

This article should not be reprinted for inclusion in any publication for sale without author's explicit permission. Anyone may view, reproduce or store copy of this article for personal, non-commercial use as allowed by the "Fair Use" limitations (sections 107 and 108) of the U.S. Copyright law. For any other use and for reprints, contact article's author(s) who may impose usage fee.. See also [electronic version copyright clearance](#)
CURRENT VERSION COPYRIGHT © MMXVII AUTHOR & ACADEMIC EXCHANGE QUARTERLY

Preparing Students to Confront Life's Unknowns

Richard F. Bowman, Winona State University

Bowman, Ph.D. is Professor Emeritus of Clinical Practice at Winona State University

Abstract

Research suggests that GRIT is the engine of human accomplishment. The paradox of GRIT is that it cannot be pursued directly. What cannot be left to chance in preparing students to confront life's unknowns is inspiring in students the self-governing dispositions which result in contextual expressions of GRIT. One of the most inspirational gifts that an educator can share with one's students is the very heart of GRIT: Retain faith that you can prevail in the end, while still exercising the discipline required to confront the brutal facts in your environment.

Introduction

Navigating a globally interconnected, interdependent world will require graduates who are adaptive, forever questioning, culturally tolerant, historically literate, technologically adept, independent of thought, capable of analysis and prose, self-reliant, ethical, and respectful of community (Saario, 1993). In a morally-interdependent world, in which everyone's behavior potentially affects everyone else, students must learn how to establish trust in their relationships by cultivating a consciousness for reaching out to others with integrity, tolerance, humility, compassion, and empathy. In the everydayness of instructional events, students must master a set of sustainable capabilities: speaking, listening, writing, connecting, and leading (Bowman, 2015). What cannot be left to chance in preparing students to confront life's unknowns is inspiring in students the self-governing dispositions which result in contextual expressions of GRIT: "The engine of human accomplishment" (Stoltz, 2015, p. 49).

The purpose of this paper is to consider four questions related to the construct of GRIT: What are the distinctive characteristics of GRIT in diverse settings? Can GRIT be taught directly in instructional settings? Can educators inspire in students the self-governing dispositions which result in contextual expressions of GRIT? Is GRIT the engine of human accomplishment?

Contextual Expression of GRIT: Never, Ever Give Up

Lost on a Mountain in Maine (Fendler & Egan, 1992) recounts the ordeal of a twelve-year-old child lost on Maine's Mount Katahdin for nine days. In July, 1939, Donn Fendler became separated from his hiking party in the fog and rain on Maine's highest mountain. During the next several days, he encountered black bears, survived a tumble down an embankment, lost his jeans and shoes, and endured countless mosquito bites. Inspired by his Boy Scout training, he survived by drinking from a stream and eating wild berries. On the day that the disoriented young boy was found, he stumbled upon a hunting camp thirty-five miles away. Throughout his harrowing journey, Donn exhibited many of the distinctive characteristics of GRIT: "The wear and tear factor" of *robustness* (Stoltz, 2015, p. 52). During his mountainous trek, he persistently exhibited *courage*, which "is directly proportional to your level of grit" (Perlis, 2013, p. 3). As Donn encountered a series of unforeseen surprises and shocks, his behavior also radiated another of the core components of GRIT, *resilience*---a belief that one can influence one's surroundings and the outcome of events by reappraising situations and regulating emotions (Zolli & Healy, 2013). Inspiration elicits belief. In teaching and learning, inspiration is a powerful, self-sustaining force which calls forth students' best efforts and creative thinking. *Lost on a Mountain in Maine* is a classic story that continues to inspire grade school students across the nation by allowing them to believe that they, too, could survive a perilous adventure with a little bit of luck and by never, ever giving up.

GRIT: The Result of an Ongoing Process of Challenge, Adaptation, and Learning

In their groundbreaking study of how era, values, and defining moments shape leaders, Bennis and Thomas (2002) concluded that there is one sentence in their research findings that should be swiped with a yellow highlighter: “To the extent that any single factor determines success, that quality is adaptation capacity” (p. 91). Adaptation capacity is a self-governing leadership disposition that characteristically leads to success. The ability to understand context and seize opportunities is a defining characteristic of adaptive capacity. Lost on the highest mountain in Maine, Donn Fendler’s ability to grasp context mirrored *mindfulness*, a state of being in which an individual is focused not only on the moment but also what is happening to oneself (Baldoni, 2015). With a heightened awareness of oneself, Donn sensed his inner voice and paid attention to it: What am I refusing to face? How have I changed? What have I learned? (Whyte, 2003) The ongoing process of challenge, adaptation, and learning resides at the very heart of GRIT (Bennis and Thomas).

Bennis and Thomas’ (2002) research findings suggested that while individuals “with ample adaptive capacity may struggle in the crucibles that they encounter, they don’t become stuck in or defined by them” (93). Crucibles are sources of awareness and self-understanding central to connecting with others. Ultimately, crucibles function as experiences that force us to decide who we are and what we are capable of. *Lost on a Mountain in Maine* was a transformative experience in which a child could have emerged either hopelessly broken or powerfully emboldened to re-connect with his family and friends in celebrating life. Donn’s self-governing disposition to re-connect with family members was an expression of GRIT.

The Essence of GRIT at Play

While our family was staying at a resort in Wisconsin Dells, Wisconsin, this past summer, we encountered an indoor arcade featuring a variety of recreational climbing walls. Metaphorically, the climbing walls served as a reminder that everyone has his or her own walls to climb in life, including disappointments, regrets, countless setbacks, failures, and even end-of-life crises. It is one’s willingness to climb those walls coupled with the ability to find ways to do so that constitutes the essence of GRIT. Just as taste in art, music, architecture, and dress has many components, one of the key components of GRIT is *perseverance*. Despite numerous aborted attempts, the tactical approaches adopted by the young climbers at the Dells tended not to be viewed as something embarrassing or shameful but rather as sources of valuable information that would eventually lead to a successful ascent. In scaling the forty-foot climbing walls, what the young climbers, often as young as six or seven, demonstrated to their alternately anxious and proud parents was that whether or not GRIT can be taught directly, it can be inspired in a supportive environment.

Creating Supportive Environments that Lead to Learning and Growth

Whether in the classroom or on a climbing wall, parents and educators create a supportive environment by inspiring children to believe that “you must everyday go to someplace you have not been before, to the point of no return” (Seidman, 2007, p. 293). In a supportive environment, learners are inspired to believe that every challenge accepted in life leads to a greater ability to confront the next challenge. In Dweck’s (2008) *Mindset: the New Psychology of Success*, the author argues reductively that individuals with a growth mindset believe that they can improve themselves and will tend to take chances leading to learning and growth. Thus, “everything will be alright in the end, and if it is not alright, it is not the end” (Perlis, 2103).

The Paradox of GRIT

The paradox of GRIT is that it cannot be pursued directly. The philosopher Henry Sidgwick spoke about the Paradox of Hedonism, the idea that if one pursues happiness directly it tends to elude you (Seidman, 2007). Whether on a climbing wall or in daily life, one cannot achieve happiness by pursuing it directly. But if individuals pursue values such as trust, honesty, integrity, perseverance, and service in pursuit of something greater than oneself, happiness should result. Tolerance in a school setting, for instance, cannot be pursued directly. But if students are inspired to “imagine and enjoy the *otherness* of others, and seeing and delighting in its promise,” tolerance should result (Kennedy, 2009, p. 32). Self-esteem in an instructional setting cannot be taught directly. But if students are inspired to approach every assignment and activity with a heightened awareness of the impact of their work, self-esteem should result (Seidman, 2007). While GRIT cannot be taught directly, if students are inspired to pursue the right goals in the right way, to respond constructively in the face of adversity, to relentlessly work at whatever one chooses, and to be open to self-reflection, dispositional expressions of GRIT will likely result (Stoltz, 2015). In Stoltz’s (2015) worldwide research, assessing the resilience and GRIT of more than one million individuals, respondents were asked, “What is the greatest setback you have ever faced, and how did you handle it?” Those who

scored the highest on the GRIT scale had “*the toughest time even recalling any adversities or setbacks.*” Strikingly, those who recalled adversities the best “scored the *lowest*” (Stoltz, 2015, p. 54). Again, this is reflective of Bennis and Thomas’ research findings that suggested that while individuals “with ample adaptive capacity may struggle in the crucibles that they encounter, they don’t become stuck in or defined by them” (93). Because GRIT has multiple correlates, with nuances and anomalies, the intensity of expressions in workplace and instructional settings will likely vary at any given point (Perlis, 2013).

Video Games: Experiencing a Sense of Competence, Control, and Personal Causation

For school-age youth, video games possess an unmistakable ethos or ambience. At the cosmetic level, video games assault the senses with an endless chain of cascading lights, thunderous sounds, and magical figures. The addictiveness of video games for many youth, however, suggests that the source of the games’ appeal lies well beyond either extrinsic or means-ends motivational supports (Bowman, 1982). In confronting the question of what makes an activity so enjoyable as to be intrinsically rewarding, Csikszentmihlyi and Larson (1980) posit the thesis of a balanced state of interaction: “a flow state.” In that state, individuals find themselves in a wondrous, dynamic experience:

Flow is described as a condition in which one concentrates on the task at hand to the exclusion of other internal or external stimuli. Action and awareness emerge, so that one simply does what is to be done without a critical, dualistic perspective on one’s actions. Goals tend to be clear, means are coordinated to the goals, and feedback to one’s performance is immediate and unambiguous. In such a situation, a person has a strong feeling of control—or personal causation---yet, paradoxically, ego involvement is low or nonexistent, so that one experiences a sense of transcendence of self, sometimes a feeling of union with the environment. The passage of time appears to be distorted: Some events seem to take a disproportionately long time, but, in general hours seem to pass by in minutes. (p. 64)

Video gamesmanship involves conscious, deliberate mental and physical activity. In a particularly instructive moment, an educator exclaimed: “Kids don’t play video games; they study them! They enjoy the challenge of learning patterns and synthesizing strategies.” In that sense, video games provide a revealing context involving the interplay of adaptation capacity and expressions of GRIT. Specifically, a combination of factors contribute to the formation of a flow experience for players: an action system in which skills and challenges are progressively balanced, a learning system in which players are shifted into the participant role involving clarity of tasks and goals, immediate and unambiguous feedback, relevant stimuli which can be differentiated from irrelevant stimuli, and choice in the selection and execution of problem-solving strategies. In essence, video games posture an alluring invitation to players of all ages to experience a near intoxicating sense of competence, control, and personal causation.

Productive educators create environments where it is easier for students to exhibit dispositional expressions of GRIT. Duckworth (Geller, 2014) observed that “kids can play video games for hours, and that’s a pretty high cognitive-load activity. But they don’t want to work on their algebra for hours” (p. 17). Although the points of resemblance between video game environments and productive learning environments are not inexhaustible, the similarities are striking: Unambiguous feedback, affirmation of the instructiveness of error, infinite opportunities for self-improvement, active involvement in tasks which are anchored in a high probability of success, freedom from fear of reprisal, ridicule, or rejection, an overarching recognition of the need for individuals to enjoy what experience (Bowman, 1982).

In creating engaging instructional environments, educators are confronted with a series of fundamental questions: Are gritty individuals in both the classroom and the workplace simply able to turn work into play? Or are gritty individuals simply able to do the work anyway? Is there empirical evidence that teaching children to be grittier cannot be done or indeed that it is not beneficial? Rimfeld et al. (2016) argue that “Grit or perseverance could have long-term benefits for children but more research is warranted into intervention and training programs before concluding that such training increases educational achievement and life outcomes” (p. 7). In contrast, in her 1926 dissertation American psychologist Catherine Cox identified the qualities of GRIT which best predicted lifetime achievement: “Persistence of motive and effort, confidence in their abilities, and great strength or force of character” (Daniels, 2016, pp. 195-196).

The Many Faces of GRIT

If one were to ask a parent or educator to define GRIT, many of the images that would likely come to mind would include: Perseverance, persistence, tenacious spirit, courage, conscientiousness, stamina, resilience, robustness, “enduringly motivated,” “make it happen,” “dig in one’s heels in the face of hardship,” “staying power,” “relentlessly work at whatever you choose,” and “what gets you through at work and play.”

Expressions of GRIT are often the *result* of pursuing a set of core values in everything that one does. As President Lincoln watched General Ulysses S. Grant take the battle to the South, he penned, “The great thing about Grant is his perfect coolness and persistency of purpose He is not easily excited He has the grit of a bullfrog Wherever he is, things move” (Shaw, 2006, p. 31). Lincoln sensed the paradox of GRIT; one cannot achieve it directly. GRIT is frequently the result of unrelentingly pursuing something that is morally right. In the battles of Shiloh and Vicksburg, for example, Grant exhibited the self-governing dispositions of an uncommon drive, an unshakable resolve, and a tenacity of spirit which reside at the core of GRIT.

Instructional Practices that Inspire Expressions of GRIT

Based on her teaching experience in inner-city schools, coupled with her research findings at the University of Pennsylvania, Duckworth (Geller, 2014) argued that while talent and intelligence will get one only so far in the classroom, on the playing field, and in the workplace, the key ingredient to success is GRIT. At issue is whether or not there are strategies that educators can draw upon to *inspire* students to demonstrate the characteristics of GRIT in instructional settings. Specifically, are their instructional approaches that support students, for example, in incrementally chipping away at some goal? Duckworth (Geller, 2014) argued that students “who are gritty will doggedly pursue things that they really value. It’s sort of like love: You can’t be in love unless there is something or someone that you’re in love *with*” (p. 15). In the classroom, one’s instructional goals have to be meaningful. In *Lost on a Mountain in Maine*, the meaningful goal for a wandering boy was to reconnect with the love of his family. In ascending the climbing walls in the Wisconsin Dells, the meaningful goal for many of the young climbers was to reap the psychic rewards attending triumphantly ringing the bell at the top of each climbing wall. For video game players, a meaningful goal involves experiencing an exhilarating sense of personal causation.

In instructional settings, whether or not students keep plugging away at a task is often the result of a cost-benefit analysis. When the instructional goal is perceived as too distant, students will tend not to persist. Convincing an underachieving high school sophomore to attend a 7:30 A.M. summer school reading class “to optimize his or her future in the workplace” will likely hinge on whether or not the student believes that the goal is realistic. In contrast, a thoughtful educator might increase the value of the rewards associated with attending summer school classes and decrease the perceived cost by highlighting for the student the connection between enhancing one’s reading skills and one’s potential performance on an upcoming written drivers’ license exam.

Part of inspiring students to put effort into pursuing specific goals is establishing an expectation that success is possible. Recently, a second-grade teacher in a Catholic Elementary School in Ohio encouraged her students to learn more about the United States by inviting students to ask their family members across the country to send picture postcards of interesting places to be shared with the whole class. Initially, there was an audible gulp among several students who said that they “did not know anyone to ask.” With the reassurance of their teacher’s voice, however, several second-grade students began to invite close family members around the country to send engaging postcards. The students’ initial success subsequently evolved into something much larger for one little girl. Megan’s expectation of success led her to begin making requests of family members and military personnel around the globe to share their distinctive postcards. Over the course of a few weeks, Megan’s perseverance, tenacious spirit, and stamina allowed her to acquire more than one hundred fifty colorful post cards to share with her seemingly astonished classmates. Decades earlier, Archbishop Fulton J. Sheen in his nationally broadcast weekly lectures was fond of exclaiming that “if the spark is a light, what must be the flame?” Research has shown that “Grit increases with age and becomes increasingly important when individuals understand what their lifelong goals as well as their interests are” (Rimfeld, Dale, Kovas, & Plomin, 2016, p. 788). The challenge confronting educators is characteristically one of *inspiring* instructional expressions of GRIT as opposed to *igniting* a passion for a single overriding goal across a span of years as evidenced in the work of scientists such as Thomas Edison. It is hard to overstate that point.

The Vital Role of Expectation in Inspiring Expressions of GRIT

Because many students begin working diligently on an assignment or project with an expectation of immediate results, influential educators *inspire* students to appreciate that expert performance in endeavors including music,

acting, chess, ballet, and swimming is acquired gradually through solitary practice of domain-specific tasks that one can master sequentially across hundreds and even thousands of hours (Ericsson, Charness, Feltovich, and Hoffman, 2006). One of the seminal findings from the study of expertise in many domains has been codified as *The Ten-Year Rule* (Chase & Simon, 1973). Briefly, the development of master-level chess performance, for example, demands approximately ten years of practice and study of the game. Relatedly, the time from the beginning of one's career in the composition of classical music, painting, and poetry to the production of a masterwork is also approximately ten years.

Ericsson et al. (1993) found that top-level expert violinists by age 20 had put in an average of more than 10,000 hours of practice, compared to an average of 5,000 hours put in by violinists who were not among the top experts. American novelist, essayist, and playwright Norman Mailer (2003) credited his eventual success as a writer to self-motivated practice: "I think from the time I was seventeen, I had no larger desire in life than to be a writer, and I wrote . . . I learned to write by writing. As I once calculated, I must have written more than a million words before I came to *The Naked and the Dead*" (pp. 13-14.). Moreover, in the domain of sports, including gymnastics, sprinting, and weight lifting, four to five hours of deliberate practice a day over months and years is a prerequisite for attaining expert levels of performance.

In instructional settings, thoughtful educators rely more on inspiration and less on motivation and coercion. Whereas motivation and coercion happen *to* students, inspiration happens *in* them. Sharing inspirational stories regarding the work ethic of world-class writers, artists, musicians, and athletes reinforces the notion for students that the payoff from one's efforts may not be obvious for a long, long time. Again, as Duckworth's (Geller, 2014) research findings suggested, while talent and intelligence will get one only so far in the classroom, on the playing field, and in the workplace, the key ingredient to success is GRIT.

Conclusion

Research suggests that GRIT is the engine of human accomplishment in the classroom, on the playing field, on the battlefield, and in the workplace. The paradox of GRIT is that it cannot be pursued directly. While it cannot be taught directly, GRIT can be *inspired* in students, for example, by sharing the stories of heroic figures who achieved the astonishing in life by knowing their personal "why" and living it courageously: Abraham Lincoln, Mohandas Gandhi, Nelson Mandela, Mother Teresa, Winston Churchill, Ulysses S. Grant, and Admiral Jim Stockdale. Inspiration elicits belief. In the classroom, an atmosphere of inspiration serves as a "call to significance" by eliciting in students the self-governing dispositions which result in expressions of GRIT (Seidman, 2007, 287).

In preparing today's students to confront the unknowable in life, the Stockdale Paradox is an especially inspirational narrative. Admiral Jim Stockdale was the highest-ranking United States military officer in the "Hanoi Hilton" prisoner-of-war camp during the height of the Vietnam War. During his eight-year imprisonment, he was tortured more than twenty times, living out the war without any prisoner's rights, no release date, and no certainty that he would even survive to see his family again (Collins 2001). When Jim Collins (2001) asked, "Who didn't make it out?" Admiral Stockdale replied, 'Oh, that's easy, the optimists.' 'Oh, they were the ones who said, we're going to be out by Christmas. And Christmas would come, and Christmas would go. Then they'd say, were going to be out by Easter. And Easter would come, and Easter would go. And then Thanksgiving, then it would be Christmas again. And they died of a broken heart' (Collins, 2001, p. 85). In the midst of deprivation and torture, Admiral Stockdale sensed piercingly that unchecked optimism is a leadership weakness which can lead to disaster.

A Last Word: The Stockdale Paradox

Among the most lasting gifts that an educator can share inspirationally with one's students is: "Retain faith that you can prevail in the end, while still exercising the discipline required to confront the brutal facts in your environment." Doing so is the ultimate expression of GRIT.

References

- Alexander, C., & Hurley, F. (1998). *The endurance: Shackleton's legendary Antarctic expedition*. New York: Knopf Doubleday Publishing Group.
- Baldoni, J. (2015). Mindful leaders have moxie. *Leader to Leader*, 75, 31-36.
- Bennis, W., & Thomas, R. (2002). *Geeks & Geezers: how era, values, and defining moments shape leaders*. Boston: Harvard Business School Press.

- Bowman, R. (1982). A "Pac-Man" theory of motivation: tactical implications for classroom instruction. *Educational Technology*, 22(9), 14-16.
- Bowman, R. (2015). Learning in tomorrow's classrooms. *The Clearing House*, 88(2), 39-44.
- Chase, W. & Simon, H. (1973). The mind's eye in chess. In W. G. Chase (Ed.), *Visual information Processing* (pp. 215-281). New York: Academic Press.
- Collins, J. (2001). *Good to great*. New York: HarperCollins Publishers.
- Csikszentmihalyi, M., & Larson, R. (1980). Intrinsic rewards in school crime. In M. Verble (Ed.), *Dealing in discipline*. Omaha: University of Mid-America.
- Daniels, P. (2016). *Mind*. Washington D. C.: National Geographic.
- Dweck, C. (2008). *Mindset: the new psychology of success*. New York: Ballantine Books.
- Ericsson, K., Krampe, R., & Tesch-Romer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100(3), 363-406.
- Ericsson, K., Charness, N., Feltovich, P., & Hoffman, R. (2006). *The Cambridge handbook of expertise and expert performance*. New York: Cambridge University Press.
- Fendler, D., & Egan, J. (1992). *Lost on a mountain in Maine*. New York: HarperCollins.
- Geller, L. (2014). Angela Duckworth's gritty view of success. *Strategy + Business*, 74, 15-17.
- Kennedy, D. (2009). How to put our differences to work. *Leader to Leader*, 52, 49-55.
- Mailer, N. (2003). *The spooky art: Some thoughts on writing*. New York: Random House.
- Perlis, M. (2013). *5 characteristics of grit---how many do you have?* Retrieved October 25, 2016, from <http://www.forbes.com/sites/margaretperlis/2013/10/29/5-characteristics-of-grit-what-it-is-why-you-need-it-and-do-you-have-it/#20052ea71f76>
- Rimfeld, K., Dale, P., Kovas, Y., & Plomin, R. (2016). True grit and genetics: Predicting academic achievement from personality. *Journal of Personality and Social Psychology*, 111(5), 780-789.
- Saario. (1993). *An American imperative: Higher expectations for higher education*. Racine, WI: The Johnson Foundation.
- Seidman, D. (2007). *How: why how we do anything means everything*. Hoboken, NJ: John Wiley & Sons.
- Shaw, R. (2006). Leadership lessons from the life of Ulysses S. Grant. *Leader to Leader*, 42, 29-35.
- Stoltz, P. (2015.) Leadership GRIT: What new research reveals. *Leader to Leader*, 78, 49-55.
- Whyte, D. (2003). *Everything is waiting for you*. Langley, WA: Many Rivers Press.
- Zolli, A., & Healy, A. (2013). *Resilience: why things bounce back*. New York: Simon & Shuster.