PeaceBuilders techniques, see Appendix C.

The PeaceBuilders Principles

The positive human interactions PeaceBuilders encourages are based on five basic principles. PeaceBuilders:

- Praise people
- Give up put-downs
- Seek wise people for advice and friendship
- Notice and speak up about hurts
- Right wrongs

These principles summarize the studies on resiliency and self-efficacy upon which PeaceBuilders is based. The principles promote a consistent, positive language that is simple enough for a Kindergartner to use. PeaceBuilders claims that use of this common language over time will create new, productive thought patterns that will replace children's old, negative emotional processes.

PeaceBuilders Materials

The PeaceBuilders package includes tools, lessons, and black line masters for teachers. This Teacher's Pak also includes an overview of the scientific rationale for the program, guides for implementation and curricular integration, and a section detailing ways to involve students' families. The tools and lessons portions of the Pak describes activities teachers can use to promote a peaceful environment at school. For example, a tabbed section titled *Increase/Decrease the Peace* contains:

- A discussion guide on the topic of behaviors that increase or decrease peace
- "Increase or Decrease" cards (Students draw a card and read about a person's actions in a situation, then decide if the actions would increase or decrease peace)
- A list of PeaceBuilders Power Words (such as *please*, *thank you*, and *excuse me*)

- A comic strip in which children model behavior that increases peace
- “I Spy a PeaceBuilder” notes that students complete when they notice a peer doing something to increase the peace

Maryland Avenue Elementary School

The Students

Maryland Avenue Elementary School is one of 18 K-5 elementary schools in the La Mesa-Spring Valley School District. The District, located in East San Diego County, serves 15,000 students with diverse socioeconomic, linguistic, and cultural backgrounds. The school is in La Mesa, a city with a median family income of \$44,000 in 2000 (Union-Tribune Publishing Co, 2002). Maryland Avenue has an enrollment of 450 students. The largest racial/ethnic groups include White (56%), Asian/Pacific Islander (14%), and Black (7%), according to its most recent School Accountability Report Card. The school meets the needs of a small and scattered population of limited and non-English speaking students that represent 18 different languages. Maryland Avenue also houses a regional preschool-5 program for all the deaf and hard of hearing (DHH) students in East San Diego County. The attendance rate for the school in 2001-2002 was 96.13%. Between Fall 1999 and Spring 2002, 19 students were suspended. No students were expelled during this period (La Mesa-Spring Valley School District, November 2002).

The Staff

Maryland Avenue employs 18 credentialed teachers, a reading specialist, counselor, secretary, health clerk, librarian, two speech language pathologists, two custodians, as well as a number of instructional aides, DHH interpreters and transliterators, and playground attendants. The school is led by Principal Jack Reed. Dr. Reed has established an environment that empowers the staff; they are largely autonomous. The staff and leadership are both stable.

Academic Profile

Scholastic achievement of California elementary schools is measured by the Academic Performance Index (API). API base scores range from 200 to 1000 and are calculated from student results on standardized tests. In 2002, these standardized tests included the California Standards Test; the Stanford Achievement Test, 9th Edition; and the Spanish

Assessment of Basic Education, 2nd Edition.¹ Schools that score an API base below 800 are assigned a growth target for the following academic year. Schools that score 800 or higher are required to maintain a score of at least 800. In addition to receiving an API base score, each elementary school is ranked statewide in deciles, with 10 being the highest rank and 1 being the lowest. Schools are then ranked a second time, in comparison to schools with similar characteristics. The California Department of Education (2003) has described these characteristics as:

- Pupil mobility
- Pupil ethnicity
- Pupil socioeconomic status
- Percentage of teachers who are fully credentialed
- Percentage of teachers who hold emergency credentials
- Percentage of pupils who are English language learners
- Average class size per grade level
- Whether the schools operate multitrack year-round educational programs

Maryland Avenue's 2002 API base was 821, with a statewide ranking of 9 and a similar school ranking of 10 (La Mesa-Spring Valley School District, November 2002).

The California State Budget Crisis

Maryland Avenue is suffering the effects of the current California budget crisis. In August, 2003, Governor Gray Davis was forced to fill a record \$38.2 billion budget gap (California Budget Project, 2003). This meant significant cuts in funding to California's public schools, including Maryland Avenue. As a result, the school had to make sacrifices, such as decreasing the hours of certain support staff members. This has created a level of tension that is detectable on campus.

¹ In 2003, the California Achievement Test, Sixth Edition, replaced the Stanford Achievement Test, Ninth Edition in API score calculations.

PeaceBuilders at Maryland Avenue

A fellow principal highly recommended the PeaceBuilders® program to Dr. Reed in 2001, but at that point in time, the cost (\$6000) was prohibitive. Soon after, the District Student Services Coordinator applied and received a grant to cover the PeaceBuilders expense at Maryland Avenue. The materials arrived at the school in early 2003, midway through the 2002-2003 school year. Teachers received an afternoon of training in January and were encouraged to explore the curriculum until official implementation just after Spring Break. Dr. Reed instituted a school wide Peace Circle, one of the suggested PeaceBuilders activities. Each morning, all teachers and students gathered in a circle to recite the PeaceBuilders pledge. Afterward, Dr. Reed announced the names of individuals whose positive actions earned them PeaceBuilders Praise Notes. The Peace Circle continues in the 2003-2004 school year, but Dr. Reed is unsure as to what degree staff members are implementing the PeaceBuilders program at other times of the day.

PeaceBuilders has also been used by the La Mesa-Spring Valley School District's Extended School Services (ESS) since Fall 2002. ESS offers on-campus before and after school child care to approximately 150 Maryland Avenue students.

A potential barrier to the implementation of PeaceBuilders is the large number of new curricula the La Mesa-Spring Valley School District has adopted in recent years. Since the 2001-2002 school year, Maryland Avenue has received new science, social science, math, and language arts textbook series, each one accompanied by numerous manuals and peripheral materials. It is unlikely teachers at the school have had adequate time to review all these programs, as well as PeaceBuilders in such a brief time frame.

Purpose of the Evaluation

The purpose of this formative evaluation is to describe the PeaceBuilders® rollout at Maryland Avenue Elementary School. How are staff implementing the program, and with what degree of consistency? Is the current implementation style consistent with what the PeaceBuilders developers intended? Are there barriers preventing implementation and, if so, what is their nature?

The study is formative in nature, designed to help administrators determine what next-steps decisions or actions are warranted (e.g., ongoing teacher training) to improve program operations (Scriven, as cited in Russ-Eft & Preskill, 2001). More specifically, the evaluator will be guided by an implementation framework, following steps/procedures advocated by the Northwest Regional Educational Laboratory (NWREL) (2001).

Stakeholders

The results of this study impact several groups and individuals. While Dr. Reed is the primary client of this evaluation, his staff and the families they serve are also stakeholders in the evaluation.

Dr. Jack Reed, Principal

Dr. Reed is interested in the social and emotional well-being of his students and believes that the PeaceBuilders program will be instrumental in reducing youth violence and other crimes among students. In addition, Dr. Reed is responsible for Maryland Avenue's academic success. He wants to limit the amount of time teachers spend on discipline issues and increase the amount of time they spend on instruction. PeaceBuilders promises to help him achieve this goal. It is too early in the program to determine the efficacy of PeaceBuilders at Maryland Avenue. However, the program cannot succeed if it is not well implemented. Dr. Reed plans to share the results of the implementation evaluation with his staff. Principal and staff will then make decisions about how to improve or continue with the implementation of the program.

Staff

PeaceBuilders promises to reduce the amount of time teachers spend on discipline problems. "But no program - no matter how sound it is - can have impact if its essential elements are not used" (NWREL, 2001). Because the staff at Maryland Avenue functions autonomously, it is likely that members are unaware of how their colleagues are implementing the PeaceBuilders program. In addition, as mentioned earlier, teachers have received a multitude of new instructional materials in the past two years; it is also likely that many teachers are not yet familiar with all of the PeaceBuilders tools. An analysis of implementation will reveal to staff members which key components of the program they have overlooked.

Families

Clearly, families of students have a vested interest in reducing antisocial behaviors and increasing academic achievement, both goals of the PeaceBuilders program. It is the right of families to be aware of research based educational programs available to their children, and to learn how well the school is implementing such programs. Moreover, PeaceBuilders encourages consistent use of its tools and language in a variety of settings. The more opportunities children have to observe and practice target behaviors, the more likely the behaviors will become part of their repertoire. One aspect of implementation to consider is the degree to which families are trained in implementing the program at home. This evaluation can serve to educate families about PeaceBuilders and encourage them to request more information from the staff.

Contextual Factors

The evaluator has identified several factors that may impact the conduct of this study, including data gathering, analysis, and interpretation:

- The recent accountability movement in education and the emphasis placed on API scores in California have forced many elementary schools to focus their energies on preparing students for standardized language arts and math tests. Teachers might not be willing to spend their energies on evaluating a youth violence prevention program if it means sacrificing time spent on core curriculum. To mitigate this factor, the evaluator can preface data collection instruments with research linking PeaceBuilders to increased academic achievement.
- The vast majority of a teacher's workday is spent teaching or preparing to teach. Most Maryland Avenue teachers work well beyond the six hours during which students are present, and all have a handful of adjunct duties, such as serving on District committees or coordinating extracurricular activities. Moreover, teachers cannot be interrupted during the instructional day to provide data to the evaluator. This limited access to teachers might constrain data collection. A possible solution is to collect data during a mandatory staff meeting or to offer desirable incentives to teachers who participate voluntarily.
- Data analysis and interpretation may indicate that changes to the implementation process are advisable. Yet due to the current budget crisis in California, Maryland Avenue will only be able to implement the most inexpensive program remedies and

enhancements. If the recommended improvements to the implementation process are costly, they can be revisited when additional funds become available.

- Due to the school's modified year round schedule, staff and students will be on break between October 13 and October 24. Data collection will need to be scheduled to accommodate this break.

Review of Relevant Literature

The evaluator has conducted a comprehensive review of the literature, which follows here. It is organized around four themes:

- the current state of youth violence.
- the role of youth violence prevention and intervention programs.
- evaluations of the PeaceBuilders program
- characteristics of an implementation evaluation

For the purposes of this review, violence is defined as an act of aggravated assault, rape, robbery, and homicide.

The Problem of Youth Violence

Between 1983 and 1993, violent crimes among youths reached record proportions, marking a seeming epidemic. Since 1994, however, there has been a decline in three main indicators of violent behavior: arrest records, victim data, and emergency room records. In addition, the use of firearms has declined, and there has been a corresponding drop in homicide arrests. In fact, by 1999, all violent crime arrests fell below the 1983 levels, with the exception of aggravated assault (U. S. Department of Health and Human Services [USDHHS], 2001).

These hopeful indicators do not tell a complete story, however. The problem of youth violence remains, as other sources alarming sources of data reveal. While violent crimes did decrease between 1983 and 1999, aggravated assault actually increased by 70% (USDHHS, 2001). According to Snyder (as cited in Flannery, et al., 2003), the rate of young people that self-report committing violence, a fourth indicator of violent behavior, peaked in the early 1990s, but has remained constant since then. Moreover, while research reflects a recent decline in the number of students who carry weapons to school, Snyder also notes that there has not been a decline in the number of children who are involved in nonfatal violence.

According to USDHHS (2001), the number of school campuses infected by the presence of gangs continued to rise well after 1994, and did not show signs of decreasing until 1999. Other data indicate that the number of children involved in gangs has not decreased at all since its peak in 1996.

Contrary to popular belief, youth violence is not only a problem in economically disadvantaged communities. While male adolescents from minority groups have a notably higher arrest rate for violent crimes, self-report data reveals that the difference between violence perpetrated by females and members of majority groups and minority males may be much smaller than we thought (USDHHS, 2001). As one principal commented, "Good clothes cover a lot of problems" (as cited in Embry, 1997). Thus, youth violence is a problem that should be of interest to everyone.

The Role of Youth Violence Prevention and Intervention Programs

During the 1970s, many believed that youth violence was untreatable, and that prevention and intervention programs would be unable to positively impact the problem (USDHHS, 2001). Since then, research by Rutter (1979) and Gottfredson (1988) (as cited in Embry, 1997) notes the positive and lasting impact that effective school interventions can have on behavior *and* academics.

One reaction to the youth violence epidemic of the 80s was the development of hundreds of prevention and intervention programs. Unfortunately, Wahler, Fetsch, and Silliman (1997) report that there has been little rigorous scientific evaluation of such programs. And according to Mendel (as cited in USDHHS, 2001), evaluations that have been conducted reveal that much of the money the United States spends on youth violence prevention and intervention is being directed to programs that are ineffective and, at times, harmful.

Today social scientists know much more about policies and procedures that can reduce youth violence than they did in the past. Recently researchers have been able to identify the characteristics of effective programs and they have evaluated existing programs with established criteria. The good news is that promising programs do exist. There are indeed programs with solid scientific rationales and empirical support of their efficacy, while

“others seem to stand primarily on the strength of good intentions and three-color graphics” (Wahler et al., 1997).

Information about effective youth violence programs has not always made it into the hands of our public schools. Mendel (as cited in USDHHS, 2001) believes that youth violence rates would decrease significantly if only schools and other relevant agencies reallocated the money they currently spend on ineffective programs to those programs whose efficacy has been scientifically supported.

Fortunately, some researchers have made recent efforts to inform the public about effective and ineffective youth violence programs. Both the Surgeon General (USDHHS, 2001) and the National Center for Injury Prevention and Control (1997), have released reports based on scientific studies that assess the efficacy of various youth violence prevention and intervention programs. This body of research is still limited, however. A summary of reports that cite PeaceBuilders as an effective youth violence prevention program follows.

Evaluations of PeaceBuilders

The Tucson evaluations

PeaceBuilders has been limitedly evaluated over the past seven years. Researchers conducted several studies among the same nine elementary schools² in Tucson, Arizona, but each study focused on different issues. Each of these studies is described below.

In their 2003 article, Flannery et al. detail their evaluation of the use of the PeaceBuilders program among more than 4,000 students in eight matched elementary schools in the Tucson area. The researchers conducted the evaluation between 1994 and 1996. The schools were randomly assigned to either an immediate PeaceBuilders intervention (PBI), or a delayed intervention (PBD). The delayed intervention began one year after the immediate intervention. The researchers hypothesized that would decrease aggression and increase social competence among the children who participated. The results were as follows:

² While nine schools did participate in the Tucson evaluations, two of the schools were grade K-2 and grade 3-5. For data collection purposes, these two schools were “combined” into one K-5 school. Thus, some of the literature refers to an eight-school sample.

After the first year of the study,

- grades K-2 students from the PBI group were rated significantly higher by their teachers in the area of social competence than were students in the control group.
- students who were initially rated by teachers as most aggressive (based on indicators including hitting, kicking, and verbal abuse) benefited the most from the PeaceBuilders program.
- grades K-5 students from the PBI group self-reported more prosocial behaviors than the students in the control group.
- grades 3-5 students in the PBI group demonstrated a decrease in aggressive behavior that students in the control group did not.

After the second year of the study,

- researchers noted differential effects for aggression and prosocial behavior between the PBI and the PBD groups.
- effects for the PBI group were maintained or increased during the second year of implementation.

Flannery et al. (2003) discuss the obstacles they faced in conducting this type of evaluation. First, they note that large-scale intervention studies are subject to attrition when teachers or students drop out of the program. Second, they were unable to control students' exposure to other programs that might affect the study's results. Third, it proved difficult to deny or delay interventions to schools that were in need of immediate help.

This study also examined program implementation. The researchers provide some evidence that the program was implemented by teachers as the program developers intended, and that teachers were satisfied with their training and program materials. More than 90% of the teachers reported that the PeaceBuilders philosophy was easy to understand, and 80% believed the program would be easy to implement. The report emphasizes the importance of teacher buy-in and the ease of implementation in PeaceBuilders success: "Few violence prevention programs systematically focus on the importance of staff training or on assessing the fidelity of program implementation" (Flannery & Seaman, as cited in Flannery et al., 2003).

A separate study, conducted by Krug, Brener, Dahlberg, Ryan, & Powell (1997) with the same nine Tucson schools, examined the impact of PeaceBuilders on student visits to the school nurse for all reasons, all injuries, and fight-related injuries. The results showed that between 1993 and 1995 (the years of the study), the rate of visits to the nurse decreased by 12.6% in treatment schools and remained constant in control schools.

Embry, Flannery, Vazsonyi, Powell, & Atha reported in a 1996 article in the American Journal of Preventive Medicine that they began an evaluation of PeaceBuilders in schools in the Tucson Unified and Sunnyside School Districts. Four schools began PeaceBuilders in the 1993-1994 school year and four began in the 1994-1995 school year. Data collection tools included student self-reports, playground observations, standardized teacher reports and ratings, and school behavior records. This report details the collection of baseline data, but does not include outcome results, as it seems the evaluation was in progress at the time of publication. The outcome results were not published until 2003, in a report by Flannery et al., which is described at the beginning of this section.

The Injury Control Update of Fall 1997, published by the National Center for Injury Prevention and Control (NCIPC), underlines the importance of empirical/scientific-based methods to critically evaluate youth violence prevention programs. NCIPC, a division of the Centers for Disease Control and Prevention (CDC), provided funding for such an evaluation of PeaceBuilders. That study, conducted by Flannery, showed promising results: When PeaceBuilders was implemented in nine Tucson, Arizona schools for three to five months, the schools demonstrated a 10% decrease in fight-related injuries. At control schools, the rate of fight-related injuries increased by 56%. Unfortunately, this report did not cite the year of Flannery's study, nor did it detail his data collection procedures.

Small-scale evaluations

Evaluators have conducted several small-scale PeaceBuilders studies at other schools. Embry (in NCIPC, 1997) cites the example of a San Bernadino, California school in which 120 students were suspended and 30 had been arrested. After two years of implementation, these numbers dropped to five and zero, respectively. The significance of these figures is of limited value, however, since Embry does not give the size of the total student population. He also fails to mention the reasons for suspension, which could include non-violent offenses.

Vosskuhler and Issman (2002) describe the impact of PeaceBuilders on a racially diverse, economically disadvantaged school in Bronx, New York. Issman, the school principal, brought PeaceBuilders to Garret A. Morgan Elementary in hopes of improving test scores: prior to implementation only 16% of the students were meeting or exceeding academic standards. Issman believed the scientific premise that a safe environment decreases demands on the frontal cerebral cortex, the portion of the brain responsible for the fight or flight response, thus increasing the brain resources available for learning. After two years of implementation, the number of students meeting academic standards rose to 30%. This report does not mention what, if any, curricular reforms were also put in place during the study's time frame.

Elliot (1998) details the implementation of PeaceBuilders at Jesse G. Sanchez School in the Alisal Union School District of Salinas, California. Sanchez School is in a low socioeconomic area, and 80% of its students have limited English proficiency. In addition, many students are the children of migrant workers, and miss significant amounts of school when their families travel to harvest crops. The city of Salinas had been plagued by gang rivalry, shootings, and a high rate of school violence. However, after one year of PeaceBuilders implementation, the district's schools demonstrated the following reductions in negative behavior:

- Disciplinary action by 49%
- Episodes of serious violence by 59%
- Tardiness by 20%
- Absences by 31%
- Vandalism incidents and costs by 61%

Elliot underscores the high level of community involvement in the implementation of PeaceBuilders, with Salinas businesses, libraries, youth agencies, law enforcement, health care providers, and families providing support for the program. In 1996, President Clinton visited Salinas to praise their crime fighting efforts and outreach to children.

Implementation Evaluation

According to NWREL (2001), an implementation evaluation framework is ideal when a school chooses a comprehensive new program. The data of an implementation evaluation feeds back into the program to effect improvement, thus an implementation evaluation is formative. NWREL warns that a program, despite its quality, cannot be effective if staff do not

implement it as the program developers envisioned. Likewise, efficacy is compromised if staff members overlook key elements of the program. Therefore, systematic data collection is essential. Systematic data collection can reveal, “which program components are firmly in place and which ones are only being given lip service” (n.p.). In this way, an implementation evaluation serves to inform stakeholders about the state of implementation and to uncover any barriers to implementation. Then recommendations can be made as to how such obstacles can be mitigated.

NWREL (2001) believes that for effective implementation to occur, the following conditions should be met:

- Implementation is undertaken for the substantiated reasons (solve a problem vs. advance a career) Administration supports the program
- Adequate resources are available, especially time for teachers to program nuances
- Professional development is ongoing
- Teachers collaborate in implementing the program
- Teachers resistance to change are diplomatically pressured
- Administrators allow staff to making mistakes as they learn
- Parents and community are involved
- Conflict with other programs is minimized
- Successful innovations are incorporated into district policy and budgets so that they will outlast changes in leadership and funding

An implementation evaluation may examine whether these conditions are being met.

Evaluation Questions

This PeaceBuilders evaluation is internal, formative, and implementation focused. The results will reveal the extent to which teachers are implementing the program as designed, obstacles to use/integration, sufficiency of the training teachers received, and teacher perceptions of the program's value and relevance. The following table contains the major issues to be addressed in this evaluation and, for each, its associated subissues, the stakeholder(s) most interested in the data, and the importance of the issue to the overall study.

Evaluation Issues	Subissues	Stakeholders	Importance of Issue
1. To what extent is PeaceBuilders being implemented as it was designed?	1.1 How knowledgeable are staff members about the program, its purpose, and its goals? 1.2 Which PeaceBuilders tools and lessons are being utilized? 1.3 In what ways does implementation vary by grade level, teacher style, or student characteristics? 1.4 How consistently do staff and students use the common language upon which PeaceBuilders is based? 1.5 Does the staff employ policies and procedures that run counter to the PeaceBuilders	Principal Staff Families	To understand patterns of implementation and possible reasons for inconsistencies/differences To understand program connections outside the school grounds

Evaluation Issues	Subissues	Stakeholders	Importance of Issue
	<p>philosophy?</p> <p>1.6 How are support staff (custodians, secretaries, playground attendants) involved in implementation?</p> <p>1.7 How is the community outside the school (families, local businesses, law enforcement) involved in implementation?</p>		
<p>2. What obstacles or constraints, if any, do teachers face in implementing PeaceBuilders?</p>	<p>2.1 Do staff members have the materials needed to implement the program?</p> <p>2.2 Do staff member have enough time to plan and implement the program?</p> <p>2.3 Is the program culturally relevant and age-appropriate for all K-5 students at Maryland Avenue?</p>	<p>Principal</p> <p>Staff</p> <p>Families</p>	<p>To determine the nature of obstacles and make recommendations on how to address the obstacles</p>
<p>3. To what extent did training sufficiently prepare staff to use the program?</p>	<p>3.1 How well did initial training cover key program concepts, implementation strategies, and ways to integrate the</p>	<p>Principal</p> <p>Staff</p>	<p>To determine staff perceptions of the training they've received to date, and to determine where follow-up</p>

Evaluation Issues	Subissues	Stakeholders	Importance of Issue
	<p>program into the regular curriculum?</p> <p>3.2 Was initial training of high quality (facilitation, pacing, etc.)?</p> <p>3.3 What follow-up/additional training (if any) would be useful to offer to staff?</p>		<p>or clarification may be warranted.</p>
<p>4. What are staff perceptions of the program's value and relevance?</p>	<p>4.1 To what extent do staff members agree with the PeaceBuilders premise?</p> <p>4.2 To what extent do staff believe that the program's goals/outcomes are attainable?</p> <p>4.3 To what extent do staff view the program as relevant to the school's mission and its students' needs?</p>	<p>Principal Staff Families</p>	<p>To determine staff perceptions of the program, and how those perceptions relate to (or reveal) implementation patterns.</p>

Question/Procedure Matrix

This matrix contains a listing of each evaluation issue—and for each, the information required to answer it, the information source, and the proposed data collection strategies.

Evaluation Question	Information Required	Source of Information	Data Collection Strategy
<p>1. Is PeaceBuilders being implemented as it was designed?</p>	<ul style="list-style-type: none"> • Structure/organization of the components of the PeaceBuilders Teacher's Pak. • Staff knowledge of PeaceBuilders components • Examples of PeaceBuilders tools and lessons staff are using • Staff decision-making processes for deciding which resources to utilize • Examples of staff behaviors that contradict the PeaceBuilders philosophy • Frequency and content of PeaceBuilders-related environmental print on campus • Content and quality of staff-student interactions (voice intonation, positive versus negative interactions use of PeaceBuilders common language) • Examples of community involvement in the program 	<p>Teacher's Pak Staff Classrooms Playground Community members</p>	<p>Content analysis Observations</p> <ul style="list-style-type: none"> • Classroom/campus • Playground <p>Focus group</p> <ul style="list-style-type: none"> • Teachers • Support staff
<p>2. What are the obstacles to</p>	<ul style="list-style-type: none"> • Names of staff members 	<p>Staff</p>	<p>Focus group</p>

Evaluation Question	Information Required	Source of Information	Data Collection Strategy
implementation?	who do and who do not have access to PeaceBuilders materials <ul style="list-style-type: none"> • Teacher opinions on the amount of time they have available to implement • Evidence of cultural relevance and age-appropriateness of program 	Classrooms Playground	<ul style="list-style-type: none"> • Teachers • Support staff Content analysis
3. Was staff training sufficient?	<ul style="list-style-type: none"> • Staff reactions to the length of initial training • Staff reactions to the quality of initial training • Staff opinions on whether additional/follow-up training would be beneficial • Staff opinions on future training needs 	Staff	Focus group <ul style="list-style-type: none"> • Teachers • Support staff
4. What are staff perceptions of the program's value and relevance?	<ul style="list-style-type: none"> • Staff perceptions of the program's value • Staff perceptions of the program's relevance to their setting 	Staff	Focus group <ul style="list-style-type: none"> • Teachers • Support staff

Summary of Procedures

Data collection procedures in an implementation evaluation must yield results that can effect program improvement. NWREL (2001) encourages evaluators to consider how staff could or would react if they had the results of the selected data collection

tool. Some data, while interesting, may not support stakeholders in making positive changes. Implementation evaluators also collect data that points to factors that prohibit implementation and means for addressing such barriers. Since comprehensive change is a complex process, NWREL also urges evaluators to select a broad range of data collection tools.

Based on these recommendations, the following table contains each data collection procedure that will be used, the question(s) it addresses, the approximate data collection schedule (start and end date), the respondent or participant groups, and (as appropriate) the derived sample.

Procedure	Issue	Schedule	Participants	Sample
Content analysis	Issue 1 (1.1-1.5) Issue 2 (2.1-2.3) Issue 4 (4.1)	October 6 - October 13	Not Applicable	Obtain PeaceBuilders Teacher's Pak
Classroom/campus observation	Issue 1 (1.2-1.6)	October 14 - November 11	Teachers	Purposive
Playground observation	Issue 1 (1.2-1.6) Issue 4 (4.2)	October 14 - November 11	Playground Attendants	N/A
Focus group - Teachers	Issue 1 (1.1- 1.7) Issue 2 (2.1 - 2.3) Issue 3 (3.1-3.3) Issue 4 (4.1-4.3)	October 14 - November 11	Teachers	Purposive sample
Focus group - Support Staff	Issue 1 (1.1- 1.7) Issue 2 (2.1 - 2.3) Issue 3 (3.1-3.3) Issue 4 (4.1-4.3)	October 14 -November 11	Support Staff	Purposive sample

Management Plan

The matrix below denotes evaluation tasks to be completed and, for each, the person responsible for completion, the approximate time length, and the estimated begin and start dates. The tasks are divided into four categories: evaluation design, data collection, data analysis, and reporting.

Task	Person Responsible	Approximate Hours	Begin Date	Start Date
<i>Evaluation Design</i>				

Develop evaluation purpose, draft issues and subissues	Evaluator, Client	6	August 25	September 2
Determine research themes, locate appropriate articles and texts, and draft literature review	Evaluator	20	September 2	September 23
Draft matrixes	Evaluator	4	September 16	September 23
Review and finalize evaluation plan	Evaluator	4	September 23	October 7
<i>Data Collection</i>				
Content Analysis				
Review contents of the PeaceBuilders 2001 Teacher's Pak	Evaluator	4	October 6	October 10
Organize content into a classifying matrix	Evaluator	4	October 10	October 13
Classroom/Campus Observation Tool				
Design	Evaluator	5	September 29	October 7
Test	Evaluator	1	October 7	October 10
Finalize	Evaluator	2	October 10	October 14
Implement	Evaluator	6	October 28	November 11
Playground Observation Tool				
Design	Evaluator	1	September 29	October 7
Test	Evaluator	1	October 7	October 10

Finalize	Evaluator	1	October 10	October 14
Implement	Evaluator	4	October 28	November 11
Focus Groups				
Solicit participants	Evaluator	3	September 29	October 7
Design questioning guide	Evaluator	10	October 10	October 23
Implement	Evaluator	1	October 28	November 11
<i>Data Analysis</i>				
Analyze and interpret qualitative and quantitative data	Evaluator	30	November 11	November 18
<i>Reporting</i>				
Draft final report	Evaluator	10	November 18	November 25
Review draft	Evaluator, Client	3	November 25	December 2
Revise and submit	Evaluator	3	November 25	December 2
Plan class presentation	Evaluator	3	December 2	December 9

Appendix A: Cognitive, Social, and Imitative Differences Among Children

Dr. Embry designed PeaceBuilders in response to the problem of youth violence, based on his understanding of the relationship between brain chemistry and behavior. The program is based on scientific evidence that children who are at risk for violent behavior differ from their peers in significant cognitive, social, and imitative ways. Specifically, Embry (1996) notes that at risk children tend to cognitively:

- Be suspicious of others
- Have difficulty reading social cues
- Misinterpret ambiguous events as hostile

And socially:

- Insult peers
- Disrupt lessons
- Engage in higher rates of physical and verbal aggression than their socially competent peers

And imitatively:

- Be attracted to and influenced by aggressive acts

Embry asserts that such differences can be successfully ameliorated with intervention at an early age.

Appendix B: The Effect of Brain Chemistry on Behavior

According to Embry (1997), the purpose of the brain is to ensure survival. The response of the brain to perceived threats is regulated by neurotransmitters, particularly serotonin, dopamine, and norepinephrine. The PeaceBuilders Leadership Guide (1994-2001) also refers to the role of the hormone, testosterone. These chemicals affect a child's cognition, emotions, behavior, and physiology. Abnormal levels of these brain chemicals are associated with the undesirable behaviors that PeaceBuilders targets.

Embry (1997) attributes the recent worsening of undesirable behaviors to four changes that have occurred in schools recently:

- To avoid lawsuits and claims of abuse, many school staff members will not touch students. Human touch is necessary for healthy levels of serotonin to be produced, and low serotonin levels are associated with higher levels of assaults and defiance.
- Some educators believe that excessive praise will decrease intrinsic motivation. Yet, since dopamine levels increase with social reinforcement, students will seek negative reinforcement if no positive recognition is available.
- Existing discipline systems often increase the perception of threats among students. It is common for school to hire staff to seek and report instances of negative behavior on campus. This increased focus on such negative behaviors may actually increase their rate of occurrence. Similarly, negative notes or phone calls home tend to increase family abuse toward students at home and increase aggressive behavior among students toward the school.
- Existing punishments may actually be negative reinforcers. Referrals to the principal or school counselor provide some students with a welcome escape from difficulties in the classroom.

Embry reports that a child's interactions with the world can alter brain chemistry and structure in lasting ways.

Appendix C: PeaceBuilders Techniques

PeaceBuilders effects change through nine broad techniques (Embry, 1997):

- A common language for “community norms”
- Stories and live models of positive behavior
- Environmental cues to signal positive behavior
- Role plays to increase range of responses
- Rehearsals of positive solutions after negative events
- Response cost as “punishment” for negative behavior
- Group and individual awards to strengthen positive behavior
- Self- and peer monitoring
- Generalization to increase maintenance of change across settings

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[KG1]Embry never mentions the principal by name