



7

FEBRUARY: A GOAL WITHOUT A PLAN IS JUST A WISH

Every worthwhile accomplishment, big or little, has its stages of drudgery and triumph: a beginning, a struggle, and a victory.

— Mahatma Gandhi

OBJECTIVES

- ✓ Understand how the personal quality of grit influences mastery.
- ✓ Guide students to research real-world examples of grit.
- ✓ Distinguish between performance goals and learning goals.
- ✓ Help students develop performance goals and learning goals.

THE MAGIC OF MINDSET

Aubrey Steinbrink is a sixth-grade language arts teacher at Spring Garden Elementary in the Dallas/Fort Worth area. When she stumbled on the concept of growth mindset, she knew immediately that it was going to be a game changer.

Steinbrink discovered growth mindset at the perfect time. The end of the 2012–2013 school year was fast approaching, and although her group of fourth graders—the grade level she taught at the time—had done well on their state assessments, she felt that they hadn't yet developed the ability to persevere, challenge themselves, or go beyond the status quo. In short, she felt as if she had let them down. But, as she said, "the Universe heard my concern and granted me another year with them as their fifth-grade teacher."⁵⁹

Then she went about turning her classroom into a growth mindset zone. She took great care to organize her classroom to reflect the ethos of the growth mindset. She was purposeful with her decor choices. She created a plan for daily bell work that included songs, video clips, and picture books that echoed the growth-mindset messages she desperately wanted her students to absorb.

It wasn't long before her commitment to sharing the principles of the growth mindset with students started to manifest in meaningful change. She began to hear the growth-mindset messages she had been promoting inside her classroom in the hallways, cafeteria, and around the school. She saw more teamwork and collaboration and emphasis on the value of effort from her students all around the school. It seemed like the growth mindset was taking hold, but her biggest challenge was yet to come. Steinbrink recounts working with a group of students facing a difficult challenge: they had to retake a state exam they had previously failed before they would be allowed to move to the next grade.

Steinbrink said that these students believed "in their core" that they were stupid, and no amount of motivational pep talks was going to change that. So she began teaching them the science of neuroplasticity. She taught them the brain is like a muscle that can grow; she taught them about neurons and dendrite connections. The students watched video clips about the brain and even role-played making brain connections with yarn.

Sure enough, when the state scores came back a few weeks later, Steinbrink's formerly skeptical students realized not only could they pass the daunting test but they had managed to close some significant learning gaps in the process.

Steinbrink again moved with the same group of students to sixth grade, where she continues to incorporate growth mindset into her class every day. She begins the year by introducing the science of brain development, acquainting the students with how their brains learn and store new information. Steinbrink loves to show students video clips that illustrate growth mindset in action. She shows a clip, and then asks students to draw out the example of growth mindset and connect it to their own lives. She brings in team-building exercises and brain teasers, and is all about getting her students out of their comfort zones. Perhaps the most important part of her growth mindset training is helping students set goals.

Her students set daily goals, weekly goals, unit goals, and yearly goals. She's constantly challenging them to find new strategies to solve problems and strengthen their areas of weakness. Her students immerse themselves in reflecting on learning by examining their own formative assessment data and strategizing on how they can improve.

Steinbrink has had an overwhelmingly positive response from her students to her growth-mindset instruction. She'll often overhear students talking to one another with growth-mindset messages like "Give it a try" and "What could it hurt?" She sees the students forging connections with one another because together in her class they're exposing their vulnerabilities and trying new things. Steinbrink says that growth mindset has leveled the playing field for her students, in a sense, because they finally realize that intelligence is the result of a process, not a gift of genetics.

Steinbrink is the perfect example of how teachers can foster growth mindset in their students. She talks to them about trying to juggle teaching along with the extra work of earning her master's degree, she tells them stories about training hard for the 5Ks she loves to run, and she openly shares her personal struggles and successes to show students how a growth mindset sticks with and supports a person in every facet of life.

⁵⁹ I see my students setting goals, going further than they expected, and not letting setbacks finish them," said Steinbrink. "They are motivated, happy, and goal-oriented, and I am proud to be their teacher."⁶⁰

Here are Ms. Steinbrink's favorite growth-mindset resources:

BOOKS

- The Miraculous Journey of Edward Tulane*, by Kate DiCamillo
- Freak the Mighty*, by Rodman Philbrick
- Holes*, by Louis Sachar
- Maniac Magee*, by Jerry Spinelli
- The Iliad*, by Homer (Paris and his brother)
- Matilda*, by Roald Dahl
- Boy*, by Roald Dahl
- Marshfield Dreams: When I Was a Kid*, by Ralph Fletcher
- I Can't Accept Not Trying: Michael Jordan on the Pursuit of Excellence*, by Michael Jordan

SONGS

- Songs from *Rent*
- "Imagine," by John Lennon
- "Human," by Christina Perri
- "Conqueror," by the cast of *Empire*
- "Titanium," by Madilyn Bailey
- "Try Everything," by Shakira
- "Eyes Open," by Taylor Swift
- "Fight Song," by Rachel Platten
- "Lessons Learned," by Carrie Underwood

VIDEO CLIPS

- "Failure" (Michael Jordan Nike commercial)
- The Pursuit of Happiness* (job interview clip)
- Katy Perry: Part of Me* ("Never Give Up" clip)
- Grit: The Power of Passion and Perseverance* (TED Talk by Angela Lee Duckworth)
- "23 vs 29" (Michael Jordan Gatorade commercial)
- Charlie Brown* (any episode)

PICTURE BOOKS

- Wilma Unlimited*, by Kathleen Krull
- Stand Tall, Molly Lou Melon*, by Patty Lovell
- Malala Yousafzai*, by Karen Leggett Abouraya
- The Invisible Boy*, by Patrice Barton
- Thank You, Mr. Falker*, by Patricia Polacco
- Oh, the Places You'll Go*, by Dr. Seuss
- Fox*, by Margaret Wild and Ron Brooks

POETRY

- "Never Enough," by Marina Lang
- "Believe," by Tera Lee Jubinville
- "Perseverance," by Pattra Shuwaswat
- "Champion," by Justin Sorenson
- "Courage," by Wish Belkin

GETTING GRITTY

As we learned from Ms. Steinbrink's story, goal setting is a powerful part of using the growth mindset to overcome challenges. Without a concrete idea of what you want and a vision of how you're going to get there, it's easy to slip back into the fixed mindset. The concept of grit is often interconnected with the incremental theory of growth mindset. First, let's take a look at what grit means, and then discuss goal-setting techniques to promote grit among your students.

In his book *Outliers*, Malcolm Gladwell writes about what he calls the "10,000 Hour Rule."⁶¹ Gladwell cites a research study by the psychologist K. Anders Ericsson, who observed and compared violin students at the esteemed Academy of Music in Berlin, Germany, a school for music students who are considered the best of the best. Ericsson determined that the difference between students who had the potential to be world-class musicians and those who were, by comparison, just good was the amount of dedicated practice each student had completed. Ericsson calculated the best violinists had racked up ten thousand hours of practice by the

age of twenty, while the "just good" students had clocked only eight thousand hours of practice. He then studied pianists with the same result. Ericsson just couldn't find evidence of the mythological "natural"—no student considered at the top of his or her class got there without putting in the ten thousand hours, and no student who had put in the ten thousand hours was considered just okay.

Angela Duckworth, a former middle school and high school math teacher, current professor of psychology at the University of Pennsylvania, and MacArthur Fellow, who has extensively researched the quality of grit—which she defines as "perseverance and passion for long-term goals"—concur that the kind of deliberate practice Gladwell refers to with the "10,000 Hour Rule" is what leads to success. Duckworth recently published a paper with Ericsson, "Deliberate Practice Success: Why Grittier Competitors Triumph at the National Spelling Bee,"⁶² showing the amount of time students spent engaging in deliberate practice (e.g., time dedicated to individual, focused study and memorization, particularly on challenging aspects that go slightly beyond the scope of current ability) in preparation for the National Spelling Bee was the best indicator of success. The students rated this deliberate practice as less enjoyable than other styles of practice like mock bees and spelling with friends or parents, but nevertheless spent tremendous amounts of time engaged in it. Why? According to Duckworth, that's the grit.

In his book *Peak*, Ericsson argues that people have the ability to create their own potential through deliberate practice, and it's false to believe that we have predetermined potential for building skill or developing talent in certain areas.⁶³ According to Ericsson, people should stop believing that there's a ceiling on their potential, and instead view it as something that can be continually developed with learning and practice.

The concept of deliberate practice can be applied on a smaller scale than the 10,000 Hour Rule implies. Anyone can use the concept of dedicated practice to master smaller tasks like learning to juggle, writing a joke, or solving quadratic equations. In a recent interview on the *Freakonomics* podcast, Ericsson said that his graduate students at Florida State University do a boiled-down version of the ten thousand hours, instead spending ten hours engaged in deliberate practice trying to improve or master skills like typing or doing a handstand.⁶⁴

American teachers probably are not in a position to personally train children to become masters in a given field, but what we're capable of is instilling in students

the belief that with enough deliberate practice and dedication to a task, they can make incredible strides. This can be done on a micro level in the classroom, where we have daily opportunities to show students that deliberate practice and dedication to learning challenges can result in improvement.

SELLING GRIT

The idea that large amounts of deliberate practice, and not natural ability, leads to success is a valuable one for students developing a growth mindset. When students see how deliberate practice (and a healthy dose of failure) is almost always required to rise to the top of any field, the idea of growth mindset can better be cemented as a viable strategy for success. It shows, unequivocally, practice and effort, not genetics, lead to success.

Get kids thinking about how practice, training, and toil lead to great accomplishment by having them market "Grit" with a commercial featuring a famous person who has demonstrated grit. To begin, show students the Nike commercial "Failure" featuring Michael Jordan. (It's available to view on YouTube.) The commercial features a voice-over of Jordan saying:

"I've missed more than nine thousand shots in my career. I've lost more than three hundred games. Twenty-six 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."

After watching the commercial, have students choose a subject and create a commercial illustrating the concept of perseverance and grit. First, have the students choose a famous person who is, or was at some point, at the top of their field. They may be tempted to choose fresh-faced actors starring in the Disney special *du jour*, but try to guide them to choose true masters in crafts. Then, have the students research that person and create a commercial for grit. The commercial will include things like how long the person has been working toward success, years of education he or she needed to complete, various setbacks along the way, and how the person continues to improve. Here are some well-known examples of "gritty" people—people who worked incredibly hard to get to the top of their fields.

- J. K. Rowling, author
- Michael Jordan, basketball player
- Kobe Bryant, basketball player
- Wolfgang Amadeus Mozart, composer
- Will Smith, actor
- Meryl Streep, actress
- Pablo Picasso, artist
- Walt Disney, Disney founder
- Henry Ford, Ford manufacturer
- Soichiro Honda, Honda manufacturer
- Bill Gates, Microsoft founder
- Harland David Sanders (a.k.a. "Colonel Sanders"), KFC founder
- Wright Brothers, aviation pioneers
- Stevie Wonder, singer
- Jim Carrey, actor
- Steven Spielberg, director
- Thomas Edison, inventor
- Oprah Winfrey, media mogul
- Abraham Lincoln, US president
- Bill Joy, computer scientist
- Tyler Perry, actor/director
- Tim Westergren, founder of Pandora

Students can create the video by using any number of devices, software, or apps. Some recommendations include Green Screen by Do Ink, iMovie, Stop Motion

Studio, Adobe Voice, iPhone/iPad camera, video camera, PicPlayPost, Magisto, Instagram Video (up to sixty seconds), and Andromedia Video Editor.

Some mistakenly believe that the people on this list are so naturally talented in their field that their path to success was an easy one. In fact, society likes to relish in the notion that some people are just born for greatness. But as students research and start uncovering the truth about how much sweat and toil, how many hours, how many failures go into creating a master, they'll understand the dogged dedication to a long-term goal required to achieve greatness. The message we want students to walk away with is that nothing really comes easy for anyone. Even if someone has a natural affinity in a given area, that person must dedicate thousands of hours to the pursuit to be considered truly great. We hope that this will leave students with a lasting sense that achievement is born of hard work, not mythical natural abilities that we're graced with at birth. Once they have this information, they can get down to the business of achieving goals with grit and perseverance.

PERFORMANCE GOALS VERSUS LEARNING GOALS

In *Drive: The Surprising Truth about What Motivates Us*, Daniel Pink writes about differences in the mindsets Dweck describes: "The two self-theories lead down two very different paths — one that heads toward mastery and one that doesn't. For instance, consider goals. Dweck says they come in two varieties — performance goals and learning goals. Getting an A in French class is a performance goal. Being able to speak French is a learning goal."⁵⁵

What kinds of goals do the masters set for themselves? According to Dweck, people set both performance and learning goals for themselves, but only learning goals lead to mastery. Dweck conducted a study with junior high students, who were learning new material in a science class. At the beginning of the study, students created goals related to learning the new material. The researchers categorized the student-generated goals as either performance goals (a goal designed to make the student look smart and capable) or learning goals (a goal designed to help the student learn, regardless of performance).

Dweck noted in *Self-Theories: Their Role in Motivation, Personality, and Development*, that, in this study, the students who went the extra mile to engage in deep learning and challenging tasks were the students who had been identified as those who primarily set learning goals.⁶⁶

Based on pretests, researchers determined that both categories of students, those considered performance-oriented and those considered learning-oriented, were approaching the new material with roughly the same amount of mathematical and numerical reasoning skill, and both groups performed similarly in demonstrating the material they learned in the unit. But when the students were asked to apply their new knowledge to novel problems — problems in which they must apply the material they've learned in new and different ways or think about the learning at the next level — the students who set the learning goals fared much better. The learning-oriented goal setters scored higher on novel problems and generated more work in solving novel problems, which included 50 percent more writing in regard to deeper-thinking questions.⁶⁷

Researchers have also examined "classroom goal structures" to determine whether students are motivated toward learning goals or performance goals based on aspects of the classroom environment. The TARGET system, first constructed by the educational psychologist Carole Ames, identifies classroom dimensions that lend themselves to either performance-oriented or learning-oriented classroom goal structures. The TARGET system looks at six aspects, or dimensions, of classroom environment that lead to either performance-oriented or learning-oriented classroom goal structures: Task, Authority, Recognition, Grouping, Evaluation, and Time.⁶⁸ Look at characteristics of the different types of classrooms in the chart on the next page, and determine the goal structure of your classroom.

DIMENSION	DESCRIPTION	PERFORMANCE-ORIENTED CLASSROOMS	LEARNING-ORIENTED CLASSROOMS
TASK	Includes the type of learning tasks the students are assigned, and the rigor, engagement, and value inherent in the tasks.	Tasks are often considered too easy by the students and often include performance tasks (e.g., rote memorization and demonstration of math facts). Very little personalization of tasks; often not engaging to students.	Students work on challenging tasks that offer equity and variety in process and product, and are of high interest to the students. The students find meaning and value in the tasks assigned.
AUTHORITY	Includes the role of students as decision makers and directors of learning, and their role in classroom leadership tasks.	The teacher provides clear directives on tasks; there's little room for student input on tasks. Teacher is the leader of the class.	Learning is often student led; students are empowered to make decisions about learning tasks. Students are empowered to take on leadership in learning.
RECOGNITION	Includes how and why students receive recognition.	Students are incentivized and recognized for turning in flawless work, following rules, and finishing work efficiently. Taking risks and developing creative strategies are not encouraged.	Students are incentivized and recognized for demonstrating effort, improving skills, and accomplishing learning goals. Taking risks and developing creative strategies are encouraged.
GROUPING	Includes how students are grouped together in collaborative learning.	Homogeneous grouping strategies are used, including ability grouping; groups feature superficial collaborative efforts and underlying competitiveness between group members and among groups.	Heterogeneous grouping strategies that feature different learning styles, strategies, levels, and philosophies are used. Students are encouraged to engage in deep collaboration.
EVALUATION	Includes how the teacher assesses student work process and product and evaluation procedures in place.	No equity in assessment and evaluation; evaluation often done publicly with a focus on how students perform in relationship to one another.	Evaluation of students is varied, and done in a private fashion. Individual progress is often assessed with a focus on individual improvement and progress toward mastery.
TIME	Includes how a teacher plans class time and how time is used to complete tasks.	Time limits are strictly enforced, with little deviation from the original plan. Students are not given variation in time limits to complete tasks because of differences in learning place and pace. Quickness and efficiency is valued over mastery.	Students are encouraged to work at their own pace; schedule can be easily adapted to address gaps or allow for enrichment or remediation. Mastery is valued over quickness.

Does your class have more features of a performance-oriented classroom or a learning-oriented classroom? If teachers send the message that completeness and correctness are more valuable than learning, students will fall in line with that expectation. But, as Dweck showed with those junior high school students, the students who set learning goals focused on true mastery—a deep understanding from which students can draw conclusions, connect ideas, and build relationships to new skills and concepts—experience richer learning than students who focus on showing what they know. The type of goal structures inherent to your classroom will influence the personal goal orientation of your students.

In the performance-oriented classroom, the teacher ranks students according to their intelligence and encourages students to compare themselves to one another. The teacher focuses on a few “smart” students and doesn’t make efforts to personalize learning to increase engagement or differentiate learning to accommodate different learning styles. In the learning-oriented classroom the teacher values mistakes as learning tools and values effort in a task over the completeness of a task. In a performance-oriented classroom, equality is a virtue (same task, same amount of time, same product, same expectations); in a learning-oriented classroom, equity is a virtue (creativity and personalization of tasks, flexible time structures, accommodation of different learning styles, equitable treatment of students).

In a review of over one hundred studies on student motivation, Chris Watkins of the University of London reported that the meta-analysis suggests that while both performance and learning orientation drive student motivation and both are present in high-achieving students, the students who focused on performance did “less well academically, thought less critically, and had a harder time overcoming failure.”⁶⁹

Both the classroom environment and school culture can have a significant impact on students’ goal orientation, and their goal orientation has a significant impact in their level of learning. A growth-mindset classroom is one that features the learning-oriented dimensions outlined in the TARGET framework. The masters who have put in ten thousand hours aren’t working toward performance goals; they’re working toward learning goals. Learning-oriented goals help students develop grit and dedication to learning over time, as opposed to performance-oriented goals, which are more about proving intelligence or ability on isolated tasks.

In the course of their learning, students will inevitably set both performance and learning goals for themselves, but it’s important that they’re able to distinguish between the two types of goals and understand that one goal will assist them in short-term comprehension and performance, and the other will lead them down a path of true mastery.

EXPLORING PERFORMANCE GOALS WITH STUDENTS

LESSON PLAN

LEARNING OBJECTIVE

By the end of the lesson, students will be able to:

- distinguish between learning goals and performance goals.
- write a learning goal and a performance goal.

RESOURCES AND MATERIALS

- Note cards
- Chart paper
- Whiteboard
- Markers

METHOD

Distribute blank note cards to students and ask them to define "goals" in their own words. Have all students share definitions with a partner and come up with a group definition encompassing both ideas. Ask partners to share definition and record key words and phrases on a whiteboard or chart

Say: "There are two main types of goals that people set: performance goals and learning goals." Define performance goals and learning goals for the students.

PERFORMANCE GOAL: A goal that focuses on demonstrating tasks, content knowledge, skills or abilities, and often how the acquired skill or task will be judged in comparison to others.

LEARNING GOAL: A goal that focuses on overall learning, particularly how mastery of a skill or concept will develop understanding and apply to subsequent learning and challenges.

Referring back to the chart, have the students determine what words and phrases from their definitions apply to learning-oriented goals

(circle in green) and what words apply to performance-oriented goals (circle in red). Present the chart with the following examples, and have students categorize examples as either learning goals or performance goals.

	LEARNING GOAL	PERFORMANCE GOAL
I will get an A on my math final.		X
I will learn how to speak Spanish.	X	
I will score three goals in the soccer game.		X
I will learn how to play chess.	X	
I will earn an "exemplary" on my state assessment exam.		X
I will learn to apply the scientific process in my experimentation.	X	

Say: "Notice how the learning goals often focus on what the student will learn, while the performance goals focus on what the student will do or show. Research tells us that while both types of goals help students achieve in school, learning goals lead them to greater understanding and enhance their ability to apply what they've learned in new and interesting ways in future challenges. Think of it this way: performance goals will help you make a short-term achievement, but learning goals will help you define a path for long-term learning and success. Let's use the SMART goal-writing framework to write a sample performance goal and learning goal."

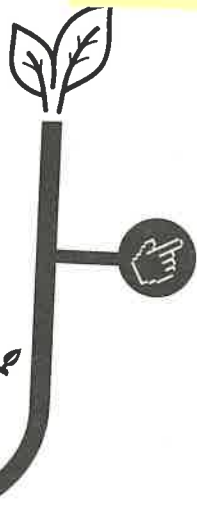
Using the SMART framework, have students write one performance goal and one learning goal. Once the goals have been written, create small groups to read and discuss the goals. Have students offer feedback to adjust goals to fit the learning and performance categories.

CHECK FOR UNDERSTANDING

Check student goals for evidence of understanding of performance goals and learning goals. Have students keep the goals to revisit and reflect on progress.

THE STRUGGLE

Mahatma Gandhi said that every worthwhile accomplishment has “a beginning, a struggle, and a victory.” Students begin on a path of accomplishment with a well-defined goal, and in the pursuit of that goal, will be encouraged to show qualities of determination and grit. But willingness to face a challenge isn’t the same as having the tools to overcome them. The next chapter, which addresses coaching through setbacks, will provide teachers with coaching strategies designed to teach students techniques for overcoming obstacles, failures, and setbacks in the pursuit of goals.



8

MARCH: MISTAKES ARE OPPORTUNITIES FOR LEARNING

*How often I found where I should be going only by setting out for
somewhere else.*

—R. Buckminster Fuller

OBJECTIVES

- ✓ Learn how to coach students through mistakes.
- ✓ Develop mistake-friendly teaching strategies.