Introduction

Why do most individuals make use of only a small percentage of their resources, whereas a few exceptional individuals push themselves to their limits? Why do some individuals accomplish more than others of equal intelligence? One personal quality that is shared by most high achieving and successful people is grit. Grit may be the quality that sets these highly successful individuals apart from everyone else (Duckworth, Peterson, Matthews & Kelly, 2007).

There has been a lot of talk recently about grit and how to develop it within our students. Grit is the quality that enables individuals to work hard and stick to their long-term passions and goals. It makes sense that this would be important for students, both in school and in life. Can one learn to have grit? How do you teach it? These are some of the essential questions that will be addressed in this research brief with the hope that you will gain a deeper understanding of what is meant by "grit," and that you will discover a couple new ways to encourage students to be more "gritty."

According to leading researcher, Angela Duckworth, grit can probably be taught. "Kids may have the wrong beliefs and have misunderstandings about skill development...beliefs that stand in the way of tapping into performance traits." When students struggle with a task, they may believe that they lack the ability to solve the problem and, therefore, give up. It is important for students to understand that it is ok to feel confused when learning something new, and actually, it is expected. We can teach students that making mistakes or taking a long time to complete an assignment is a normal part of learning, not a sign of failure.

Definition of Grit

According to researchers at the University of Pennsylvania, grit is defined as "perseverance and passion for long-term goals." Grit involves working strenuously toward challenges, maintaining effort and interest over years despite failure, adversity, and plateaus in progress. The gritty individual approaches achievement as a marathon; his or her advantage is stamina. While disappointment or boredom may lead most people to change trajectory, the gritty individual stays the course" (Duckworth et al, 2007). We all can identify people in our lives who have big ideas and a lot of enthusiasm for many projects, only to drop them within a few weeks. Individuals with a lot of grit tend to set very long-term objectives and do not lose sight of them, even when they are not getting any positive feedback.

Resilience, as defined by Martin Seligman, a researcher from the University of Pennsylvania and creator of the evidence-based Penn Resiliency Program, is "the ability to appraise situations without distorting them, and thinking about changes that are possible in your life" (Perkins-Gough, 2013). Resilience is related to grit because part of what it means to be gritty is to be resilient when challenges present themselves. There are many other traits one must possess in order to be gritty, which include conscientiousness, self-discipline and perseverance. Having grit means that you choose to invest time and energy in a particular endeavor and give up many other things in order to pursue this passion. Gritty people have deep commitments to which they remain loyal for many years.

Research Supporting the Importance of Grit

So why should we pay so much attention to grit? Duckworth and Seligman (2005, 2007) have demonstrated that grit, perseverance and self-discipline are better predictors of success in college than the SAT or IQ tests. These standardized tests serve an important function, but are limited in their ability to measure important traits such as grit and self-control.
Angela Duckworth and Deborah Perkins-Gough conducted a study at West Point Military Academy in order to look at how well grit would predict who would stay for the entire program. Although West Point has a rigorous admissions process, about 1 in 20 cadets drop out before the first academic year begins (Perkins-Gough, 2013). As part of the study, the cadets each took a short grit questionnaire when they first arrived. This score was actually a better predictor of who would stay than any other measure West Point looked at. There have been similar findings with many other groups, including the National Spelling Bee contestants and first year teachers in really tough schools. When one considers individuals of equal talent, the grittier people do better.

There have been many studies that show the importance of self-discipline in achieving positive outcomes such as academic success, happiness and overall competence (Mischel, Shoda & Rodriguez, 1989; Ayduk et al, 2000; Funder, Block & Block, 1983; Duckworth, 2009). Self-discipline is defined as "the capacity to do what you want to do. It's knowing how to manage your emotions and thoughts and knowing how to plan your behavior in order to reach your goals" (Duckworth, 2009). In 1995, Wolf and Johnson conducted a study which found that self-discipline was the only one among 32 measured personality traits that predicted college GPA better than the SAT did (Duckworth & Seligman, 2005).

In a study by Duckworth and Seligman (2005), highly disciplined adolescents outperformed their peers that were more impulsive on all academic variables, including grades, standardized test scores, admission to a competitive high school and attendance. Self-discipline also predicted which students would improve their grades throughout the year, while IQ scores did not.

The Big Five model has provided a framework for many of the studies on traits that predict success. Personality psychologists, for the most part, agree that the five-factor model encompasses all of the major personality traits and organizes them into a framework. These five factors are conscientiousness, agreeableness, extraversion, emotional stability and openness to new experiences. Relative to the other big five traits, conscientiousness is the most reliable predictor of academic course grades, physical health, longevity, job performance and marital stability (Duckworth, Weir, Tsukayama & Kwok, 2012). Conscientious individuals are more likely to avoid unnecessary interpersonal conflict and to settle conflicts when they occur. These behaviors may explain why conscientiousness predicts how many friends children will have better than intelligence or any other big five trait. In addition, conscientious individuals perform better in school which often leads to better paying jobs, and for some, greater subjective well-being (Duckworth et al, 2012).

Grit Versus Talent

At one time or another, we all have been impressed by an athlete, a student or a musician whom we would label as "talented." Talent, however, is only part of the picture. In his book, Outliers, Malcolm Gladwell talks about the 10,000 hours of practice required to excel at a particular skill. "I believe ability can get you to the top," says coach John Woodin, "but it takes character to keep you there. It's so easy to begin thinking you can just turn it on automatically, without proper preparation. It takes real character to keep working as hard, or even harder once you are there. When you read about an athlete or a team that wins over and over and over, remind yourself that more than ability, they have character" (Carol Dweck, Mindset: The New Psychology of Success).

In terms of academics, if students are just trying to reach the threshold of getting an A, and they also happen to be very talented, they may do their homework or study for a test in just a few minutes. Once they reach a certain level of proficiency, then they stop. They actually work less hard than their peers for whom the work is challenging. If, on the other hand, they are not just trying to reach a certain cut point, but are trying to learn as much as possible by doing as well as they can, then there is no limit to what can be accomplished.

There are a lot of fragile gifted and talented kids who don't know how to fail. They don't know how to struggle, and they don't have a lot of practice with it. "Being gifted is no guarantee of being hardworking or passionate about something. The people who are ambitious and have no limit to how much they want to understand, learn or succeed are both talented and gritty" (Perkins-Gough, 2013). According to Galton (1892) who collected biographical information about highly successful people (judges, statesmen, scientists, etc.), "ability alone did not bring about success in any field. Rather, successful high achievers also possessed zeal and the capacity for hard labor" (Duckworth, Peterson, Matthews & Kelly, 2007).

Encouraging Grit and Character

According to Carol Dweck in Mindset: The New Psychology of Success, "After seven experiments with hundreds of children, we had some of the clearest findings I've ever seen. Praising children's intelligence harms their motivation and it harms their performance. Children love praise, and especially for their intelligence and talent. It really does give them a boost, a special glow - but only for that moment. The minute they hit a snag, their confidence goes out the window and their motivation hits rock bottom. If success means they are smart, then failure means they are dumb. That's the fixed mindset."
Children who have more of a growth mindset tend to be grittier. The attitude that "I can get better if I try harder," most likely results in the development of a tenacious, hardworking person. "In theory, the work that Carol Dweck has done to show that you can change your mindset would also be relevant to changing your grit." Duckworth and her colleagues at University of Pennsylvania are developing an intervention, based on Dweck's work, to look at making students aware of the value of deliberate practice. The intervention requires teachers to tell kids that practice is not easy...that they are going to be confused...frustrated. Teachers explain that when you are learning, you have to make mistakes and do things over and over again which can be boring (Perkins-Gough, 2013).

Tim Elmore recently wrote a blog about building perseverance in students based on the findings that students in Singapore are far more persistent in problem solving than American students. He explains that although we live in a world of speed and convenience (ATMs, high-speed internet access, fast, Instagram), this speed has diminished perseverance and work ethic in our kids. He recommends the following strategies to encourage perseverance in students:

- Talk about the power of attitude and persistence. Singapore teachers repeatedly talk to their students from a young age about attitude and persistence. They underscore how valuable this trait is for success in life.

- Turn the problem into a picture or puzzle. Singapore teaching methods include "model drawing." Students turn math problems into a picture and the graphic helps them solve the problem by engaging both sides of the brain.

- Start with smaller problems they can more easily solve and help them get some quick wins.

- Share the "why" before the "what." We often fail to inspire kids because we don't share the relevance of the problem.

- When possible, place students in communities to work together. Students learn best in communities where they can solve problems in cooperation with peers. They often give up when they feel alone and inferior.

- Make it a game or competition.

- Reward hard work and delayed gratification. What gets rewarded gets repeated. Affirm hard work and actually reward completion in the end.

Research shows that how students conceive their abilities in relation to a task can shape the outcome. Discussing students' strengths in a setting where they feel unsure of themselves sets a positive tone and removes a barrier to success (Pappano, 2013). However, attempting to boost students' self-esteem with words is less effective than asking them to persevere on a challenging task.

**Action Steps for Teachers and Schools**

In order to build character and grit in students, it is essential to also develop a school culture that emphasizes character and grit (Dean, 2014). Many times, a character education program is implemented on top of an existing school culture, but copying and pasting a program is not likely to be successful.

In one school that is successfully teaching grit and character, they use advisory to explicitly teach the important skills and mindset. This teaching is supported by much of what happens outside of the advisory, including "modeling by teachers, the use of a common language about character, and the recognition that all students play a role in character development. In addition, students are given room to challenge authority in the school, set the agenda for school meetings, and engage with social issues beyond the school walls" (Dean, 2014).

One assistant superintendent for curriculum and instruction explained that the administrators in his district firmly believe that character education and positive school climate are the keys to reducing discipline problems and raising student achievement. He researched this topic for two years by reading about Positive Behavioral Interventions and Supports (PBIS) and by reading Ross Green's *Lost at School* and Paul Tough's *How Children Succeed*. He decided to build a period of time into the schedule in the middle schools to address school culture and climate concerns as well as to implement character education and citizenship classes. Topics such as "how to have good conversations, be an active listener, build meaningful relationships, set goals and pursue them, and recognize the consequences of behavior were taught" (Perkins-Gough, 2013). This school was part of a study conducted by Angela Duckworth who found that their character-building program has yielded results at the elementary level, middle school level and even in the ninth grade. In ninth grade, when many students have trouble adjusting to higher demands, retention rates have decreased, discipline problems have fallen and student achievement has risen (Perkins-Gough, 2013).

Another school that has been studied by Duckworth's team has been successful in teaching intellectual virtues through repeated action and practice. One third grade teacher in this school has posters about "Intellectual Aggressiveness" along with examples of their use such as "Use Evidence to Support your Ideas." This teacher says things like, "Talk to your neighbor and let's be intellectually
aggressive about this." He says it is important to have language around these skills which allows him to attach it to their struggles or behaviors that may take them away from being successful. When students in his class misbehave, he interprets this as masking a lack of knowledge. He looks through such behaviors to give students the message that "you can fight through this and you can be successful" (Pappano, 2013).

One high school math teacher described how instead of showing approaches to a geometry problem, he lets students struggle until they uncover the principle themselves. He gets students interested by saying things like, "Let's be curious about this." His students are motivated, not because of the grade, but because they are curious and they truly want to learn. If the question is framed correctly, it spurs something intrinsic inside of them (Pappano, 2013).

In a study of three successful Boston charter schools, researchers concluded that success is derived from a two-part model: (1) establishing a common vocabulary around character strengths and then (2) utilizing the vocabulary in very specific instructional moments. If a student is struggling with an essay, the teacher might say, "Let me show you how to be really gritty." If a student gives up too quickly or lacks the self-confidence to persist in math, the student and teacher can reflect and discuss, "How does that feel? What does it look like? How does it affect me? Together they can make a plan to challenge the idea that the student can't figure out problems or is inclined to give up quickly. If he usually gives up after one try, he can decide that next week he will try three times before giving up, or will commit to getting help after school."

Conclusion

Although there are many interventions and strategies that can be implemented in order to develop grit, it is the quality of interactions and interventions - not the strategies themselves - that matter most. "Human change occurs more readily in the context of caring and trusting relationships" (Pappano, 2013). We must remember the importance of providing social emotional support to our students. "If public schools start to devalue social workers, counselors and school psychologists - if they don't understand that these people are a key part of the learning situation for kids - then we are in big trouble." Schools, especially those facing major challenges, should not be afraid to look into partnerships with research universities. The more relationships schools can build with outside resources, the better off they are going to be (Perking-Gough, 2013).

Schools should devote more - not less - intentional effort to developing grit in students. Teaching grit means helping students understand how to set and achieve their goals. When we teach students how to regulate their attention, emotions and behavior, we empower them to pursue goals that are most important to them (Duckworth, 2009), which sets the stage for helping each student reach his or her full potential.

References


Jennifer Bashant, Ph.D., is a faculty member at the Capital Area School Development Association, University at Albany’s School of Education.