Academic Resiliency Content is Key in School Improvement

Research demonstrates that failing middle and high schools usually share three common characteristics: 1) their students perform poorly in academics, (2) they have high dropout rates, and (3) they usually service lower socioeconomic populations (Balfanz & Legters, 2004). Under the new Title I guidelines aimed at turning around chronically low performing schools, states and school districts have an opportunity to place unprecedented resources towards school transformation in an effort to increase academic performance, advance graduation rates, and improve teacher effectiveness particularly for students in these failing schools.

While increasing academic performance is key to improving schools, there are numerous nonacademic factors that impact students' ability to achieve. Studies show that successful schools balance content to personalize the learning environment, ease students' transitions into and out of high school, and ensure that students are exposed to a balanced blend of academic and nonacademic learning opportunities that provide postsecondary and workforce readiness skills (Perlman & Redding, 2007). In other words, these schools use tools to create a positive learning environment where the academic and behavioral competencies of all students are supported, and instruction is differentiated and responsive to student needs, leading to achievement gains, and reducing behavior problems (Close & Solberg, 2007).

In order to foster a positive environment for academic success, school districts are turning to ScholarCentric's *Success Highways* program, which provides educators research-based, proven tools to enhance students' critical nonacademic skills that improve academic performance. The *Success Highways* combination of resiliency assessment, curriculum, and professional development has been established to assist in increasing attendance and academic outcomes in part by providing essential tools for teachers and supporting the creation and maintenance of the positive learning environment that is key to school transformation.

I. The Research on Academic Resiliency in School Transformation

A. The Link Between Resiliency and Student Success

Resiliency refers to the ability to succeed in school despite adverse conditions such as poverty or abuse and includes components such as confidence, a sense of well-being, motivation, an ability to set goals, strong relationships/ connections, and stress management (Close & Solberg, 2007).

Numerous studies on resilience establish a correlation between academic resiliency and academic success, especially in lower socioeconomic populations. For example, a longitudinal study by Scales et al. (2006) found that higher levels of resiliency traits are strongly correlated with higher grade point averages (GPAs) among middle and high school students. These findings hold true over time, so that students reporting more resiliency characteristics early in the study had higher GPAs three years later, compared to students with fewer assets at the start.

Similarly, in a series of studies conducted by the U.S. Department of Education, Waxman and Huang (1997) assessed inner-city students in the south-central United States. They found that students who ranked in the 90th percentile on the standardized tests in mathematics were highly resilient, reporting significantly higher levels of task orientation and satisfaction, social self-concept, achievement motivation, and academic self-concept than their counterparts who ranked below the 10th percentile.

Reyes and Jason (1993) designed a study to understand successful high school students in an inner-city school. Two groups of Latino students were identified as being either at low or high risk for dropping out of school; all students shared a similar socioeconomic status, parent-student involvement, and parental supervision. They found that the low risk students reported strong resiliency, an attribute that the high risk students were significantly lacking.

Hanson and Austin (2003) conducted a longitudinal study of students in California and found that nearly every measure of resilience was positively related to concurrent test scores. The highest increases in test scores occurred in schools where the students reported high levels of resilience. Moreover, resilience development proved to be equally beneficial for successive test score improvements in both low and high performing schools.

In his work to pinpoint the aspects of resiliency most closely linked to academic performance, Solberg et al. (1998) identified six key skills as the foundations of educational resiliency: building confidence, making connections, setting goals, managing stress, increasing well-being, and understanding motivation. Studies conducted by Solberg in Milwaukee Public Schools between 1998 and 2004 show that when students learn about and cultivate these six skills, their school performance improves significantly (Solberg et. al., 2007).

Equivalently, in his *Breaking Barriers* study, Toldson (2008) examined the social, emotional, and cognitive factors contributing to the academic success of African American males (n=6000). Four overarching components empirically linked to academic performance were identified: 1) personal and emotional factors, such as emotional well-being and self esteem; 2) family factors, including household composition, parents' education and relationship with their children; 3) social and emotional factors, including economic standing and community involvement; and 4) school factors, relating to their perceptions of school and relationships with teachers.

B. How Resiliency Education Specifically Fits into School Turnaround

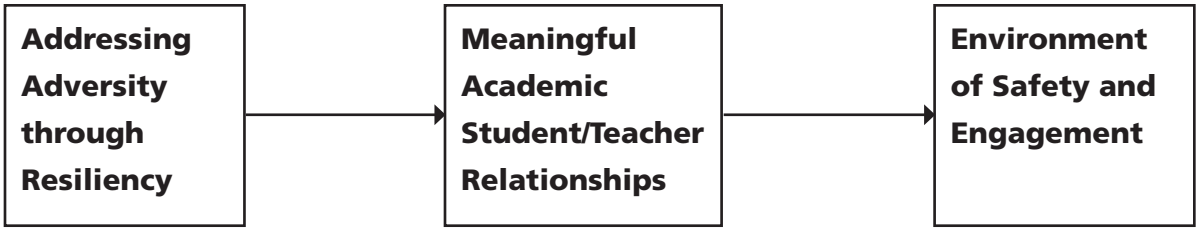
According to Mass Insight's landmark work, "The Turnaround Challenge," addressing a student's readiness to learn is one of the three pillars of transformation.

The Mass Insight study lists the components of creating "readiness to learn" as including:

1. Safety, Discipline, and Engagement – Schools create a place where students feel secure and inspired to learn.
2. Action Against Adversity – Schools directly address their students' poverty driven deficits.
3. Close Student –Adult Relationships – Students have positive and enduring mentor teacher relationships (Calkins et. al., 2007).

Research establishes that students' poverty driven deficits usually include many difficult-to-overcome barriers including lack of academic or career role models in urban communities, limited resources, discrimination, racism, lack of positive feedback, and low teacher expectations (Perlman & Redding, 2007). Increasing a student's resiliency leads to sustained self efficacy, a student's perception that he or she has the ability to shape what happens in his or her life, regardless of academic circumstances. A resilient student becomes responsible for his or her success, a factor that has a large impact on a student's motivation to overcome any academic barriers (Solberg, Close, & Metz, 2002). Accordingly, a sustained self efficacy, a.k.a. resiliency focused educational paradigm, can significantly affect school outcomes for youth, especially for students who are faced with great adversity.

Applying the Mass Insight paradigm, students who respond to resiliency interventions create positive secure academic win-win relationships with their teachers, creating an environment where they feel secure and more inspired to learn. ScholarCentric's *Success Highways* provides a meaningful framework to build sustained self efficacy/resiliency, build meaningful academic student/teacher relationships, and build an environment of safety and engagement. Academic resiliency skills can be learned, measured, and have a long term impact on a student's academic performance, which will lay the groundwork for postsecondary access and success (Bernard, 2001).



II. How to Put a Resiliency Framework in Place

A. ScholarCentric's *Success Highways* Research-Based Framework

Implemented in school districts all over the country, the *Success Highways* research-based content is customizable to meet the needs of multiple parties. Its components include:

1) *Success Highways* Resiliency Assessments

The *Success Highways* resiliency assessments were developed through 15 years of major university studies with large heterogeneous and geographically diverse samples. In 2008, a university-conducted validation study (n=5000) utilizing a national sample revalidated the measures by means of a factor analysis (Gillis & Sidivy, 2008). Recently, the assessment was administered to over 5000 entering 9th graders and correlated to attendance, behavior, and coursework indicators. These additional results showed a strong correlation between high resiliency scores and academic success (Solberg, 2010).

Educational institutions utilize data from the assessments either with or without the *Success Highways* curriculum. The assessments provide valuable information and insight to all participants. Reports include:

- **School/District Reports:** *Success Highways* offers a wide variety of reports for districts and schools including reports that provide an aggregate analysis of an entire district, specific schools, and even individual analysis of each student's resiliency and growth.

- **Individualized Student Reports:** All students participating in the *Success Highways* curriculum (see below) receive individualized reports showing the results of their formative resiliency assessment as compared to an academically successful cohort. Students use the report in tandem with their personalized "My Success Roadmap" to analyze the barriers that may be in the way of their academic success. Students then create their own academic plan to overcome those barriers.

2) *Success Highways* Curriculum

The curriculum provides educators with an engaging, proven, research-based content and methodologies for teaching each of the six resiliency skills. The user-friendly teacher's guide includes expandable content, providing a step-by-step approach with multiple opportunities to connect with students through a variety of strategies to accommodate their diverse needs.

There are a number of established teaching strategies to provide the *Success Highways* content, including anchored instruction, goal-based scenarios, activity-oriented direct instruction, structured simulations, self-assessment comparisons, decision-making and time-management games, metacognition prompting, instructional branching, and cognitive apprenticeship.

The *Success Highways* pedagogy empowers students to:

- Study the objective definition of the resiliency skill
- Create their own subjective definition of the resiliency skill
- Listen to the teacher's own personal story about his/her experience with the resiliency skill and how this is related to his/her educational experience
- Participate in standards-based classroom activities involving the skill (i.e. case study analysis, group discussions, research)
- View and reflect on personal resiliency data as compared to a validated sample
- Create a personal action plan to overcome any resiliency deficiencies and galvanize resiliency strengths

The *Success Highways* content approach is assets-based, and teachers focus on the unique strengths of each individual student and help them identify how they can utilize these assets to overcome any poverty-driven or other deficits (Solberg, 1998). Secondly, the *Success Highways* approach helps teachers personalize their instructional approaches which create meaningful relationships while still fostering high expectations (Taylor

& Adelman, 1999). Thirdly, the targeted curricular approach provides critical social/emotional support to students, which leads to improved academic outcomes (Winfield, 1994). The approach also builds the types of supportive connections at school that can ameliorate potential risks at home and in the community (Zimmerman & Bingenheimer, 2002). Finally, such content builds teachers' capacity to foster healthy skills development (DuBois et. al., 2002).

3) *Success Highways* Professional Development

Each local education agency that ScholarCentric works with has different educational paradigms. ScholarCentric's *Success Highways* professional development team provides customized training, available as both in-person workshops as well as webinar formats, to ensure teachers are equipped and supported in both interpreting and transferring data and teaching the content.

The professional development is also focused on promoting collaboration by having teachers coalesce around common data for assessing student needs and instructional planning.

B. *Success Highways* Models

1) Incorporation into Core Content

As resiliency skills relate to academic success, many schools distribute and share resiliency data with core academic teachers, and/or incorporate the *Success Highways* content into core academic content. For example, with the help of *Success Highways* professional developers, Milwaukee Public Schools Genesis High School teachers incorporated the *Success Highways* resiliency data into their formative data review. They then incorporated the 15 lesson *Success Highways* teacher-driven curriculum into their high school English and math classes. Through the lesson pedagogy, teachers worked with individual students to review their own data and monitor their progress and take responsibility for their growth.

Milwaukee Public Schools and University of Wisconsin researchers analyzed this approach using a quasi-experimental, peer-reviewed research technique in South Division High School, WI. They were able to establish a correlation between students who learned resilience skills using the *Success Highways* paradigm with higher grades, higher attendance, and an increased rate of passed classes. These results were then replicated at other schools with large free and reduced lunch populations (Solberg et. al., 2001).

2) Freshman Transition/9th Grade Academy

The literature suggests that all successful secondary school transformations occur within the context of a positive learning environment. Along with increasing academic achievement, this effort must include ensuring that students are challenged and engaged in learning, providing individualized learning experiences addressing individual needs, and helping students to see the relevance of their coursework by creating connections (Perlman & Redding, 2007).

This is particularly important at the inception of the high school experience. Referred to as the "ninth grade bulge," students in ninth grade comprise the largest percentage of the overall high school population because they are much more likely to fall behind during this critical year and not be promoted to the tenth grade (Wheelock & Miao, 2005).

The Denver Public Schools (DPS) Ninth Grade Academy focuses in part on incorporating *Success Highways* in order to combine resiliency mastery with English and math enrichment. The goal of the Academy is to target progress in achievement, engagement, and graduation rates.

Academic data was collected on approximately 900 participants of the program in 2007 as well as a comparison group comprised of approximately 700 DPS students who did not attend the program and were of similar academic proficiency, grade level, gender, race/ethnicity and free and reduced lunch status. The study found that students who participated in the Ninth Grade Academy outperformed the comparison group in reading and writing test scores as well as G.P.A.; additionally, they held higher attendance records and lower tardy rates and

were less likely to be suspended or expelled. Furthermore, the Ninth Grade Academy students were significantly less likely to drop out of school and more likely to be on track to graduate (Denver Public School, 2009).

Similar to the Denver model, Johns Hopkins Talent Development High Schools utilized *Success Highways* in its 9th Grade Freshman Seminar course in Chicago and Baltimore high schools. Compared to a similarly situated Talent Development control group, studies demonstrated that students exposed to the *Success Highways* content reported statistically significantly higher academic connections and school importance.

3) Middle School

Transition from middle to high school is a critical point in a student's academic career. Research indicates that this time is often characterized by increased disengagement and a decline in grades, motivation, and attendance. Furthermore, many students either do not make it to the ninth grade, or they arrive lacking the preparation to successfully navigate the new academic and social demands of high school. Failure to meet these challenges is linked to school failure and highlights the fact that students' experiences during their first year of high school have significant implications (Perlman & Redding, 2007).

Unsuccessful high school transition is associated with higher dropout rates, delayed graduation rates, and low achievement (Herlihy, 2007). It is also important to note that these challenges are more prevalent in urban, high-poverty schools and among African American and Latino students and students with disabilities. Literature suggests that students with the necessary academic and socio-emotional supports follow smooth transitions from middle school to high school, and supports the implementation of transition programs and suggests that these interventions are linked to positive student outcomes such as higher student engagement and lower dropout rates (National High School Center, 2007).

The use of *Success Highways* has been successfully used in Broward County middle schools to ease the transition to high school. Teachers consistently reported they appreciated the content to address the nascent post-pubescent social emotional changes that occur during the middle school years (such as negative peer acceptance, confidence issues, and stress). Qualitative studies show that the schools' use of the *Success Highways* paradigm provided a more personalized learning environment and providing a self efficacy framework for academic ownership.

4) Advisory

Schools around the country are utilizing *Success Highways* as an advisory component. Advisory is intended to facilitate meaningful interaction between teachers and students and provide a time for teachers to identify and respond to students' needs proactively. Interventions such as *Success Highways* are organized to match the needs of individual students with appropriate nonacademic interventions to support their academic learning. When implemented with fidelity, it will result in providing a meaningful and productive advisory time (Martin & Halperin, 2006).

Effective examples of middle and high school advisory include Sunnyside Unified School District where all 8th, 9th and 10th graders were assessed on resiliency. A significant number of middle and high school guidance counselors and teachers were trained in interpreting the data and in using the *Success Highways* pedagogy in their advisory periods. All 8th grade students participated in the *Success Highways* content and many 9th and 10th grade students participated in *Success Highways* Down the Road enrichment activities. Transitioning 8-9th grade students who displayed resiliency risk factors are being specifically targeted by high school guidance for more specific advisory interventions.

5) Response to Intervention/Social Emotional Tier I Intervention

The use at Sunnyside also fits into a Response to Intervention (RtI) model. RtI integrates assessment and intervention within a multi-level prevention system to maximize student achievement and to reduce behavior problems (National Center on Response to Intervention, 2010).

Within an RtI system, *Success Highways* provides a "social-behavioral" assessment and Tier I early intervention content. The validated data and monitoring framework is an integral part of the progress monitoring cycle and will both diagnose why students are struggling and provide scripted universal interventions. Its assessment component also provides information on which students either did not respond to the universal *Success Highways* intervention and/or need additional interventions.

C. *Success Highways* Efficacy Research

Using a quasi-experimental, peer-reviewed research technique, researchers were able to establish a correlation between students who learned resilience skills using the *Success Highways* paradigm with higher grades, higher attendance, and an increased rate of passed classes. These results were then replicated at other schools with large free and reduced lunch populations (Solberg et. al., 2001).

ScholarCentric's *Success Highways* provides not only a teacher-driven curriculum for developing the resiliency skills that are linked to academic success but also an independently validated assessment instrument for measuring individual skills capacity. In addition, reporting tools within the program allow students to monitor their progress and take responsibility for their growth.

A number of quasi-experimental studies established that students exposed to the *Success Highways* resiliency content demonstrated better attendance, earned higher grades, earned more credits, increased test scores, and were more likely to graduate. (Solberg et.al. 2001) These studies evaluated incremental *Success Highways* exposure and found better outcomes consistently with as a result of increased exposure. The results were found to continue two years past intervention. Denver Public Schools integrated *Success Highways* into their district-wide summer transition program and found that students who participated in the program recorded better attendance, higher grades, and more classes passed (Denver Public Schools, 2009).

III. Conclusion

One of the greatest challenges educators face is balancing the urgency to demonstrate immediate academic gains with the need for addressing the developmental needs of educating the whole child. Both are important. However, academic achievement will fail to advance unless the socio-emotional needs of children are also met. *Success Highways* provides a research-based, proven approach for meeting both challenges. Transforming schools is undoubtedly difficult work, yet it is made abundantly more challenging when nonacademic factors impede school improvement efforts.

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