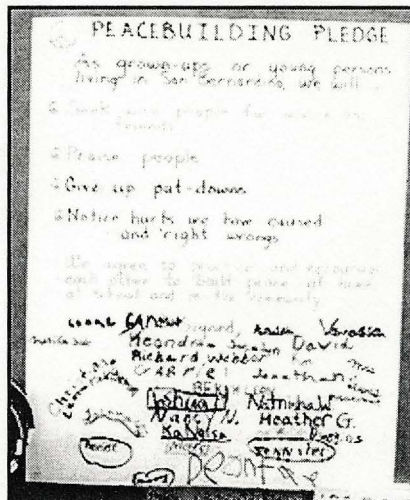# Does Your School Have a Peaceful Environment?
Using an Audit to Create a Climate for Change and Resiliency

A powerful tool for helping administrators, teachers, and community leaders to create more peaceful schools and communities is described

By Dennis D. Embry

The school is a setting that routes both child and adult behavior, much like a road and traffic devices route journeys. A school that cues peaceful behavior will sustain learning and civility, and provide opportunities for world-class talent. These cues have a direct impact on children's brains and their behavior. A school audit, adapted from an ongoing long-term study on PeaceBuilders (see Note) sponsored by the U.S. Centers for Disease Control and Prevention, provides a powerful tool for helping to create a more peaceful school and community. This article provides some instruction for auditing your school.

The School Climate

Perhaps you drove a car today. You may have even driven to a school. Imagine that some perverse being had altered all the cues for driving the car. The white lines are gone from the road to cue the lanes. Yellow lines that demark which side of the road to drive on change color frequently and even reverse their meaning. Traffic lights vary in the colors and meaning at nearly every block. Instructions for traffic laws vary with every police officer.

What would be the result? These are the questions I pose at various staff development workshops. The answers are instructive. "There would be chaos." "Lots of accidents." "The lawyers and psychologists would have a booming business." "We'd all be crazy with the stress of watching out at every intersection, fearing yet another change."

This may be an amusing staff development ice breaker, but the exercise is not a game. It is reality for America's school children everyday. The "rules of the road," "the traffic signs," and all the other cues that channel behavior in a school and across schools vary so widely as to cause crashes, injury centers, legal remedies, and trauma response teams. The result is that children are on a trajectory toward substance abuse, antisocial behavior, and academic failure. Such a result also destroys staff morale, productivity, and physical health.

Oddly, the call is not to improve the roadway and the constancy of the rules of the road. Rather, the call has been for all manner of crisis responses:

1. Conflict mediation;
2. Harsh discipline;
3. Anger-management curricula;
4. More special education or 504 plans; and
5. Removal of students.

Whole industries now minister to the ongoing pain and suffering caused by these "accidents" at school, peddling their wares to traumatized school dis-

tricts. These are sold to schools as violence-prevention services, which are, in fact, violence-response or -treatment programs. Elegant, simple, effective answers seem to evade our detection, as we are so bound up in reactive wariness and response to the ongoing trauma.

A Conceptual Alternative

Ask a fundamental question of the teachers in a school: "What part of the body are we trying to change?" The answer will come, "the brain." Ask another question. "What is the purpose of the human brain?" The answer will be, "to think." Ask again, "About what?" A pause will follow this question, which is profound. A thoughtful, somewhat tentative answer is likely to emerge: "How to survive?" Such a response is truly insightful.

The anthropological literature identifies a number of major threats to human survival: starvation, disease, and human predation. A well-developed brain provides advantages for dealing with all those threats. What we call education is an elaborate, adaptive mechanism to save our children from the three threats that limit their ability to survive and carry forward. Although these threats to human survival may seem vaguely archaic, they are root issues that underlie the process of education every day, even when we are not conscious of them.

The adaptive responses to the major three threats are regulated by chemical messengers in the brain (see, e.g., Carlson, 1994). These messengers include monoanimines like serotonin and catecholomines like dopamine and norepinephrine. At risk of very gross simplification, these messengers have specific functions. Serotonin regulates sense of safety, status, and "belonging." Dopamine signals reward. Norepinephrine says "pay attention," or "this could be harmful."

There are other important chemical messengers. Internal opiates like endorphines have two functions: dulling pain under threat and signaling pleasure after reward. Other simpler messengers, called peptides, are used throughout the body. Some may regulate memory and learning about sources of pain. More complex neurohormones like testosterone and corti-

sol flow all through the body, turning off and on various machinery in the body designed to respond to threats. Some of these messengers actually turn off and on genes.

Each and every day teachers and other school staff affect these powerful chemistries that regulate a child's cognition, emotions, behavior, and physiology (Carlson, 1994). These chemistries change the structure of a child's brain and, in turn, change everything about a child's interactions with the world. In time, certain patterns of interactions can permanently alter a child's brain chemistry and structure. Some examples will help.

> **"We are more likely to be creating the conditions that lead to assaults, defiance of authority, and even lawsuits by telling adults not to touch children."**

Each day a teacher provides a group reward to the teams who finish their homework, such as extra recess or some games. Dopamine receptors fire in children's brains, signaling reward in the nucleus accubens, and the front part of the brain (devoted to planning) is strengthened so that the children start to "see" how their behavior produces results. Each day a teacher greets, praises, and touches the children throughout the day. Serotonin pathways fire, signaling safety and status. Now the children seem to take more pleasure in small things, help each other more, and seem to have a sense of self-esteem. A staff member adopts a calm way of interacting with children, even under stress. The children are more attentive, less hyperactive, and are more sensitive to an adult's "evil eye." The children seem less numb and more attentive to social situations, even showing empathy.

A discussion of neurotransmitters may seem a bit deep and possibly irrelevant to those in the teaching profession, until you ask this question:

"Who has heard of Prozac™ or Ritalin™?" Many people giggle, and some say, "Well, just about all the adults at school need to be on Prozac because the kids aren't on Ritalin." This humorous comment speaks of a very profound development in modern schools and society: We are now using medications in lieu of the environment to trigger the necessary brain chemistries for learning in the school community, in part because of the changing environment of schools. Here are some of the changes affecting the neurological and behavioral health of our children.

1. *Adults are now instructed not to touch children.* It is not uncommon for teachers and adult staff to be instructed not to touch children at school, ostensibly to avoid the possibility of lawsuits or the perception of sexual abuse. Paradoxically, this "rule" is probably contributing to the problem of violence and antisocial behavior. Considerable evidence suggests that touch and human warmth are major factors in the creation of serotonin in humans. Low levels of serotonin, however, seem to occur when social relationships are fragile or hostile. Low levels of serotonin seem to be associated with higher levels of aggression toward others or self. Thus, we are more likely to be creating the conditions that lead to assaults, defiance of authority, and even lawsuits by telling adults not to touch children. Lower levels of serotonin also make teaching more difficult because children are less likely to be satisfied with the stimulation they receive. Among girls, there is some suggestion that they will tend to engage in sexualized behavior when they have low levels of serotonin.

2. *Adults are often told that praise decreases intrinsic motivation.* It is common to hear workshop leaders who say that praise makes children less intrinsically motivated. Thus, the adults in the school are now less likely to praise and commend competencies of children on a frequent basis. This runs against the consensus of experimental studies and the long-term studies of exceptional talent (Bloom, 1982; Cameron & Pierce, 1994). What is even more frightening is that studies strongly suggest that children will increase the negative behavior under such circumstances, resulting in higher levels of adult at-

tention to inappropriate child behavior. Given that social reinforcement appears to work on the dopamine pathways, the lack of praise and increased dependence on negative social attention help explain why this is the common pathway of substance abuse: nicotine, alcohol, and cocaine are dopamine "mimics."

3. Certain "prevention" structures and routines tend to increase threats and hostility. What may not be apparent to many is that some "solutions" to aggressive behavior, in fact, increase its frequency. For example, many schools are now increasingly hiring people to become monitors on the playground and school grounds, with the basic job description of noticing and finding "bad" behavior. This increases the focus and attention on inappropriate behavior and will actually increase the frequency of that undesirable behavior. In a similar vein, emphasis on competitive games during recess, ostensibly to give children a release for their "pent up anger," actually increases aggressive behavior, whereas structured, cooperative games decrease aggressive behavior. Reliance on negative phone calls and negative home notes to parents tends to increase abusive behavior of high-risk families toward their children and school staff as well as aggressive behavior of the child toward the school—precisely the opposite of the intended effect.

4. Common "intervention" strategies can create avoidance or escape strategies that reward or foster negative behavior. Certain strategies that begin as well-intentioned ideas can be inappropriately applied and create unintended consequences. For example, some school staff refer students to the principal or counselor for almost any disruptive or problem behavior because they believe that it takes some professional training to handle the situation. A referral to a counselor or principal can operate as a positive reinforcer or as an escape from a negative situation—in which case the child may continue to engage in the problem action or situation that results in ongoing referrals. Another tool sometimes used inappropriately is time-out. A child may be sent to time-out for a frequent behavior as "punishment." What may not be apparent to the adults is that time-out can be an effective way of escaping a situation that is aversive, such as experiencing frequent reprimands for poor academic work.

A Structural Alternative

The previous paragraphs might be read as suggesting that schools are likely to have a strictly negative impact on children's lives. There are many reasons for hope, however. Schools can foster positive behavior by their structure, regardless of the socioeconomic conditions of the children, their families, or the neighborhood without running a multilevel social service program.

The sociological studies of Rutter (e.g., 1979) show that schools can have a clear effect on reducing juvenile delinquency and other indices of developmental psychopathology. For example, Rutter found that (a) praise for work in the classroom and frequent public praise for good work or behavior at assemblies led to better student behavior; (b) increased decorations in classrooms and hallways was associated with better behavior; (c) better behavior and work occurred when greater proportions of students had a chance to hold positions of responsibility; (d) frequent homework was associated with better behavior and achievement; (e) widely publicized and implemented standards of behavior were effective in maintaining a positive school climate; and (f) high hourly rates of interaction between students and teachers regarding academic content fostered positive behavior and achievement.

Other studies stand out as showing the power of children's environments to increase positive behavior and resiliency. Gottfredson (1988) detailed how school climates can reduce juvenile delinquency. Mayer, Butterworth, Nafpaktitis, and Sulzer-Azaroff (1983) powerfully demonstrated that hourly and daily structured praise systems targeted at students, staff, administrators, and families improve school discipline and achievement, as well as significantly reducing vandalism costs. Murphy, Hutchinson, and Bailey (1983) showed that simple organized games can reduce playground aggression by more than 50%—an especially noteworthy finding given that playground aggression is one of the major predictors of juvenile delinquency (Walker, Colvin, & Ramsey, 1995).

The promising results from these and related studies are not flukes. The results are highly replicable, as demonstrated by over 200 schools that have applied what has come to be called the PeaceBuilders model, described below (Embry, Flannery, Vazsonyi, Powell, & Atha, 1996). The approach seeks to create a climate of change and resiliency so that school is a peaceful, nurturing environment that promotes thinking, emotional, and relationship competencies. Creating this positive environment is considered primary. The question in the PeaceBuilders® (see sidebar) approach is not how we react to behavior problems presented by the

Table 1. School Resiliency and Change Audit for a Peaceful Environment

Setting characteristic	Rationale
Common language A common, everyday language is used by children, teachers, administrators, staff, and families about belonging to a higher good and how to achieve that greater good. A particular noun should be selected to stand for the higher good, and a set of verbs should be developed to provide a vocabulary to talk about how to realize it. To meet the test, the noun must be something that both adults and children aspire to at many levels in the community. An elementary school mascot name is not likely to meet the test. The verbs also must be something that would be appropriate for both adults and children to do.	A sense of belonging is life-giving to humans. Without a sense of belonging, levels of serotonin will be very low, with aggression (among men) and depression (among woman) the likely outcome. Among humans, a sense of belonging is highly regulated by language—a fact one can easily see among juvenile antisocial gangs that have a noun to belong to (e.g., CRIPS or BLOODS) and a set of verb prescriptions for how to belong (e.g., "Jump in," "Kick back with . . . ," "Be down for . . . . " Schools and communities rarely have such language.
Positive stories Students and staff hear, see, or read daily stories about doing good in the world. These stories feature the children, adults who love them, and high-status persons as the heroes of the actions. The stories must be more than heroic actions of a few people. The actions and "heroes" must be easy to copy on a daily basis.	Such stories are symbolic or live models of success that indicate pathways for reinforcement and social belonging. Human beings are "hard-wired" to copy models of behavior that produce reinforcement or social status. In the first case, the dopamine circuits will be activated. In the second, the serotonin pathways are activated when the observer imitates the model.
Daily rewards Daily rewards and recognition are given for the desirable actions (the verbs) designed in the common language. Monthly or infrequent rewards and recognition actually increase problem behavior by creating resentments, sabotage, or resignation among higher risk students, who are unlikely to ever experience rewards for positive behavior.	Daily rewards and recognition increase dopamine circuits and reduce threats by higher risk persons toward lower risk people.
Group rewards Group rewards are used for positive behavior frequently, and competencies and performances are reinforced rather than just the absence of bad behavior. Such group rewards are frequent and activity oriented.	Individual rewards for children who are risk can create social rejection by "normal" peers. If, however, the whole class is rewarded because of the positive actions of a target child, the whole class will praise and encourage the target child's actions. Reinforcement systems based on performance (e.g., class getting 85% of the math problems correct) means that children's behavior will be positive when adults are not present. Group and performance rewards stimulate both serotonin and dopamine pathways, while reducing threats that activate the norepinephrine pathways.
Positive Behavior posters Student-created posters, stories, and signs for the target behaviors and displays of student work saturate the school and are changed every 7 to 14 days.	Such displays recruit adult praise and peer recognition, both of which stimulate the dopamine and serotonin pathways. The children are likely to recruit praise and recognition from caring adults frequently if the displays change frequently, and performance skills will increase among the children.
Praise notes Student peers, teachers, staff, and families receive and write frequently (daily and weekly) written praise for positive actions.	Written praise is powerfully effective for more at risk students and stimulates peer reinforcement for langauge skills—a key factor in developing control over emotional impulsiveness.

(table continues)

(Table 1 continued)

Setting characteristic	Rationale
Social skills training The school has weekly schoolwide lessons focusing on the social skills to be mastered that are a part of belonging to the larger group. The lessons need to be more than lectures; they must include actual practice and rehearsal in applying the skills.	Without a schoolwide application, students and adults will not be encouraged to identify with the school culture and its goal. The schoolwide approach reduces reactive response to transgressions by the children.
Student responsibility Many students have positions of responsibility for the daily running of the school. Such positions are more than honorary symbols such as student council; they are practical and daily.	When students have actual roles in the school's success, they are likely to receive recognition from peers and adults (serotonin) and actual reinforcement (dopamine).
Schoolwide cue system The school has schoolwide cues for basic behaviors such as stopping, paying attention, sitting in groups, waiting in line, and walking from place to place. These cues and prompts must be proactive and positive (e.g., "stand on the yellow lines") rather than inhibitory ("don't push").	Such common cues and procedures reduce threats and negative attention from adults.
Staff's praise The school staff praise positive behavior on the playground by the minute; the school has organized cooperative games and activities on the playground; students praise each other daily for positive behavior on the playground.	The combination of these actions increases serotonin and dopamine as well as reducing threats and hostility related to arousal.

children but how we create an environment at our school that produces thoughtful, caring, and resilient behaviors among all of our students in the first place. The idea is to create a path of least resistance to channel the energy and efforts of the whole school toward what children and adults want to build rather than what they seek to run away from. The action-science and community-change literature strongly argues that systemic change will occur only when one focuses on what one wishes to construct (Fritz, 1989; Senge, 1991), a conclusion that is also strongly echoed in the child resiliency and emotional intelligence literature (e.g., Werner, 1989).

When schools, adults, and children focus on the good to be achieved moment by moment (as well as longer term) rather than the bad to be avoided, a number of major benefits seem to accrue to all in the school (see, e.g., Embry & Flannery, in press;
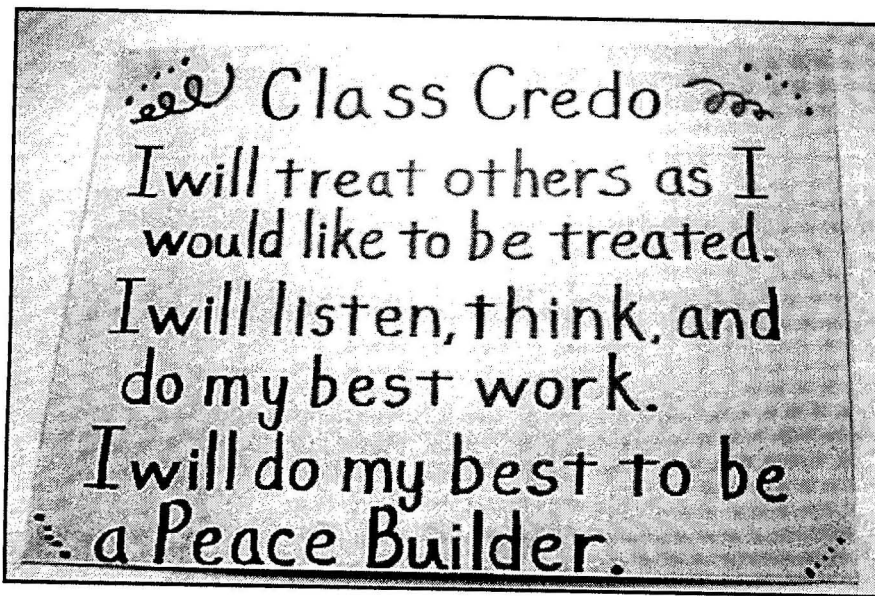
Mayer et al., 1983; Rutter, 1979; Shedler & Block, 1991; Walker, 1995). These include increased time for teaching and learning, less vandalism and graffiti, less child abuse, less negative aggressive child behavior, better physical health, improved mental health, fewer school dropouts, higher academic achievement, improved staff morale, and better child-rearing practices when the children become parents themselves.

Everyone in schools and society benefits from these outcomes. Violence, substance abuse, and school failure are real issues, even in well-off neighborhoods. As one principal in an affluent neighborhood told me, "Good clothes cover a lot of problems." Moreover, the children who matriculate from any given school will mix with children from all walks of life and be touched by the children and families of other neighborhoods, no matter how much we attempt to iso-

late behind gates and other barriers. In neighborhoods with mostly thrift store clothes, the problems are more apparent, of course.

Whatever the conditions are of a neighborhood or community, all schools can encourage positive behavior and child resiliency. The processes seem to be universal. The audit shown in Table 1 can help a school identify its capacity to foster change and resiliency. Many of the techniques are simple and all are practical. All children and adults benefit when they have the capacity for resiliency and change, and this article presents a few of the ways to increase that capacity. The result will be greater personal and public peace. ∎

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Class Credo
I will treat others as I would like to be treated. I will listen, think, and do my best work. I will do my best to be a Peace Builder.

child competence that is in more than 300 schools in the United States. Address: Dennis D. Embry, Heartsprings, Inc., PO Box 12158, Tucson, AZ 85732; 1-800/368-9356.

Note

PeaceBuilders is a registered trademark of Heartsprings, Inc.™

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