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# A Review of the Literature

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## Engaged Students are High Performing Students: Paving *Success Highways* for All Students to Achieve Their True Potential

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*Abstract.* “Engaged Students are High Performing Students: Paving *Success Highways* for All Students to Achieve Their True Potential,” Dr. Scott Solberg explains one negative consequence of the No Child Left Behind Act—the potential for increased school dropouts by disengaged students—and the resulting economic impact high dropout rates have on communities. Through case studies, Dr. Solberg goes on to offer methods for identifying disengaged students at-risk of dropping out of school. He concludes his paper by discussing how teachers using the *Success Highways* program in their classrooms can re-engage students in both their academic and personal lives, and thereby prevent or effectively reduce dropout rates.

Educators want all students to succeed. Currently, however, there is little incentive under No Child Left Behind (NCLB; Resnick, 2003) for educators to keep low-performing students in school who otherwise will not demonstrate reading or math proficiency. An unintended consequence of the NCLB legislation is that students dropping out of school may actually help schools meet adequate yearly progress indicators. The loophole is that only students attending for a full academic year (FAY) are counted toward proficiency because the goal is to hold schools accountable only for the students they teach. An interesting scenario unfolds when you consider the following: If 50 out of 100 tenth grade students score above the proficiency cut score, then 50 percent are deemed proficient; if 15 of the students who will not meet proficiency standards leave the school before meeting full academic year requirements the proficiency percentage increases to 58.8 percent. The problem is that failing to be retained by a given school in the middle and high school years creates a pathway of failure that eventually results in dropping out (Jerald 2007).

### **Dropouts Severely Impact School Funding and the Local Economy**

The dire economic consequences of high dropout rates have both immediate, short-term consequences to schools as well as long-term catastrophic consequences to our communities. From a public and charter school perspective, students who are not retained annually reduce the income schools receive from the state. If each student provides \$5,000 in state income and every year 25 students fail to return in the 10th grade, the cost of each dropout cohort totals \$375,000 in lost revenue for the remaining three years they would otherwise have attended the school. Compounded after three years of losing 25 students, a total of 150 students would be lost to the school, which creates an accumulated annual loss of \$750,000 in potential income. Estimating that each teacher costs a school \$90,000 (including fringe benefits), the total cost to the schools in personnel is eight classroom teachers.

“Every nine seconds in America a student becomes a dropout,” proclaim Martin and Halperin (2006), who

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paint an even direr picture regarding the economic impact of dropouts for our communities. Failing to achieve a high school degree creates added costs to the community as well as reduces the revenue levels needed to support those costs. Costs to the community include lower health and auto insurance rates, higher incarceration rates, higher rates of individuals qualified for free food programs, and higher rates of public financial assistance. Muenning (2005) estimates that “if only one-third of high school dropouts were to earn a high school diploma, federal savings in reduced costs for food stamps, housing assistance, and Temporary Assistance for Needy Families would amount to \$10.8 billion annually” (Martin and Halperin 2006, viii). And, failing to receive a high school degree severely reduces a

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community’s revenue stream. The U.S. Department of the Treasury (Aizcorbe, Kennickell, and Moore 2003) randomly surveyed over 4,000 adults and found that the gross median income for each family whose head of household possessed a college degree was \$50,800 more annually than for families in which the head of household never received a high school degree. The median net worth estimates for a family whose head of household possessed a college degree was over \$185,000 more than families in which the head of household never received a high school degree. Across their lifetime, high school dropouts collectively cost society \$260 billion dollars (Martin and Halperin 2006).

## **Dropouts Are Not Ready to Compete for Occupations that Demand 21st Century Skills**

The reason high school dropouts are not able to compete economically in the United States is due to not possessing the 21st century skills that are necessary to secure occupations that offer livable wages (Olson 2007). Today’s world of work demands not only a higher level of literacy, numeracy, and interpersonal skills, but also two years of post-secondary training beyond the high school degree. Gewertz (2007) summarized the shift in work-readiness indicators to rely more heavily on possessing “soft skills”:

In an increasingly global, technological economy...it isn’t enough to be academically strong. Young people must also be able to work comfortably with people from other cultures, solve problems creatively, write and speak well, think in a multidisciplinary way, and evaluate information critically. And they need to be punctual, dependable, and industrious. (p. 25)

To be ready to compete for occupations in the 21st century, students need to be engaged in designing their own success strategies for establishing the range of skills needed to compete effectively in a 21st century world of work.

## **Disengaged Students Drop out of School**

Identifying the “causes” of dropping out of school is not an easy task. Using a retrospective research design, Bridgeland, DiIulio, and Morison (2006) asked over 400 school dropouts representing 25 different locations throughout the United States their reasons for leaving school. The reasons cited covered a range of issues, including: needing to work, becoming a parent, caring for a family member, and that the schoolwork was uninspiring and not challenging. Bridgeland and his colleagues concluded that dropping out is a gradual process of “disengagement” and that low attendance is a primary at-risk marker. Jerald (2007) argues that potential dropouts can be predicted through a combination of academic

failure indicators that include lower attendance and low retention. Yazzie-Mintz (2007) found that only one-third of the students surveyed reported going to school because of what they are learning in the classroom. Students become disengaged as they fail to perceive the relevance of how their classroom experiences are preparing them for the world of work, and as attendance patterns falter and boredom ensues, the disengaged student eventually stops going to school altogether. Jerald concludes that low academic performance and low engagement are two strong and integrated factors that predict whether a student will withdraw from the academic experience and eventually dropout of school

Disengagement in school can also be marked by other contributing factors such as low motivation, low academic skills, and a school environment that is perceived as not challenging students to learn. In addition, too often school environments unintentionally harbor low expectations for a given student that are consistent with his or her previous behavior. Becoming disengaged is best conceived, therefore, as a dynamic interplay of a student's failure expectations being reinforced by a school environment that unintentionally reinforces these failure expectations. The following case study highlights the dynamic interplay that can often occur.

### Case Study

*Ian's reading skills began to show up as a problem in the fourth grade because this was the period when he needed to apply his reading skills so less attention was spent on developing reading skills. In looking back, this may have accounted for his being highly distractible during many classroom lessons. His low test scores indicated a problem in reading and math. By the fifth grade his teacher's expectations were reduced since there was no funding available to provide remedial skills development. Not having the skills needed to compete in the fifth grade, Ian's distractibility manifested as behavior problems, and when he was not in school the teacher was able to do more teaching and less "redirecting" of Ian's behavior. The other students seemed to focus better on their work when*

*he was not in class as well. With high-stakes testing, the teacher felt pressure to reach as many students as possible and if Ian was not interested in learning then the teacher needed to focus attention on the other students who were interested. Ian experienced this as not being wanted in school and was unable to perceive a connection between his challenging behavior and the teacher's impatience with him. His conclusion was that school is "boring" and teachers "just don't like me." His effort went from minimal to nonexistent. The teacher was becoming more frustrated over time and finally asked the school psychologist to test Ian for possibly having a learning disability. Ian's low achievement test results were consistent with his poor academic record, which placed him into a category of "slow learner," but were not enough to warrant special education services. The teacher was more impatient that a resolvable problem was not found. The teacher received assurance from colleagues that the teacher's job is to teach, not remediate or serve as a psychologist or social worker.*

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*Entering the middle school years, Ian knew that he was not "school material." He knew this because each time he sat in class without materials, showed up late, or wanted to "joke around," his teachers would have him sent to detention, ignore him, and otherwise become visibly frustrated. Students generally did not like him either. He did not perceive the other students being responded to in this way, but Ian continued to be unaware of how his behavior contributed to these interactions. Ian being at home or otherwise not showing up at school continued to be easier on teachers, who could now focus on teaching not behavior management. Ian eventually was separated into different programs. As he got older, his frustration mounted and he became more aggressive. His number of absences mounted through suspensions and finally expulsions. Being bounced around from school to school reinforced his previous experiences and continued to*

*support his notion that he just wasn't school material. It wasn't that he eventually dropped out of school, he was able to find a part-time job that happened to be during the day and so there just wasn't time to attend.*

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*Specific antecedents to dropping out of school include: low academic confidence, low motivation, poor relationships with peers and teachers, lack of goals, and poor health and stress management skills.*

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### **Psychological Antecedents of Dropping Out**

The case study highlights a myriad of potentially contributing factors that ultimately result in becoming at-risk for dropping out of school. While the student must be held accountable for his or her own behavior, the classroom context also serves as a holding environment that can either challenge the student to succeed or reinforce the student's failure patterns (Solberg, Gusavac et al. 1998). In addition, the case study has attempted to highlight some of the early

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academic performance indicators of dropping out: poor grades, low attendance, and failing to retain the student from year to year. These risk factors culminate into psychological antecedents of dropping out. Specific antecedents to dropping out of school include: low academic confidence, low motivation, poor relationships with peers and teachers, lack of goals, and poor health and stress management skills. Two research studies that I have conducted highlight the interaction

of these psychological antecedents in predicting these early academic indicators of becoming at-risk for dropping out of school (Solberg, Carlstrom et al. 2007; Close and Solberg, in press). Both studies assessed students upon entering the ninth grade and tracked their first semester academic outcomes, because more than one-third of all dropouts occur when students fail to transition from the ninth to 10th grade (*Education Week* 2007, 5). The first study (Solberg, Carlstrom et al. 2007) sampled over 750 ninth grade students attending an urban high school. Over 60 percent of the students were from Latino/a backgrounds and over 90 percent received free or reduced lunch. The study sought to classify students into different risk categories based on their level of academic confidence, academic motivation, and relationships with peers, teachers, and parents. A group deemed "most vulnerable" included students who indicated the lowest levels of academic confidence and motivation while also indicating very low connections to peers, teachers, and parents. At the end of the fall semester, these students recorded lower end-of-semester grades and were less likely to still be in school at the end of the term.

In the second study (Close and Solberg, in press), a more definitive picture emerged, showing how these psychological antecedents promote academic success. Using a sample of over 400 ninth grade students, the results indicated that students who felt strong connections with teachers and peers were more motivated to attend school because it was enjoyable and meaningful. Students expressing more motivation to attend school also reported higher academic self-efficacy (i.e., confidence). And, the combination of high motivation, high academic confidence, and health status predicted end-of-semester grades and attendance. Finally, the combination of grades/attendance as academic success indicators and health status was predictive of whether the student was still in school at the end of his or her ninth grade fall semester. What these results imply is that curriculum strategies designed to reduce school dropout rates should focus on building stronger peer and teacher connections, relevance and meaningfulness of school, academic confidence, and stress/health management.

## Creating “Ready to Learn Classrooms” that Engage Students and Decrease Dropout Rates

Jerald (2007) argues that dropout prevention practices within schools have stronger “holding power” when they focus on “alterable” aspects of the learning environment. In fact, many of these alterable relational factors have a stronger impact on preventing students from dropping out than unalterable factors such as income level, race/ethnicity, etc. Schools with the strongest holding power offer a supportive environment and challenging academic practice. Jerald concludes that schools with stronger holding power provide challenging and engaging curricula and the support needed to help students successfully master the curricula.

Not surprising, helping students learn how to succeed academically in a relationally supportive learning environment that is engaging and challenging is aligned with proponents of the 21st century skills (Olson 2007). The success strategies identified in the research studies above indicate that schools need to create learning environments in which all students build strong relational connections with peers and teachers, focus on building academic self-confidence by “learning how to learn” new and challenging material, perceive the relevance of what is being taught to helping students achieve desired occupational goals, and manage one’s stress and health in order to maintain high motivation and energy. These factors have also been discussed under the heading of “resilience” proposed by Masten (2001). Resiliency skills operate as self-protective factors that prevent students with risk markers from succumbing to that risk. Solberg, Carlstrom et al. (2007), classified a sample of students deemed “resilient” as students who were living in high risk settings (e.g., perceived exposure to violence) combined with high academic confidence, high motivation, and strong connections to peers and teachers. The results indicated that at the end of the ninth grade fall semester, students classified as “resilient” possessed higher grades

and stronger retention than students classified as “most vulnerable.” This indicates that the resilience characteristics provide some self-protective benefit in support of the student’s academic pursuits.

It is important to note that prevention strategies differ from intervention strategies in that the latter seeks to isolate students at-risk into specialized mentoring support or remedial classes. Check and Connect, for example, assigns a mentor to a caseload of students (Anderson, Christenson, Sinclair, & Lehr, 2004). The mentor needs to meet regularly with the students and follow up with home visits in order to create a bridge from home to school. Classroom-based prevention strategies should be considered strongly for a number of reasons. By intervening with the classroom, prevention programs address three levels of prevention: primary, secondary, and tertiary. Primary prevention is designed to provide support such that students do not become at-risk. Secondary prevention attempts to work with students who have an identifiable risk

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factor in order that the risk factor does not translate into emergence of the problem. Finally, tertiary prevention strategies work with students who have manifested the problem and who need help in order that the problem does not recur.

To create an effective dropout prevention-oriented classroom curriculum, research has identified nine core ingredients (Bandura 1986, Brown and Ryan-Krane 2000, Deci and Ryan 1995). Classrooms that use these ingredients as part of the efforts to prevent school dropouts are likely to establish the “holding power” needed for students to become more engaged learners. These ingredients are written exercises,

individualized interpretations and feedback, world of work information, modeling opportunities, attention to building support for choices within one's social network, mastery experiences, verbal persuasion, anxiety management skills, and opportunities for establishing stronger relational connections between youth and their teachers (Howard, Solberg et al., in press). For example, Solberg, Gusavac et al., (1998; Study 3) used a quasi-experimental design to study the impact of receiving individualized interpretations and feedback on student's perceptions of how to succeed in school. Each student received an individualized bar graph report that compared his or her perceptions of each resiliency skill (e.g., academic confidence, relationships with peers, health status, etc.) with a comparison group of students. The study was conducted with over 200 students in attendance and randomly assigned whether students responded to an open-ended question ("What does it take to be successful in school?") one week prior to the feedback or one week following the feedback. The results indicated that following the individualized feedback session, students were more likely to define strategies for being successful in school in accordance with the resiliency skills described in the feedback session. This study demonstrated a cognitive shift in students defining academic problems in terms of alterable engagement factors, such as relationships and confidence building, following the feedback session. Alternatively, students who completed the open-ended question prior to the feedback session were more likely to provide nebulous responses such as "better attitude" and "try harder."

### **Using *Success Highways* to Engage Students and Prevent Dropping Out**

*Success Highways* helps students build the resiliency skills needed to be successful in school by incorporating the nine classroom-building ingredients that provide schools with the holding power needed to keep students in school. The result of the 15 classroom-session program is that students become more engaged

and invested in their academic and life success. The curriculum is designed to help students become aware of their own challenges, own those challenges, develop a success strategy, and then take action to successfully address those challenges. This is done through a series of strategic classroom conversations that allow students to share their own life context as it relates to each resiliency skill area and teachers to share their experiences in these areas as well. *Success Highways* forges a strong relational base between the student and teacher, and the student and his or her peers. As a result, the teacher gains leverage that allows for a more challenging academic environment to emerge because he or she now knows something about each student's aspirations and dreams. The student becomes aware of how what he or she is learning is relevant to these aspirations and dreams, which results in him or her becoming a more engaged learner.

Is it really that simple? One group of girls realized through this process that the ninth grade algebra course was essential to being able to go to college. They also realized that since the teacher was rarely showing up at school they were not learning algebra. The girls wrote a petition to the principal to request a new teacher. The principal was able to use the teacher's high absence rate and the student petition to make a replacement. This occurred in a school where the average math level upon entering the ninth grade was at a fourth grade level, and the school was located in one of the lowest income areas of the urban community. In a similarly situated school, one student noted during a *Success Highways* discussion how he left his home and previous state to get away from drugs being sold in his home. A girl spoke up, saying that she too had a similar situation but that she chose to focus on school, not the chaos going on in her home and neighborhood. The male student went to the principal a week later and asked if he could retake his math class during the summer. The principal asked why, adding, "You're doing fine in math." To which the student replied, "I know, but I can do better." These are not isolated incidents but just a few of the stories that occur spontaneously

when students become engaged learners as a result of the *Success Highways* curriculum.

Quasi-experimental methods and an independent evaluation were conducted in order to verify the positive academic impact of these curriculum ingredients (ScholarCentric 2006). The evaluation studies focused on the transition into ninth grade and found that increased exposure to the curriculum was associated with large improvements in attendance, credits earned, and grades. Two years following exposure to these classroom experiences, students were still found to be performing well. This is consistent with the findings of Solberg, Gusavac et al. (1998) that the curriculum contributes to a shift in how students define the challenges they face as alterable factors he or she can manage.

Personally, the moment I realized how powerful the ingredients in *Success Highways* were in supporting student development occurred a number of years ago. At the end of the academic year, one of our staff members asked if I had remembered that she was in one of the individualized report sessions that I had conducted a couple of years before. As she was talking she pulled from her backpack a worn student workbook and upon presenting it to me said, “I read back through this once a week.” No, implementing *Success Highways* is not easy, it takes dedicated teachers who are willing to hear and be changed by the stories they witness. For teachers who are willing and ready, creating “ready to learn classrooms” is easier than one would expect, and the impact of 15 lessons lasts a lifetime.

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## Resources

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