

What Does It Mean to Have ‘Grit’ in the Classroom?

By learning how to persevere and change course, students learn how to push themselves.

[Andrew McGill](#)

Nestled within the New-Age-y sounding concept of “noncognitive factors” are fairly concrete examples of what parents and educators should and shouldn’t do to prepare students for the rigors of college and their careers. Gleaned from research into brain development and human behavior, a toolkit is emerging on how to best respond to and encourage students’ grit, persistence, and the ability to learn from one’s mistakes.

If done right, the use of these concepts could change the classroom in significant ways. Students could see far fewer quizzes and tests. Teachers would follow students’ progress at a much more customized level to quickly identify where they are struggling, offering aid that is better targeted. Short tutorials designed to boost motivation and resilience could accompany the students’ math and reading lessons.

But, before exploring what classrooms that are focused on noncognitive factors might look like, how about a definition for the term itself?

“If we think of noncognitive factors as all of the things that are not just content knowledge and academic skills that go into academic performance, then really we’re talking about psychological factors, emotional factors, social factors” as well other aspects that determine how a student learns, explained Camille Farrington, a leading scholar on noncognitive factors who’s based at the University of Chicago’s Consortium on Chicago School Research. “A teacher who knows that all of that stuff is contributing to a

young person’s ability to pay attention, to get involved, to get engaged, and think about what they are learning—that’s what we’re talking about [when we talk about noncognitive factors](#).”

To take a page from Julia Child’s editor, these factors can be described as the art of learning—the technique and finesse a student uses when handling the challenges of receiving new, complex information.

Teachers and parents can play an important role in helping students recognize that learning is not just about the end goal, but a process that is valuable in its own right, too. *The Atlantic*’s James Hamblin highlights one crucial lever that puts that [self-awareness into motion](#):

At whatever age smart people develop the idea that they are smart, they also tend to develop vulnerability around relinquishing that label. So the difference between telling a kid ‘You did a great job’ and ‘You are smart’ isn’t subtle.

Rewarding learners on effort rather than accomplishment stimulates a host of cognitive signals that can have the effect of strengthening their resolve. Tell a student she’s smart, and you run the risk of crimping her ambition to tackle more challenging tasks down the road; laud her for the time and energy she expended, and the link between effort and positive outcomes grows stronger. “To be successful, students must choose to learn and persist when learning is challenging,” said Dave Paunesku, the cofounder of a research lab at Stanford University that’s putting into practice the research on noncognitive qualities like persistence and learning from failure, at a seminar for education journalists last year.

Rewarding a child for her smarts can sometimes result in a counterproductive attitude researchers refer to as a “fixed mindset.” Studies show that having a fixed mindset—believing that there’s such a thing as being “no good at math,” for example—can block students’ faith that they can learn. If a concept isn’t immediately understood, the student with a

fixed mindset essentially resists applying the new efforts required to comprehend the material.

One such study measured the brain activity of learners with a fixed mindset versus those with its opposite: the “growth mindset”—the belief that challenging concepts can be learned over time. Participants wore an EEG cap so that researchers could study their brain activity when they were asked trivia questions. Both types of learners’ brains were equally active when they were told whether they gave the right or wrong answers. However, the researchers found that growth mindset learners displayed more brain activity when they were given the correct answer. The fixed mindset participants “tuned out,” as [a Stanford University summary of the experiment puts it](#), when they were confronted with an opportunity to learn from their mistakes.

In another experiment, researchers issued a test with difficult questions. The researchers then told all the participants they performed poorly on the test, and gave them the option of reviewing the results of participants who did well and those who scored poorly. The growth mindset participants opted for the higher-scoring assessments, while the fixed mindset group gravitated toward the scores that were lower than their own, suggesting that they wanted to feel better about their own lackluster performances.

Other studies point to students improving from a C to C+ in math the more they demonstrated a growth mindset compared to similar students with fixed mindsets. One experiment taught a set of students that the brain is malleable, and that the more the brain is exercised, the stronger the neural links become—a key component to boosting smarts. Across the school year, that short lesson made the difference between a high C average and a low C average in math compared to students not exposed to the tutorial. Researchers say these and similar experiments make the case that classrooms should change to teach in ways that help students develop positive mindsets.

Farrington, the University of Chicago researcher, said student grades should be based more on what they know at the end of the course rather than the interim tests and quizzes that comprise a large percentage of their overall grades. She would like to see more schools assign students multi-month projects where students can learn from their mistakes without compromising their overall grades.

“I am a big fan of feedback, detailed feedback, and early feedback. A grade is not necessarily that helpful in terms of early feedback because all it tells you is where you fail in terms of the expectation,” Farrington said. “It doesn’t necessarily tell you what you need to do, or what part of your work needs to improve.”

In fact, a growing number of education researchers say low early grades shake the confidence of students who are at risk of giving up. The researchers also contend that the low grades punish students who require more time to learn new content because their overall grade average doesn’t reflect the knowledge they’ve actually acquired by the end.

That critique on grades fits into a larger criticism of how schools are structured. Some schools that are adopting these techniques are attempting to foster more collaboration among single-subject teachers so that subjects are interrelated rather than what they tend to look like now: hermit kingdoms of content. Another effort gaining traction is better record-keeping of where students are falling behind within a specific subject. “A really common thing is that a student will fail a semester, then is asked to repeat the entire semester when they might have mastered a big chunk of the work,” Farrington said. “We don’t keep track of what they’ve actually done or haven’t learned. We say, ‘Hey just start it over, and try and pass the class.’”

The body of research on noncognitive factors [has its detractors](#). Some argue the research tries to explain away the effects of poverty or the systemic injustices that can disproportionately affect black, Latino, and low-income students. Other critics deride the research community for proffering

school-reform nostrums, turning attention away from efforts like equitable school funding.

Journalists who cover this field often hear those criticisms. Katrina Schwartz, a reporter at KQED in San Francisco, said in an interview that teachers gripe about how some schools buy into the “narrative of grit” at the expense of examining student experiences outside the classroom. “We’re going to say the girl who turns in her homework every day is super gritty, because she is persisting through this boring homework, and she is going to do well in school,” Schwartz cited as an example. Meanwhile, some educators don’t recognize the grit of a student “who had a lot of challenges outside of the classroom, [who] is often demonstrating a lot of grit in terms of even getting to school or doing anything connected to their academics when they’re trying to help their family or take care of their siblings,” Schwartz said.

Evie Blad, a reporter at *Education Week* who covers this field, is also mindful of the grit narrative’s critics. “If you go to a high-poverty school, and they are doing nothing to acknowledge or remediate some of the systemic problems that maybe are affecting their students, they’re sitting in classrooms drilling them on grit, then that’s probably something that the [reporter would] want to pick up on in a story.”

In some cases, schools may just miss the point of grit. Schwartz said that some teachers or school leaders view grit as conformity. “Grit means you turn in your homework, you take these tests, you fill out these work sheets,” Schwartz said. “You do exactly how I tell you to do it and you sit still while you’re doing it.” And much of the lessons learned from concepts like grit and perseverance require significant student buy-in.

The scholars on grit, persistence, and mindsets are aware of the pushback. “We’re terrified as a field,” David Yeager, a researcher at Stanford and University of Texas at Austin who focuses on academic mindsets, [said at last year’s journalism conference](#). He acknowledged the risk of the research

being overhyped and told journalists that he and his colleagues are policing their own studies against misuse. He recently [published a paper](#) with Angela Duckworth, the University of Pennsylvania scholar most associated with grit research, that warned against linking measurements of grit to teacher evaluations.

“Mindset interventions are not a replacement for addressing root problems in schools or society, such as poor teaching or the widespread and brutal effects of poverty and bias,” Yeager and two of his colleagues [wrote last year](#). “Children will always need safety, security, and adequate resources at home and in school.”

This post appears courtesy of the [Education Writers Association](#).