It’s not that I’m so smart, it’s just that I stay with problems longer.

~ Albert Einstein

Over the last three decades, education reform in the U.S. has focused on academic standards for what students should know and be able to do and holding schools accountable to these standards. The standards-based reform movement took on full steam with the passage of the No Child Left Behind (NCLB) in 2001. NCLB was envisioned to address inequality in America’s schools by establishing crucial goals for educational equity; however, it resulted in a teaching to the test rather than engaging students in deep learning. While the accountability measures raised achievement in some states, for some school districts, and for some students, they did not substantially expand educational equity or significantly improve education outcomes across the nation. Actually, U.S. rankings on international assessments have stagnated since 2001 (New Accountability, 2014). NCLB also produced an array of iatrogenic consequences, for example, sanctions based on poor student performance on standardized test scores, an increased focus on improving pass-rates for students who were already close to passing the tests while leaving low- and high-performing students behind, and failing to accommodate English learners (Valenzuela, 2005).

The Power of Grit, Perseverance, and Tenacity

Erik K. Laursen

The failure of test-focused school reform efforts requires effective strategies for engaging students and learning. The science of positive psychology provides promising new approaches to develop inner strengths that foster success in school and life.
In the context of the failing accountability movement, education experts agree that the single-minded focus on academic competencies is insufficient to prepare learners for success in an increasingly complex world.

Competencies for Contemporary Learners

In order for students to become successful citizens of their local and global communities, schools must be transformed to provide intentional experiences for students to learn the knowledge and skills required for career and community participation such as collaboration, problem-solving, grit, perseverance, tenacity, and self-control. Several educational groups, such as the Partnership for 21st Century Learning Skills Framework (http://www.p21.org) and the National Research Council (2012), use the term noncognitive factors to differentiate these attributes, skills, and intrapersonal resources from content knowledge, which they call cognitive factors. It appears that the development of these competencies involve higher forms of thinking (Conley, 2013). In this article, the term developmental factors will be used to describe these metacognitive learning skills.

The single-minded focus on academic competencies is insufficient to prepare learners for success in an increasingly complex world.

The Influence of Developmental Factors

In recent years, education leaders and the business world have realized that the standards-based reform movement was unable to solve the inherent inequalities in American education or prepare students for the demands in today’s workforce. As a result, there has been a movement toward investigating the influence of developmental factors. The most noteworthy contributors are Angela Duckworth of University of Pennsylvania, Carol Dweck of Stanford University, and Farrington and colleagues (2012) of the University of Chicago.

Grit, Perseverance, and Tenacity

Angela Duckworth has focused her research on two traits that predict achievement—grit and self-control. Across six investigations, researchers studied National Spelling Bee finalists, New Point cadets, educational attainment of adults, and grade point average for Ivy League undergraduates (Duckworth, Peterson, Matthews, & Kelly, 2007). Duckworth and her colleagues found that grit—the tendency to sustain interest in and effort toward very long-term goals—contributes significantly to successful outcomes. In short, grit is a better predictor of high school graduation and grade point average than IQ (Duckworth, 2013). Add to this the findings of Bowen, Chingos, and McPherson (2009), who found that high school grades are better predictors of college success than standardized tests. In other words, grittier students who stick with the day-to-day work during high school are more successful in college.

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Mindsets

Carol Dweck (2006) identified two very different mindsets—fixed and growth mindsets—and has shown that people achieve what they believe about themselves. People with a fixed mindset believe that traits such as intelligence and talent are finite. They have a certain amount of brains and talent and nothing can change that. People with a fixed mindset worry about their traits and how adequate or inadequate they are. They have something to prove to themselves and others. If intelligence and talent are fixed, then education and experiences are shaped by how much of this finite quality one possesses.

People with a growth mindset, on the other hand, see their talents as qualities to be developed through their dedication and effort. They are happy if they are brainy or talented, but that is just the starting point. They see education, experience, and practice as opportunities to increase their mastery. They understand that no one has ever accomplished great things—not Mozart, Darwin, or Michael Jordan—without years of passionate practice and learning.

I've missed more than 9000 shots in my career. I've lost almost 300 games. 26 times, I've been trusted to take the game winning shot and missed. I've failed over and over and over again in my life. And that is why I succeed.

~ Michael Jordan

Ricci (2013) surveyed kindergarten, first-, second-, and third-grade students about their beliefs about intelligence. While 100 percent of the kindergarteners had a growth mindset believing they could...
learn, a dramatic shift in mindset took place over the first 4 years of schooling as shown in Table 1. By fourth grade, 42 percent of the students demonstrated a fixed mindset suggesting a belief that intelligence is not malleable. The data indicate that traditional educational practices squash curiosity for learning in almost half of our students before the end of elementary school. It is obvious that our educational practices are in desperate need of transformation in order to create opportunities where all students can grow and succeed.

**Developing learners**

Farrington and others (2012) of the University of Chicago conducted a literature review to identify the role of developmental factors in school performance. They concluded that students’ mindsets and perseverance are directly associated with grades. These two developmental factors determine student engagement, class attendance, assignment completion, learning from failure, and sticking to tasks until completed. Students who demonstrate a growth mindset and grit earn higher grades than students who do not. Evidence is emerging in support of the influence of developmental factors on academic performance and success of students. However, these factors are not only internal to the individual but are developed in intentional and optimal learning environments where students are engaged in relevant learning activities.

Csikszentmihalyi (1990) described learning as the intrinsic reward of hard work that is essential to successful human development. In order to prepare students for adult success, education should help them to seek out challenging and engaging activities that set them on the path to mastery. When this is achieved, students experience what Csikszentmihalyi calls flow. The flow state is so enjoyable that people will seek it out and persist at tasks with powerful intrinsic motivation. In order to create flow, learning must be relevant and supported by adults who build on students’ strengths to decrease their anxiety, rather than focus on their weaknesses. Students need to have the opportunities to take on long-term or higher-order goals (or purposes) that, to them, are worthy of pursuit. Second, they need a supportive and rigorous learning environment to help them pursue these goals.

“Challenge gives children vision and direction, focus and perseverance. Support gives the serenity that allows them freedom from worry and fear” (Csikszentmihalyi, 1990, p.17).

Intentional learning environments are designed to actively engage students in selection of learning activities and learning strategies (Çubukçu, 2012). These pedagogical strategies are described under different names, for instance, problem-based learning (Sungur & Tekkaya, 2006), student-centered instruction (Davis, 2010), and deeper learning (The William and Flora Hewlett Foundation, n.d.) and seek to use real-world connections, cross-curricular techniques, and problem-solving skills. The goals are for students to develop their knowledge base, problem-solving skills, and collaborative skills as well as to become self-directed, motivated, life-long learners (Zhang, Parker, Eberhardt, & Passalacqua, 2011).

**Our educational practices are in desperate need of transformation in order to create opportunities where all students can grow and succeed.**

Intentional learning strategies provide students with choice to garner ownership for learning goals and activities (Çubukçu, 2012). Ownership personalizes developmental goals for each student rather than addressing the class as a whole. As students develop, goals are changed to focus on mastery instead of performance, resulting in greater self-efficacy.
Another core of intentional learning pedagogy is the focus on identifying and engaging students in learning about authentic real-life problems. This relevance sparks interest in the content and facilitates deeper understanding of the principles or processes underlying the problem (Rotgans & Schmidt, 2011). Experience with real-world issues prepares students to become life-long learners (Zhang, Parker, Eberhardt, & Passalacqua, 2011).

**Teaching Grit and Growth Mindsets**

There is an increasing body of evidence about the importance of focusing on developmental factors. Below is a list of suggested strategies to teaching grit and growth mindsets.

**Experience with real-world issues prepares students to become life-long learners.**

*Talk about grit*

If grit is an unfamiliar topic, begin reading about grit. Here is a list of readings I enjoyed:

- *Giraffes Can’t Dance* by Giles Andreae and Guy Parker-Rees (2012)
- *Mirette on the High Wire* by Emily Arnold McCully (1997)
- *What If the Secret to Success Is Failure?* by Paul Tough (2011)

*Learn about people who have grit*

Another way to help students learn about grit is to ask them to research and report on people who have demonstrated perseverance in the face of hardship. Here are two more impressive examples:

A five-year old child watched helplessly as his younger brother drowned. In that same year, glaucoma began to darken his world, and his family was too poor to afford medical help that might have saved his sight. Both of his parents died during his teens. Eventually he was sent to a state institution for the blind. Because he was African-American, he was not permitted access to many activities, including music. Given the obstacles he faced, one could not have predicted that he would someday become a world-renowned musician. His name is Ray Charles. (Brooks & Goldstein, 2003, p. ix)

Another example of grit is Dr. Marsha Linehan, today a leading psychotherapist and the developer of Dialectical Behavioral Therapy, who as a 17-year-old was hospitalized for 26 months for suicidal ideation, burning her wrists with cigarettes, slashing her body, and head banging (Carey, 2011).

*Long-term goals*

The U.S. Department of Education (2013) defined grit as “perseverance to accomplish long-term or higher-order goals in the face of challenges and setbacks, engaging the student’s psychological resources, such as their academic mindsets, effortful control, and strategies and tactics” (p. 15). Therefore, promoting opportunities for students to develop and work on long-term goals is a good strategy to develop and strengthen grit. Amy Lyon (Edutopia, 2014) has designed a curriculum to help her students establish long-term goals. A video of how she teaches her fifth-grade students long-term goals is available online (http://www.edutopia.org/research-made-relevant-grit-video).

*Take the Grit Survey*

For those interested in exploring their own grit, Angela Duckworth’s Grit Survey is available online (http://www.sas.upenn.edu/~duckwort/images/12-item%20Grit%20Scale.05312011.pdf).

*I have not failed. I’ve just found 10,000 ways that won’t work.*

~ Thomas A. Edison
Developing growth mindsets

I don’t mind if I mess up on an assignment if I can figure out what I did wrong. When I do that, I build new connections in my brain. When I continue, it’s like I build a highway in my brain.

~Middle school student who participated in Brainology

The belief that intelligence and character strengths are malleable and grow as a result of effort is the essence of a growth mindset. Students are more likely to stick with challenging tasks and assignments when they believe that their effort is a determining factor in their growth. Snipes, Fancsali, and Stoker (2012) noted that a growth mindset is possibly one of the strongest contributors to the development of grit. The most fundamental practice in promoting a growth mindset is acknowledging and praising students for the effort they put into learning—whether academic or any other task—not for ability. A brief mindset assessment is available online (http://community.mindsetworks.com/my-mindset?force=1).

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Brainology (http://www.mindsetworks.com) offers interactive online activities where students learn that the more they use their brain the more it grows. Mari Cay Ricci (2013) in her book Mindsets in the Classroom: Building a Culture of Success and Student Achievement in Schools offers comprehensive practical strategies for both teachers and parents in teaching mindsets.

In the final analysis, though it may seem overwhelming to think about systems change, it will take grit, perseverance, and tenacity to transform our educational systems and practices to ensure that an increasing number of students become successful. However, in my practice I have learned that change begins with me. I encourage you to become grittier and to share your experiences with the youth you encounter in your work.

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References


