Effective Instruction:
The Forgotten Component in Preventing School Violence

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Abstract

Incidents of school violence and student misbehavior have received a great deal of media attention. In response, local, state and national policy makers have proposed and implemented a variety of preventive efforts, including zero tolerance policies, metal detectors, and video monitoring. We contend that these strategies reflect narrow definitions of the terms “school violence” and “school safety.” Administrators, teachers and students appear to agree that school violence is an issue that encompasses more than instances of injury by physical force. We summarize research showing that behaviors characterized by administrators, teachers, and students as violent and unsafe often are the outcome of a predictable chain of events that begins with academic failure. For this reason, we suggest that efforts to prevent school violence include the promotion of effective academic instruction. By creating schools that facilitate student success, the goal of improving school safety will be addressed.

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The issue of school violence has gained national prominence, yet there continues to be confusion over the exact meaning of the term (Furlong, Morrison, & Dear, 1994; Furlong & Morrison, 2000). “Violence” generally is defined as the “exertion of physical force so as to injure or abuse” (Merriam-Webster, 2000). Recent responses of local, state and national policy makers to well-publicized and tragic school incidents seem to be in

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line with this definition of violence. However, "violence" also may be defined as "injury by or as if by distortion, infringement, or profanation", "intense, turbulent, or furious and often destructive action or force", or "vehement feeling or expression" (Merriam-Webster, 2000). Research suggests that this broader definition of violence may be more in line with what teachers, administrators, and students deal with daily in public schools. According to state and national surveys, teachers report behaviors such as student cursing, grabbing, pushing, verbal threats and intimidation as the most prevalent forms of violence occurring on school campuses (Furlong et al., 1994; Petersen, Beekley, Speaker, & Pietrzak, 1998; Petersen, Beekley, & Speaker, 1998).

It also is informative to compare trends in the estimated prevalence and reported incidence of school violence with student perceptions of school climate and safety. For instance, between 1993 and 1997 there was a significant decrease in the number of high school students who reported carrying a weapon to school in the prior 30 days, and a general decrease in school crimes serious enough to be reported to the police (U.S. Department of Education, 1999). However, during the same period students reported feeling increasingly less safe at school (US Department of Education, 1999). It seems apparent that students and teachers are concerned not only about violence in the sense of physical force and weapons, but about behaviors such as intimidation, and anxiety provoking behaviors that could be included in a broader definition of violence.

A survey conducted during the 1996-1997 school year found that more than 75% of all schools reported having zero tolerance policies for various drug and violence offenses (U.S. Departments of Education and Justice, 1998). In addition, there has been an increase in the presence of law enforcement officers and metal detectors in public schools (U.S. Departments of Education and Justice, 1998). However, evidence suggests that such measures have been ineffective, or even counterproductive, in preventing school violence (Hyman & Perone, 1998; Mayer & Leone, 1999). While at face value, these responses seem appropriate strategies for addressing school violence, they are strictly reactive and may not address a broader definition of "violence" as it is understood by those who experience it our schools (Furlong & Morrison, 2000).

Some states and many individual schools have implemented more enlightened policies to address the more common forms of violence found in schools. For example, Illinois, Kentucky, and North Carolina have taken the lead in system-wide policy making, crafting legislation to provide support for initiatives directed at creating safe and secure schools. These states have developed school safety centers and statewide networks that monitor school violence and provide coordinated training and technical assistance in both academic and behavior support. At the national level, funding has been made available for innovative and technically sound school
safety demonstration, training, and technical assistance projects (e.g., Center for Positive Behavioral Interventions and Support; Center on Education, Disability, and Juvenile Justice). Seventy-eight percent of schools report at least some type of formal violence prevention or reduction program (U.S. Departments of Education and Justice, 1999). However, the link between poor academic achievement and the types of behavior that threaten school safety has gone largely ignored in school safety policy (Kauffman, 1997; Scott, 2001). The purpose of this paper is to explore the relationship between student academic achievement and school discipline problems. Predictable pathways between poor academic performance and challenging classroom behavior are illustrated, and academically based interventions are described. Our premise is that what can be predicted can be prevented.

Students with Disruptive Behavior: A Predictable Sequence

Although we know a great deal about the risk factors that set the occasion for student failure, direct causal pathways have not been established. Therefore, our present knowledge permits only gross prediction. Still, research on populations of at-risk children and youth has resulted in a great deal of information with regard to students who are most likely to fail in school. There is substantial evidence that early identification of, and intervention for, academic learning problems reduces the likelihood that students will engage in disruptive classroom behavior (e.g., Maguin & Loeber, 1996). The following sections provide a brief review of the research that has documented such predictable relationships. We describe this research in terms of two broad sets of events that research points to as setting the occasion for school failure and long-term unfavorable outcomes.

Setting Event One: Poverty and Cultures of Violence

Demographic variables characterizing children's homes and families constitute the earliest indicators of potential academic failure. Studies of factors associated with school dropout lead us to venture that students who are likely to leave school without graduating can be identified at the time of birth, based on the social class and family characteristics into which they are born (Conseur, Rivara, Barnoski, & Emanuel, 1997; Patterson, Reid, & Dishion, 1992). Research has demonstrated a connection between poverty and school dropout for both regular (Rumberger, 1987) and special education students (Giel & Harnish, 1995; Rylance, 1997). The backgrounds of students who drop out of school often include poverty, parents who are less well educated, homes in which academic skills such as reading are neither valued nor modeled, as well as the presence of multiple family stressors such as the abuse of drugs and alcohol; divorce; and physical, sexual, or emotional abuse (Patterson et al., 1992).
Adams (1988) found that children of wealthy parents often come to school with 1000 hours of exposure to print material, whereas children in poverty typically enter school with as little as 40 hours of exposure. Further, in a six-year longitudinal study of parent-child interactions, Hart and Risley (1995) found that children in lower socioeconomic homes tended to have less verbal interaction with their parents than did children from middle or upper income homes, resulting in significantly lower vocabularies at the time they entered school. When such disadvantaged children from cultures of failure reach school, typically they are served by teachers from middle or upper income backgrounds, using a vocabulary and assuming a level of familiarity with print materials that is far above that of many low income children.

Thus, through no fault of their own, these students have weaker readiness skills, resulting in academic deficits relative to their chronological age peers at the time they first enter school. Hart and Risley’s (1995) research also demonstrated that providing only a “booster shot” type intervention (i.e., intensive direct instruction) that is time limited (i.e., one year) is not sufficient. Hart and Risley found that although the intervention did narrow the gap between their sample and normally achieving peers, it did not alter their trend of academic achievement, which remained lower. These findings suggest the need for effective and intensive instructional delivered throughout the school and over time. Without intensive and prolonged academic instruction that produces substantial improvement in their school performance, these children will fall further and further behind their peers.

*Setting Event Two: Academic Failure*

As Kauffman (1997) has noted “Low achievement and behavior problems go hand in hand” (p. 247). The evidence for this connection is strong and continues to grow (Epstein, Kinder, & Bursuck, 1989; Maguin & Loeber, 1996; Walker, Colvin, & Ramsey, 1995). While the exact origin of this relationship may foster a “chicken and egg” conundrum, the nature of the relationship clearly is reciprocal (Bower, 1995; Kauffman, 1997; Walker et al., 1995). Functional assessments of such relationships reveal clear patterns of behavior that maintain and reinforce both academic and social failure (Dunlap, Kern, Dunlap, Clarke, & Robbins, 1991; Lewis, Sugai, & Colvin, 1998; Skiba & Peterson, 2000).

From their meta-analysis of this academic and behavior research, Maguin and Loeber (1996) identified three especially strong relationships. First, poor academic performance is related to the onset, frequency, persistence, and seriousness of delinquent offending, while higher academic performance is associated with refraining or desisting from offending in both boys and girls. Second, cognitive deficits and attention problems are strongly associated with both poor academic performance and delinquency.
Finally, interventions that improve academic performance are associated with a reduction in the prevalence of delinquency. These findings make clear the reciprocal relationship between academic and social behavior. Further, failure to facilitate success in one realm likely will result in failure in the other.

*Academics become aversive.* As previously discussed, students identified as exhibiting challenging behaviors in the classroom typically are less academically proficient than their age peers. Moreover, students identified as having challenging behaviors or academic deficits in the classroom are more likely to experience negative or punitive interactions with their teachers, regardless of their behavior (Denny, Epstein, & Rose, 1992; Gunter, Jack, DePaepe, Reed, & Harrison, 1994; Shores, et al., 1994). In addition, these students are likely to receive less time engaged in instruction with their teachers (Johns, 2000). Carr, Taylor, and Robinson (1991) found that, among a group of students with disabilities, teachers provided less instruction and reduced demands for students who exhibited disruptive behaviors. As a possible result of this pattern, students with academic or behavior difficulties experience time in the classroom not as an exciting opportunity for learning, but as an aversive situation. Academic failure leads to student avoidance of academic tasks, which, in turn, sets the occasion for increasing academic deficits and further negative interactions with teachers. For students with academic skill deficits, even physically laborious tasks come to be more appealing that academic activities (Juel, 1988).

*Patterns of challenging behavior develop in the classroom.* Recent research on functional behavior assessment of disruptive behavior in regular classrooms sheds more light on why disruptive behavior develops in some students. Certainly, a great number of problem behaviors provide access to teacher and peer attention. Still, the majority of office discipline referrals originate because students are noncompliant with teachers’ expectations for academic activities (Skiba, Petersen, & Williams, 1997). Any behavior that results in escape or avoidance of an aversive stimulus may be strengthened through negative reinforcement. Individual students’ patterns of noncompliance with teachers’ academic demands therefore may occur because such behavior results in predictable escape from aversive academic tasks in which students have predictably failed. However, other topographies of behavior that disrupt the classroom environment (e.g., verbal or physical aggression) also may serve the function of escape from aversive academic tasks (Dunlap, Kern, Dunlap, Clarke, & Robbins, 1991; Gunter, Denny, Jack, Shores, & Nelson, 1993). Once such behaviors are reinforced, a pattern quickly emerges and students’ misbehaviors become more frequent (Patterson, DeBaryshe, & Ramsey, 1989; Walker et al., 1995).

*Students are removed from academic settings.* The typical outcome of noncompliant, disruptive, and aggressive student behavior is removal from
the instructional setting (e.g., timeout, office referral, or suspension) (e.g., Cooley, 1995). It is important to recognize that removal from instruction constitutes negative reinforcement for both student and teacher, in that their behaviors (classroom disruption, removing the student from the classroom, respectively) lead to termination of an aversive situation (Carr et al., 1991; Gunter et al., 1994; Shores et al., 1994). This cycle of undesired behavior and disciplinary removal obviously exacerbates the problem. Students with academic deficits need more intensive and effective instruction, not removal from the learning environment. Exclusion from academics typically results in even greater academic deficits which, in turn, leads to more frustration with academic tasks, setting the occasion for additional behavioral challenges and further exclusion from classroom instruction, thereby contributing to an escalating cycle of academic and social failure. Academic deficits, combined with age, are the characteristics most predictive of school drop out (Rylance, 1997).

Outcome: Social and Academic Failures Throughout Life

The longer academic deficits and behavioral problems persist, the less likely it is that remediation will be effective. Children who do not read by the fourth grade have a .88 probability of never learning to read, regardless of intervention (Juel, 1988). Current failures are great predictors of future failures and the longer this pattern persists, the less likely it is to be changed. As Walker et al. (1995) have observed, "if an antisocial behavior pattern is not changed by the end of grade 3, it should be treated as a chronic condition, much like diabetes" (p. 6). Clearly, the outcomes of academic failure are dire. As noted earlier, the student behaviors that accompany academic failure have become increasingly disruptive and violent. In the community, chronic patterns of antisocial behavior result in referral to the juvenile justice system, and the outcome of adjudication is punishment by incarceration. Over 1 billion dollars are spent annually on juvenile corrections facilities in the U.S. (Patterson, DeBaryshe, & Ramsey, 1989) and out-of-home placements average $50,000 per year, per child (Epstein et al., 1993). However, the fiscal outcomes pale in comparison to the life-long failures endured by these students. Left to fail, these students are far more likely than their age peers (regardless of intelligence) to end up in jail, be unemployed, have illegitimate children, and even be involved in accidents. (Nelson & Pearson, 1994; U.S. Department of Education, 1998; Walker, et al, 1995). Figure 1 presents a visual representation of how cultural setting events predict a vicious cycle of failure in school, leading to school violence and life failures.
The Academic Behavior Connection

OUTCOMES

School Safety Issues School Exclusion Life-Long Failure

RISK FACTORS

Poverty Poor Modeling Reading Deficits

Figure 1. The Academic Behavior Connection
Breaking the Cycle: The Evidence for Effective Instruction

The connection between effective instruction and pro-social behavior is well-established (Becker & Carnine, 1980; Gunter & Denny, 1998; Gunter, Hummel, & Conroy, 1998; Kameenui & Darch, 1995). When instruction is designed to maximize the likelihood of success and minimize errors in acquiring basic skills, students are more likely to enjoy the activity. The student who is successful with and enjoys an activity has little incentive to disrupt the class or to act in ways which would precipitate his or her exclusion from that activity - and in fact have been found to have more appropriate social behaviors (e.g., Ayllon, & Roberts, 1974; Gunter, Hummel, & Conroy, 1998; Maguin & Loeber, 1996). Students who are at-risk for school failure require direct and individualized academic interventions that are designed to facilitate their success. Instruction that meets the needs of individuals who are failing or at-risk for failure involves selecting, sequencing, and presenting examples that are both meaningful to the student and effective in facilitating acquisition of concepts and skills that lead to immediate reinforcement (Tarver & Jung, 1995).

Evidence from a number of large-scale studies indicates that effective instructional practices do facilitate academic success with students of all ages, abilities, and backgrounds (e.g., Adams, 1988; Adams & Engelmann, 1996; Cole, Dale, & Mills, 1991; Engelmann, Becker, Carnine, & Gersten, 1988; Tarver & Jung, 1995). While it is obvious that effective instruction provides the best chance of success for all students, it is very clear that it is an absolute necessity for students who are at-risk for academic or social failure (Serna, Nielsen, Lambros, & Forness, 2000). If these children could learn in the absence of effective instruction, they already would have done so.

To make a difference in the lives of children who are likely to fail in our schools, and who consequently are susceptible to becoming life-long tax burdens to other citizens, they must be identified as early as possible and exposed to powerful instructional strategies that are supported by research. Simultaneously, educators must strive to create school environments that maximize the probability of academic and social success.

Early Identification and Intervention

The concept of early identification must move beyond the simple focus on very young children. Early intervention must involve comprehensive and continuous assessment of academic and social indices across students at all ages and grade levels, with the objective of finding students when they first begin to exhibit signs of academic failure. Historically, children have been identified for services only when the degree of failure has overwhelmed the system, as opposed to identifying smaller problems and pre-
venting failure in the early stages (Kauffman, 1999). Given that academic failure is one of the strongest predictors of behavior problems and dropout, such reactionary approaches will continue to be inadequate.

School-wide models of prevention, such as Positive Behavioral Interventions and Support (PBIS) (Sugai et al., 1999), involve monitoring and evaluation of student progress on a formative basis. Data-based decision rules are used to identify those students whose academic or social performance indicate that they are at-risk for school failure. In this way, schools identify students early in a pattern of problem behaviors so that failure may be prevented (Nelson, 1996; Scott, in press; Tolan & Guerra, 1994). One thing is certain: if intervention is not begun before failure becomes a predictable pattern in the school, failure in life is very likely to follow, and, with each passing day, the likelihood that remedial interventions will succeed becomes increasingly less.

Effective Instruction

Because they are interrelated, desired academic and social behaviors must be given equal priority and taught with equal pedagogical vigor. Social behaviors should be taught using the same set of sound instructional techniques that represent best practices in teaching academics. However, schools historically have been resistant to this model, often insisting that appropriate student behavior should occur without instruction or reinforcement, the former being reserved for developing academic skills. Learned behaviors will maintain and generalize only when they are consistently efficient in accessing naturally maintaining reinforcers. Natural reinforcers occur naturally in the environment, without stipulated teacher delivery, and are available to students outside of school or instructional environments. Student success is a natural reinforcer in that it can be directly connected to specific students behaviors, promoting internalization (i.e., self-esteem). In the classroom, success during instruction is the most basic natural reinforcer and is absolutely necessary to continued learning. Thus, instruction must focus on skills that are predictive of success in the natural environment (Scott & Nelson, 1998). For students with a history of failure, simply providing opportunities to learn is insufficient. Instruction for these students must be calculated to make them successful during each and every lesson; in other words, consistent access to reinforcement (success) must be part of the instructional design. The consistency of student success should be the criterion by which the effectiveness instruction is judged.

Thus, effective instruction should be based on the question “how can I teach this concept or skill in a manner so that I know the student will succeed?” Within any given curriculum, teachers should select important foundational skills that predict success and present them at the level of
the student by providing a) a meaningful rationale for each lesson, b) multiple relevant examples and non-examples, c) opportunities to practice with feedback, and d) non-trained examples that allow students to successfully generalize skills (Becker & Carnine, 1980, Nelson, Johnson, & Marchand-Martella, 1996). When students experiences success, teaching has been effective. When students fail, it is even more critical that success be facilitated in the next lesson – to avoid increasing the incentive for escape-motivated misbehavior.

The evidence is overwhelming that simply sitting back and waiting for success is woefully ineffective. The teacher who laments “I’d like to reinforce that student but he/she just doesn’t ever do the right thing” is ignoring the teacher’s role in instruction. It is the teacher’s job to design instruction so that students are likely to be successful. Failures indicate a need for altering instruction; simply insisting that students with histories of failure be responsible for turning things around by “trying harder” is illogical and will not succeed. Effort will increase in relation to perceived ability to succeed. In addition, initial success will maintain student behavior in the presence of leaner reinforcement schedules in the future.

Creating School Environments That Facilitate Success

Successful students are able to use the skills they have learned to access reinforcement in their environments. If a student spends time working on a reading lesson in a resource classroom, only to be turned loose in a regular classroom with no reading materials at her reading level, why would she want to continue with reading lessons? Similarly, if we teach a student to react to teasing by ignoring, and that only makes the teasing get worse, why wouldn’t he resort to hitting? All educators must carefully consider how to establish school and classroom environments that foster desired behavior and discourage undesired behavior. This involves being proactive in teaching all students rules and routines that will support and encourage desired behavior.

In addition to effectively teaching desired academic and behavioral skills, educators must create environments in which these skills will be frequently used and reinforced. Academically, this means providing students with multiple opportunities to use acquired skills across curricula and to combine isolated skills to create more complex behavioral repertoires. Socially, it is equally important that students have the opportunity to acquire desired behaviors, and to practice these across multiple social contexts. Moreover, it is important to insure that the reinforcement necessary to maintain adaptive skills is present in all relevant social contexts. Because social skills are interactive in nature, it also is important that all students be taught and encouraged to interact appropriately. This entails teaching and reinforcing social skills in natural contexts, not just during “social skills group.”
The simple underlying concept is that students who are successful in school have little incentive to engage in behaviors that might typically result in their exclusion from school.

Finally, it is important that all adults in the school understand and agree upon the student skills to be taught and reinforced so that students will encounter settings that foster academic and social success throughout the school environment. Inappropriate social behaviors should be treated as errors and responded to with appropriate correction and re-teaching procedures, just as good teachers do in response to academic errors (Kameenui & Simmons, 1990; Sugai & Lewis, 1996; Schloss, Smith, & Schloss, 1990). Therefore, when students are in the presence of other adults in the school it is important that both their academic and social behavioral errors be effectively corrected.

Conclusions

As previously mentioned, although we know a great deal about the risk factors that set the occasion for student failure, direct causal pathways have not been established. Therefore, our present knowledge only permits gross prediction. There are clear examples of children in whom all the risk factors are present, yet who are successful without intervention. Likewise, there are examples of children who exhibit none of these risk factors but who fail nonetheless. Furthermore, knowledge of factors that place students at risk for school failure can be a double-edged sword, in that it may lead educators to make decisions based on stereotypic assumptions rather than objective measures of student performance. For example, a disproportionate number of minority children are represented in school failure statistics (U.S. Department of Education, 1998). This inequity may be due, in part, to a type of “profiling” when students enter school. That is, many of these students come from neighborhoods, cultures, and backgrounds much different from that of mainstream America, and they may be treated differently simply because of these differences (Shores et al., 1994). We wish to be clear that this is not an appropriate or effective use of our knowledge of risk factors. Rather, we advocate that school personnel receive training in cultural sensitivity and that they remain aware of risk factors as they screen for students in need of special assistance to achieve academic and social success. Because these children cannot simply be picked out as they walk in the schoolhouse door, we must use our knowledge of risk factors to provide students with the best chances for success.

Ideally, children who are at-risk should receive help before chronic patterns of failure become established. We believe that the existing research clearly demonstrates the most effective and efficient way of providing this support is to design system-wide prevention at the school level rather than waiting for and then reacting to student failure. Further, such prevention
efforts must maintain a focus on both academic and social behavior. Students who experience success in school, regardless of their background, have far less incentive to engage in negative behaviors.

Solutions to violence in public schools will require more than a simple focus on physical injury and weapons. Violence in schools involves intimidation, anxiety, fear, and a variety of associated incidents that do not involve weapons or injury. Because predictors of school failure point to a connection between academic and social failure, solutions must focus on facilitating success with both academic and social behavior.

References


EFFECTIVE INSTRUCTION


