



What's the Answer to Improving Academic Outcomes in Grades 3 Through 12?

Hint: It starts with a comprehensive understanding of each student's risk and resiliency indicators.

Far too few students are performing to their potential. Consequently, the latest findings from the Pew Research Center have American students ranking in an unimpressive 38th place out of 71 countries when it comes to math scores, and 24th place when it comes to science.¹

One significant reason for the poor performance of our students is a complex — yet predictable — interaction between **risk and resiliency** indicators. The problem

for educators is that they don't know which students are suffering from which risk indicators until the damage is done. Likewise, educators don't know what types of support they could be giving to students with positive resiliency indicators to help them maintain their level of performance or perform better.

What schools need is a way to assess a students' mental resiliency and intervene with them early on to change the course of their lives.

Academic Performance Problems Are Rooted in Having Low Resiliency and High Risk

Evidence clearly shows that a student's academic performance is based on the presence (or absence) of key resiliency and risk indicators.² Students with high resiliency had better reading skills, school attendance, academic self-perceptions, academic-related goals, social support from classmates and parents, self-perceived physical health, and fewer social problems than peers with comparatively low resiliency.³

Our own research finds that the presence of even one risk indicator can reduce academic performance by 20%, increase the chances of early school drop-out, and drive lead to poor health outcomes. However, just one resiliency factor can cut those risks by half.

So, what does this mean for educators? A common finding in resilience research is that educators can tip the scale from risk to resilience-if they know what attributes to look for and monitor.⁴

With access to the right information, educators can change lives for the better.

The Resiliency/Risk Continuum

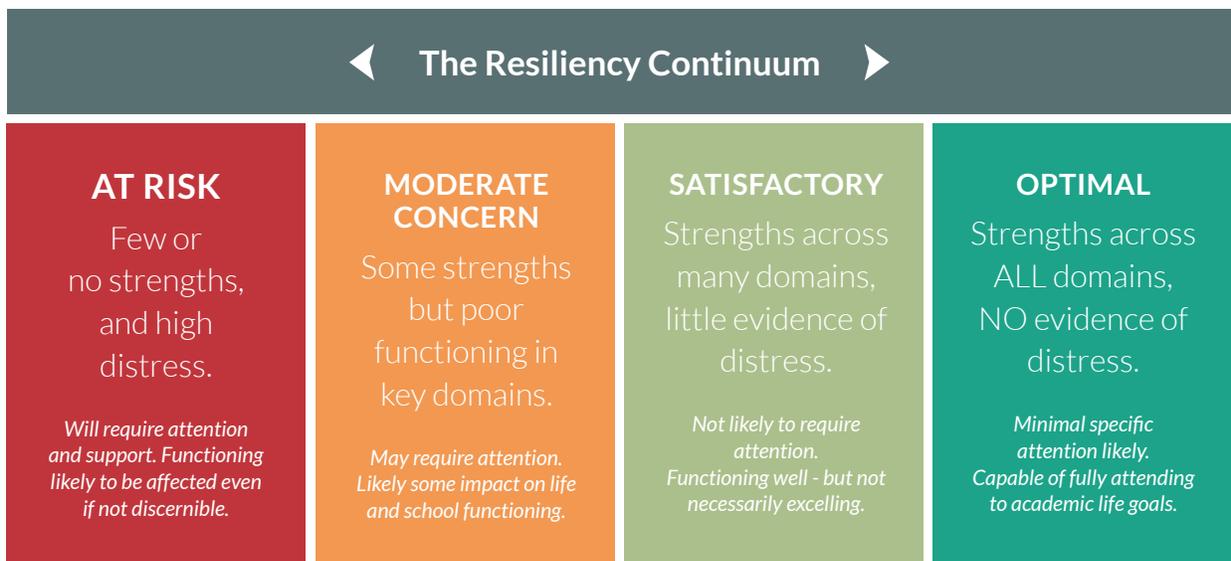
The presence of resilience attributes and the impact of risk extend along a continuum. Each dimension along this continuum indicates how well a student perceives themselves, their experiences (including their schools and peers), and their larger world. There are critical differences in overall functioning for youth found at each dimension.^{5,6}

School districts understand that students who possess key strengths and who lack (or can control) significant distress also display optimal academic, interpersonal, and psychological functioning — as youth and later as adults.

Unfortunately, for many students, this is not the case.

Those who do not possess strengths and/or who report high distress are at-risk, that is, significantly more likely to experience poor academic, interpersonal, and social outcomes. These outcomes include dropping out of school, expressing high psychological distress (including thoughts of self-harm), and reporting high interpersonal distress, which may include experiencing peer victimization and ostracism.

Without intervention, many of these students will display poor functioning as adults.



Our Two-Year Study Highlights the Seriousness of the Problem

We conducted a two-year study following 50,000 students from grades 3 through 12 to assess the validity of the continuum, which serves as the foundation of Terrace Metrics. We mapped our risk and resiliency data on to students' academic outcomes (grades and test scores) and behavioral outcomes (tardiness, absenteeism, and office referrals).

WHAT WE FOUND WAS EXTRAORDINARY.

For every step down the continuum (from Optimal to Satisfactory, from Satisfactory to Moderate Concern, and from Moderate Concern to At-Risk) a student's GPA declines by 15%, chronic absenteeism increases

by 5%, chronic tardiness increases by 15%, and the rates of in-school and out-of-school suspensions increase significantly. **Perhaps most importantly, state test scores go down by as much as 17%.**

Currently, school districts struggle to identify where students are along the resiliency continuum. While some students in the At-Risk range are identified through expensive and resource-taxing processes, roughly 75% go unidentified.

Similarly, schools have no consistent and reliable way to assess youth reporting Optimal functioning. Consequently, many students who could be high achievers don't get the attention or challenges they require.

Current Assessments Don't Provide a Solution

School administrators and educators have stated that they would do whatever they could to move their students toward the Optimal end of the continuum.^{7,8} A major barrier is that current approaches don't provide adequate tools to support even the most well-intentioned efforts.

Until now, there has been no comprehensive school-wide resiliency/risk measurement tool, nor has there been a systematic way to monitor school-wide resiliency health over time. With the assessments that do exist, the results are delivered weeks after the survey is completed. Moreover, the assessments are only available for a few select age groups.

OUR STUDENTS DESERVE BETTER.



Terrace Metrics Solves This Problem

Terrace Metrics is a comprehensive, web-based life skills assessment and intervention system for students in grades 3 through 12.

It's the only tool that measures both risk factors (e.g., depression, anxiety, victimization, social ostracism) and resiliency factors (e.g., grit, leadership, hope). The tool can be customized to address the specific needs of a school district or individual school. Examples of added indicators include drug/alcohol and trauma screeners, and propensity for school violence.

In the span of one standard class period (typically **15 minutes**), students complete a secure, private, and confidential survey. Our propriety software then converts each student's data to comprehensive individual and parent reports **immediately** after

administration. This information is accompanied with curricula, videos, and other intervention tools to positively intervene.

Two-year's worth of data on more than **48,000** students demonstrate that the information provided is both easy to access and understand and has been highly utilized by schools and parents. The process is efficient, requires few school resources, and is financially sensible for school districts.

The full impact of Terrace Metrics is realized through linking results to interventions. We also provide extended consultation time post-data collection, customized intervention curricula manuals and other materials, advanced statistical analyses and reports that provide a more granular understanding of a targeted question or concern, and professional development activities such as workshops and staff training.



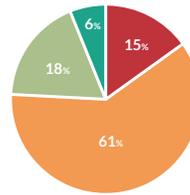
Terrace Metrics = Real Results

To illustrate the type of results that Terrace Metrics can bring to a district, we followed the progress of elementary, middle, and high-school students in one district for six months. Here is a highlight of the results:

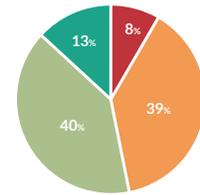
- The assessment and action plan were effective for all three age groups.
- Students at every point on the mental health continuum showed an upward improvement over a six-month period.
- In all three age groups, the Average and Optimal categories increased to greater than 50 percent after just six months.
- The total of “At-Risk” students decreased by an average of 39 percent across all age groups.
- 53 percent of targeted students met their growth goal for math from fall to winter.
- 59 percent of targeted students met their growth goal for reading from fall to winter.

■ At Risk ■ Moderate Concern ■ Satisfactory ■ Optimal

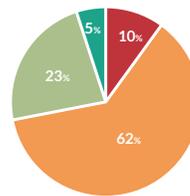
Elementary School
Fall Semester



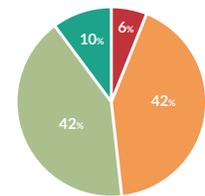
Elementary School
Spring Semester



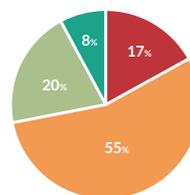
Middle School
Fall Semester



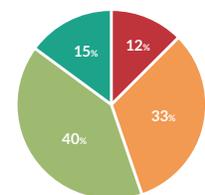
Middle School
Spring Semester



High School
Fall Semester



High School
Spring Semester



Conclusion and Next Steps

Educators can't eliminate all the risks that students face in their daily lives. However, educators who care deeply about the academic success of their students can learn which specific risks their students face, and which resiliencies can be nurtured. a

IT STARTS WITH A UNIQUE AND COMPREHENSIVE ASSESSMENT.

In addition, the information is linked to appropriate curricula and commonly adopted multi-tiered intervention models.

Contact us today through our website www.terracemetrics.org, by emailing us at info@terracemetrics.org, or by calling us at 800-470-3301 to learn more about how Terrace Metrics can help you help your students to perform better in school and in life.

Contact Us

Sources

- ¹ Pew Research Center, [U.S. Students Academic Achievement Still Lags That of Their Peers in Many Other Countries](#). 2017.
- ² Educational & Child Psychology. Relationship Influences on Students' Academic Achievement, Psychological Health and Well-Being at School. 2010.
- ³ School Psychology Review. [Looking Beyond Psychopathology: The Dual-Factor Model of Mental Health in Youth](#). 2008.
- ⁴ Bonnie Benard. [From Risk to Resiliency: What Schools Can Do](#). 2000.
- ⁵ Handbook of Positive Psychology in Schools (2nd Ed.). Toward a Science and Practice of Positive Psychology
- ⁶ American Journal of Orthopsychiatry. [Mental Health in Adolescents: Is America's Youth Flourishing?](#) 2006. in Schools: A Conceptual Framework. 2014.
- ⁷ American Journal of Psychiatry. [Unmet need for mental health care among U.S. Children: Variation by ethnicity and insurance status](#). 2002.
- ⁸ National Education Association. [Are Schools Ready to Tackle the Mental Health Crisis?](#) 2018.