

G-WORDS

20 STRATEGIES FOR
FOSTERING

Grit & Growth Mindset

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For all the educators who recognize that social-emotional learning is
more important today than ever.

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1 THE G-WORD

“That video didn’t tell me anything I didn’t already know.”

This was the exact response a veteran teacher gave after we watched Angela Duckworth’s Grit TED talk at a staff development training. Now, if you are a grit die-hard, you might think, “Psssh. Another stubborn veteran who isn’t open to new ideas.”

But, don’t get worked up. The veteran was right. This thing we call “grit” isn’t a new idea -- especially not in schools and classrooms. More research, more distinction, more discussion about grit: These *are* new. But, the boom of grit-talk these days has brought just as many questions as it has brought answers.

Is “Grit” simply an educational fad? Is it a distraction from larger -- more important -- pedagogical issues? Heck, is it even teachable? No doubt you have at least a hint of an answer to each of these questions in your mind. I know I do.

But I don’t think our answers about the “grit trend” necessarily matter because “grit” is simply a label for what we already know is important, what we already try to cultivate in our classrooms. Call it commitment. Call it drive. Call it focused determination. The semantic debate isn’t as important as this fact:

We know having passion and perseverance toward long-term goals is important.

Further, we know the importance of this fact:

Educational systems should help students develop passion and perseverance toward long-term goals.

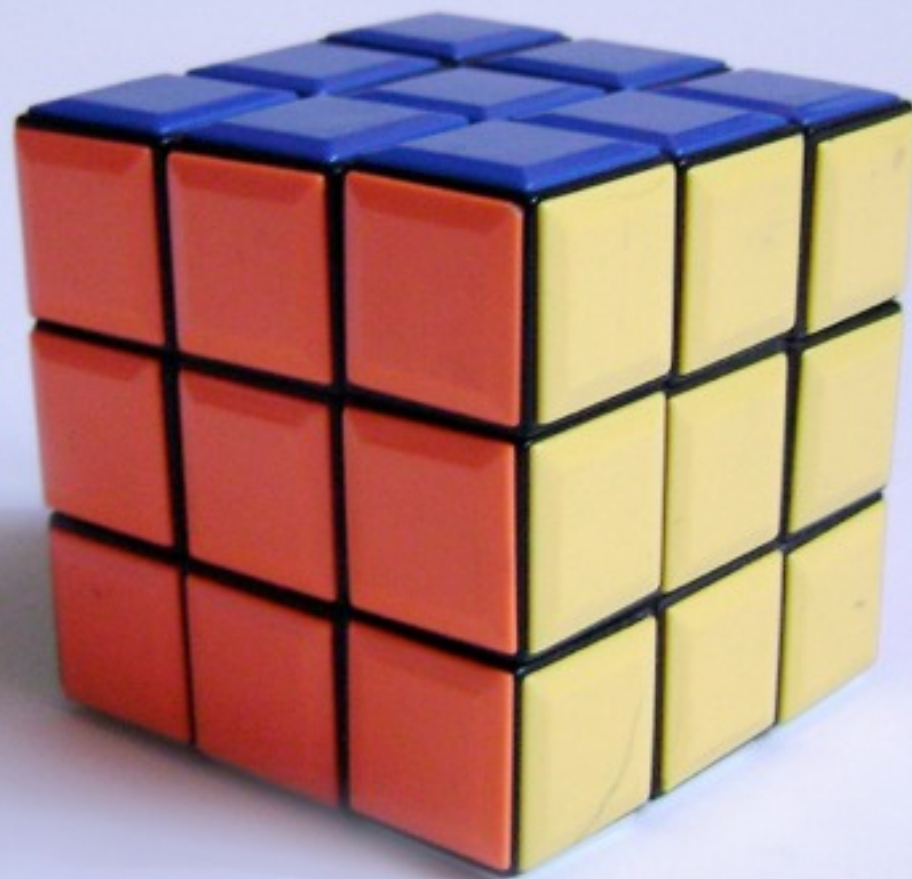
That is exactly what this ebook is about: Developing strategies that help students establish goals, believe in their ability to accomplish those goals, and strengthen their persistence in order to make those goals a reality.

So, whether you call it grit or dedication or commitment, this ebook is designed to lay out the strategies I've used over the last decade to help hundreds of students develop their passion, their perseverance, and their willingness to take positive risks to accomplish short and long term goals.

Although I think it's important to first lay out a little theory to align our understanding of how to approach grit and growth, you can skip around to your heart's content to explore the strategies that will have the best influence on your students.

May the strategies be ever in your favor.

2 BATTLING THE GRIT BUZZ- WORD



What is grit really?

5.25 seconds. That's how long it took Collin Burns to complete a Rubik's Cube in April 2015. Watching this moment often blows peoples' minds. They watch it with awe, wondering if there is some "trick" being used or if Burns simply has unfathomable genius. But, what if Collin Burns *wasn't* just some spatial-logical genius? What if he simply had

this buzz word called “grit”? And, if this is true, does that mean that those of us who *can’t* solve a Rubik’s Cube in under 6 seconds lack grit? Are we just too lazy?

The answer depends on how you define what “grit” really is. And, to help us align on what we mean when we say, “grit” -- what it is and what it is not -- we need to look more closely at that Rubik’s Cube.

What a jerk-hole of a puzzle, right? We’ve all probably tried to solve one. Some of us have been successful (note: Success does not equal ripping off the stickers and re-arranging them). What fascinates me, though, is that when I’ve asked hundreds of teachers and students if they have tried solving a Rubik’s Cube, most teachers and students say they’ve attempted one. But, when I ask who has **solved** one, only a few in a large crowd admit they have.

Because of the “low success rate,” this puzzle stands as a symbol of intellectual prowess -- a separator of the “brains” and the “no-brains.” And yet, at any moment, a Rubik’s Cube is only about 20 moves away from being solved. Twenty. That’s it.

Why then have so many of us failed to complete one? Is it because we aren’t “gritty” enough? No. Failing a Rubik’s Cube does **not** necessarily mean we are not gritty. To better understand why this is, we’re going to journey to see how grit is being misinterpreted. In making this journey, we’ll develop a better understanding of what grit **is**, what it is **not**, and what we can do to help students develop it.

Shall We Define It?

You can’t talk about grit without paying homage to Angela Duckworth. According to Duckworth, who premiered this idea to the public in the 2000s, grit is **passion and perseverance towards long-term goals**. Re-read that definition because we’ll be coming back to it often.

She and her team found that grittier West Point cadets were more likely to complete the grueling “Beast Barracks” training. Grittier kids were more likely to advance in The Na-

tional Spelling Bee. Grittier first-year teachers in challenging schools were more likely to keep teaching -- and to teach well. And the list of grit correlations continues to this day.

So, when the concept of grit started popping up on newsfeeds, educators took notice. Unfortunately, what some educators paid attention to most was the part about “perseverance,” something we all want more of in our classrooms. We got geeked about dropping down research that shows that hard-work *does* matter, not just IQ. And so, the excitement about the data to defend dedication become the main focus. This is problematic. Here’s why:

The sole focus of “grit” as “work harder and don’t give up,” often leads to this fruitless equation in the classroom:

Same teaching methods + Telling kids to be “grittier” = Grittier kids

Imagine if we applied this type of equation to something like reading or math:

Same teaching methods + Telling kids to be better readers = Better readers

Ridiculous, right? Here’s the first thing we should know about grit:

Grit does not equal “working harder” on tasks that aren’t relevant to the individual. And, simply talking about grit without changing how we teach will not create grittier students.

Yet, attempts at grit strategies often consist of explaining ad nauseum what grit is and why it matters -- as if the student needs to just make the decision to be grittier. If we are going to have any influence on a student’s passion and perseverance towards long-term goals, we have to shift our focus. And, we can start with talking about goals.

Goals, Goals, Goals

The glaring problem we often find in “grit” instruction is that teachers don’t help students develop goals -- short-term and long-term -- that students want to achieve. Remember our definition: Grit is **passion and perseverance towards long-term goals**. Without long-term goals, then, we don’t have grit.

But, simply setting long-term goals doesn't guarantee we are developing passion and perseverance. Ever set a goal in mind only to think, "I'll get to that later..."? Gritty individuals take conscious steps each day to move closer to their long-term goal. So, we also need to link short-term goals to the long-term so students develop confidence and competence to further fuel their motivation.

Here's another important note: The more the goal matters to the individual, the more likely he or she will push past the struggles and challenges to stay motivated. Read another way: Students must have autonomy in creating goals that matter to them.

Take a deep breath because I know what you're thinking, "Well . . . my students don't necessarily have passion for conjugating verbs." You're right. Many of us teach concepts and ideas that students don't see as a part of their life goals.

Therefore, we have an even deeper challenge: If we want grit to emerge as an academic benefit, we have to help students find the link between *their* long-term goals and *the content* we teach.

Let's re-cap:

To develop grit, students need:

- A) Long-term goals that matter to them;
- B) Short-term goals to fuel their confidence and competence for the long-term goals;
- C) An understanding of how our content can enhance their goal-attainment.

Sounds more complex than solving that flippin' Rubik's Cube, right? Before you cake on another layer of deodorant over those sweat marks you're forming, know that these questions and dilemmas are exactly what this book will tackle.

Here's how we're going to get gritty:

In the next chapter, we'll talk goals -- not just what a good goal looks like, but how to plan for adversities, how to connect short-term to long-term, and how to help students find passionate purposes behind even the most mundane tasks.

In chapter four, we'll look at the first mental disposition that will help students through their grit perseverance: Growth Mindset. As with "grit," you've probably realized that "growth mindset" is another one of those educational buzzwords booming on your newsfeeds and in your staff meetings lately. Strip the semantics and we're basically talking about students seeing the link between their effort and their growth in knowledge and ability. Chapter four, then, will lay out a host of strategies that encourage risk taking, develop agency, and help students make progress.

We'll strengthen this perseverance, in chapter five, where we'll cover a couple games and activities that can put students in a safe state of struggle without making them want to punch you in the face (hopefully). In doing so, we can help them develop strategies for realizing and regulating their emotions.

And to tie this whole thing up in a pretty, gritty bow, we'll look at strategies to make sure your class atmosphere is supportive enough to handle the conversations and challenges that accompany grit-building.

Although I've found these strategies to work best when combined together, you can find benefit from any one of them in isolation. And please remember to always consider how these strategies should be adapted best for your needs, with your students, in your style.

Let the grit-building begin.

3

GOLDEN GOALS

“People don’t get what they want out of life because they don’t know what they want out of life.”

- John Goddard



Imagine hundreds of jigsaw puzzle pieces strewn across a table, waiting to be solved by a student. There are vast amounts of shapes, sizes, and colors, some of which are flipped upside down. The student searches for the box that shows what the completed puzzle should look like. But, it’s gone. The student has no guiding image, no structure, no model with which to assemble the pieces.

But, before the student starts the struggle, the teacher announces:

*“If you do really well on this state-mandated puzzle, our school can be ranked higher on a list that doesn’t matter to you. If you do well, you’ll go on to college where you can spend four more years solving even more of these puzzles for only a few dozen thousand dollars. You’ll also help us keep our jobs. You want us to keep our jobs, don’t you? So, you better work real hard on that puzzle -- **real hard**. Be gritty because if you work harder you’ll solve it better.”*

This is what school is like for students who don’t have goals. School is hundreds of inconsequential moments thrown together without any particular purpose or relevance -- puzzle pieces strewn across the table.

To talk about perseverance and passion without helping students see the bigger picture -- the end goal of this puzzle-solving process -- is not going to help them solve the puzzle any faster. Students need goals, large and small, easy and hard. They need to see how the little pieces fit within the larger puzzle, and they need to find purpose in putting together the puzzle in the first place.

Our job is to help them see the bigger picture. Our job is to help them find the puzzles *they* want to solve. Our job is to coach them and help them strategize how to make the little connections.

We cannot do that without talking about goals. And that is what the strategies in this chapter are aimed to do.

We’ll begin by helping students develop life goals -- the ones that matter to them -- through **bucket lists** and **vision boards**. After developing the larger visions of what students want to accomplish, we’ll provide them **meaning missions** to fuel their motivations and interests. We’ll help them develop a deeper understanding of why their actions today in our classrooms can create a larger purpose with **self-transcendent mission statements**. We’ll use **grit ladders** to help them break down their “gritty goals” into immediate steps. And, we’ll help students anticipate challenges and overcome obstacles with the **WOOP** strategy.

Strategy #1: Bucket Lists

What:

Students go through the process of creating “bucket lists” that they want to accomplish before they die.

Why:

One major obstacle to helping students develop grit is their not spending enough time thinking about what they want to accomplish (i.e. forming goals). We can do better in helping students develop visions of what they want to do in life – as well as help support them in making the first steps.

How:

1. Introduce the following quotation:

“People often don't get what they want out of life because they don't know what they want out of life.”

– John Goddard.

Lead a discussion about the personal meaning students make out of this quotation. Prompting students to share stories of when people have doubted them or told them “you can’t do it” can also help students relate to the life list of John Goddard that you’ll share next.

2. Describe the life of John Goddard (<http://www.johngoddard.info>) and share his original life list that he started at the age of 14.

3. Introduce a new quotation:

“What would you do in life if you knew you could not fail?”

4. Have students begin listing out things they'd like to accomplish before they die. Give them permission to copy from each others' lists – and John Goddard's. If you have your own bucket list, share it with them. Challenge students to generate a lot of ideas, knowing that they may remove, add, or modify items at any point.
5. Invite students to post their bucket lists in the classroom or online via a blog or community post.
6. Provide supplies or opportunities for students to accomplish items off their list
(e.g. Leave chopsticks on the desk of a student who wants to learn how to use them, etc.).
7. Celebrate whenever a student checks something off his/her list (I happen to love any excuse to play the “Olympic Theme Song” to celebrate achievement). Celebrations can be whole-group, like a round of applause, or individual like a pre-made “Congratulations: You are kicking life's big ol' butt” cards.

Strategy #2: Vision Boards

What: Similar to **Bucket Lists**, students develop visual images of what they want to accomplish in life.

Why: Many students have a narrow view of what success could look like in their lives. Often, these mental pictures develop because students only visualize what they see around them. Vision Boards can help students develop a more specific view of what they want to do and who they want to be.

How:

1. Ask students to close their eyes and picture what they will be doing in 10 years. Walk them through a guided visualization, having them consider:
 - What they are doing for careers
 - Who they are surrounded by
 - Where they live
 - What they have already accomplished
 - How others perceive them
 - What causes/issues they support
2. Have them describe what they see to a partner or in journals. Have them get specific. The more vivid the image, the more concrete they will be able to make their goals later.
3. Lead them through the process of creating their vision boards, using one of these options:

Low-Tech Option

- Supply students with stacks of magazines, scissors, glue, and poster paper.
- Have them cut and paste images and quotations that inspire them or represent their vision of the future.

- Encourage them to place things closest to the center that mean the most to them.
- Rather than just basic paper, students can be given outlines of a human torso, placing “character” based goals inside the torso and external goals outside the torso.
- Students can create vision covers of their text books, place them in their lockers, or host them in the classroom to keep their goals on their minds.
- Have students share in small groups what made their board and why. Bonus points in life if they can make connections to how the content you teach will help them get closer to achieving those visions.

High-Tech Option

- Using a shareable app or program, such as GoogleDocs, students cut and paste images and quotations they find online.
- Students can share their vision boards, comment on one another's, and engage in digital conversations.
- Students can also post links to their vision boards on Facebook, Twitter, Instagram, etc. Or, a simple search online will bring up dozens of sites like [DreamItAlive](#) that are dedicated to helping people create, connect, and fund their vision boards.

Strategy #3: Meaning Missions

What:

Students are given random, personalized missions that support their passions and/or “grand goals.”

Why:

Students have a variety of passions and grand goals that may not typically fit within standardized curricula or graduation requirements. These passions, however, should still be acknowledged, cultivated, and supported no matter what class we teach. Meaning Missions allow us to fuel students’ passions and goals.

How:

1. Early in the year, provide surveys in which students list out their passions and hobbies.

Sample Questions:

- “If money were not an issue, what would you love to do as a career/calling?”
- “What are your top three hobbies from which you could make a career someday?”
- “What do you love doing when you don't have school work or other obligations?”

2. On a private document, keep track of students' hobbies/passions.

3. Create personalized “missions” that students can choose to take on without fear or requirement of grading/evaluation.

Examples:

Art/doodling – “Your mission is to create a logo/design for our [name of club/organization] to be used on this year's t-shirts. Make sure your logo includes their symbols (a microscope and a star).”

Fishing – “Your mission is to create a youtube video on how to bait a hook and clean a fish for beginners (particularly young children).”

Music – “Your mission is to create background music for our school's announcements. Feel free to make it upbeat and use instrumentation that your peers would like.”

Helping others – “Your mission is to take the contents contained in this envelope [\$5] and make the biggest, most positive impact possible on someone in our school.”

Video Games – “Your mission is to create a new video game concept for teenagers aged 14-18. Once completed, I'll help you pitch your concept to the owners of S2 Games.”

Extra Cred.

- Whenever possible, help students extend their meaning missions. Email ideas to students about opportunities and help them network with adults within their career interests.
- Ask your social media network for volunteers from any and every career field. Have these volunteers give you suggestions of “missions” for students to try.

Strategy #4: Self-Transcendent Mission Statements

What:

Students create mission statements for why they are committed to a class beyond the immediate gain.

Why:

A recent [study](#) published in the Journal of Personality and Social Psychology showed increased performance when students were given even brief interventions to find self-transcendent purposes for learning material beyond their immediate benefit. To see a difference between “surface” mission statements and “deeper” or “self-transcendent” mission statements, look at these examples:

Surface Mission Statement – “I want to ace all my ELA classes”

Deeper Mission Statement – “I want to contribute great writing to inspire people to help others who are feeling depressed.”

How:

1. Enroll students by prompting deeper questions, such as, “What is the greatest benefit of your doing well in this class?”
2. Lead a discussion on the deeper reasons to achieve in the academic area of the class.

Examples:

- Why you or other people (especially teenagers) are passionate about the field;
- Famous people who innovated in the field;
- Future needs that the field/subject could help fulfill;
- How people currently live a better life because of the field/subject's innovations.

3. Facilitate a brainstorm in which students write as many deeper reasons as they can before sharing small group/whole-group. Ideas can be written to allow each student to at least have other options if he/she was unable to think of one personally.

4. Create daily reminders for students of their deeper purpose, such as:

- Posting them on a board in the classroom;
- Writing them on their notebook covers;
- Taping them on their desks/tables;
- Placing them on the inside of their lockers;
- Setting text reminders/alerts with deeper-purpose cues to go off during passing periods or before class. You can use a program like [Remind](#) to help.

Strategy #5: Grit Ladders

What:

Students break down long-term goals into smaller steps in order to make gradual progress on their gritty goals.

Why:

Ambitious, long-term goals can often become overwhelming – or seem so far in the future that one forgets to take small, daily steps. Grit Ladders help outline goals and help provide smaller, more manageable action steps. In achieving smaller goals, students will experience more continual boosts of accomplishment and positive emotion, which increases motivation.

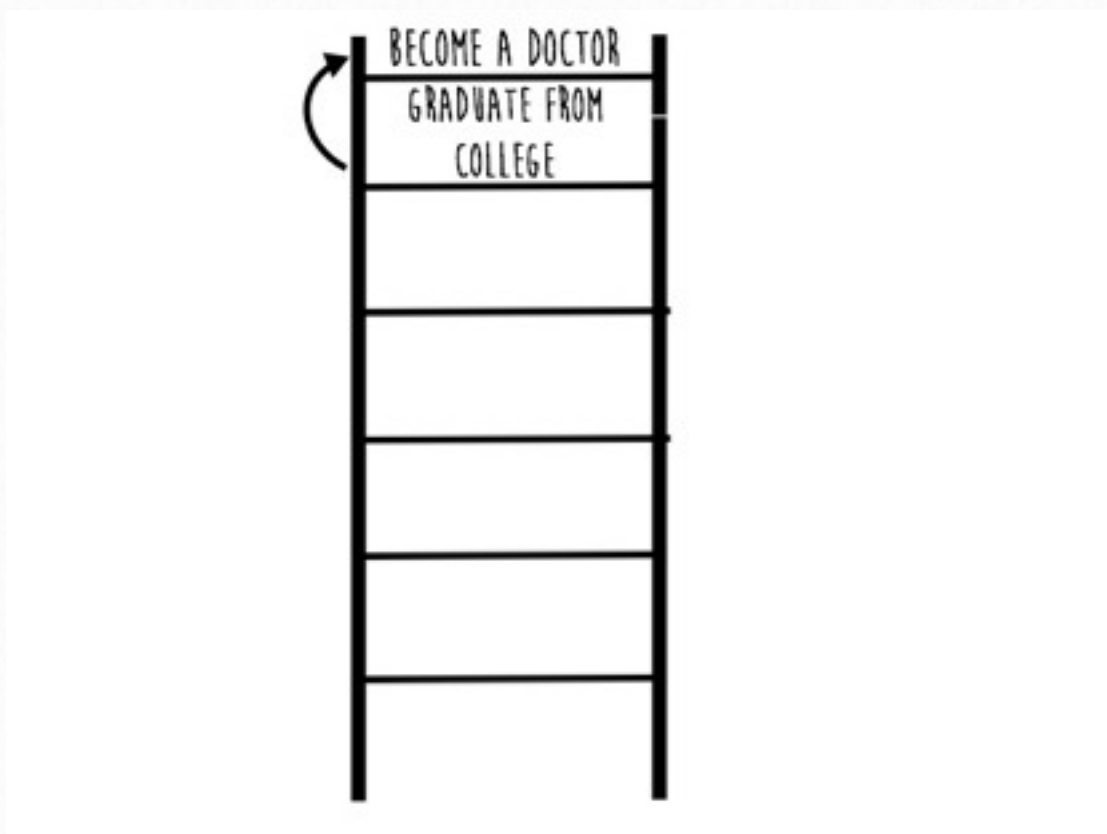
How:

1. Students draw a ladder, with a long-term goal written at the top.

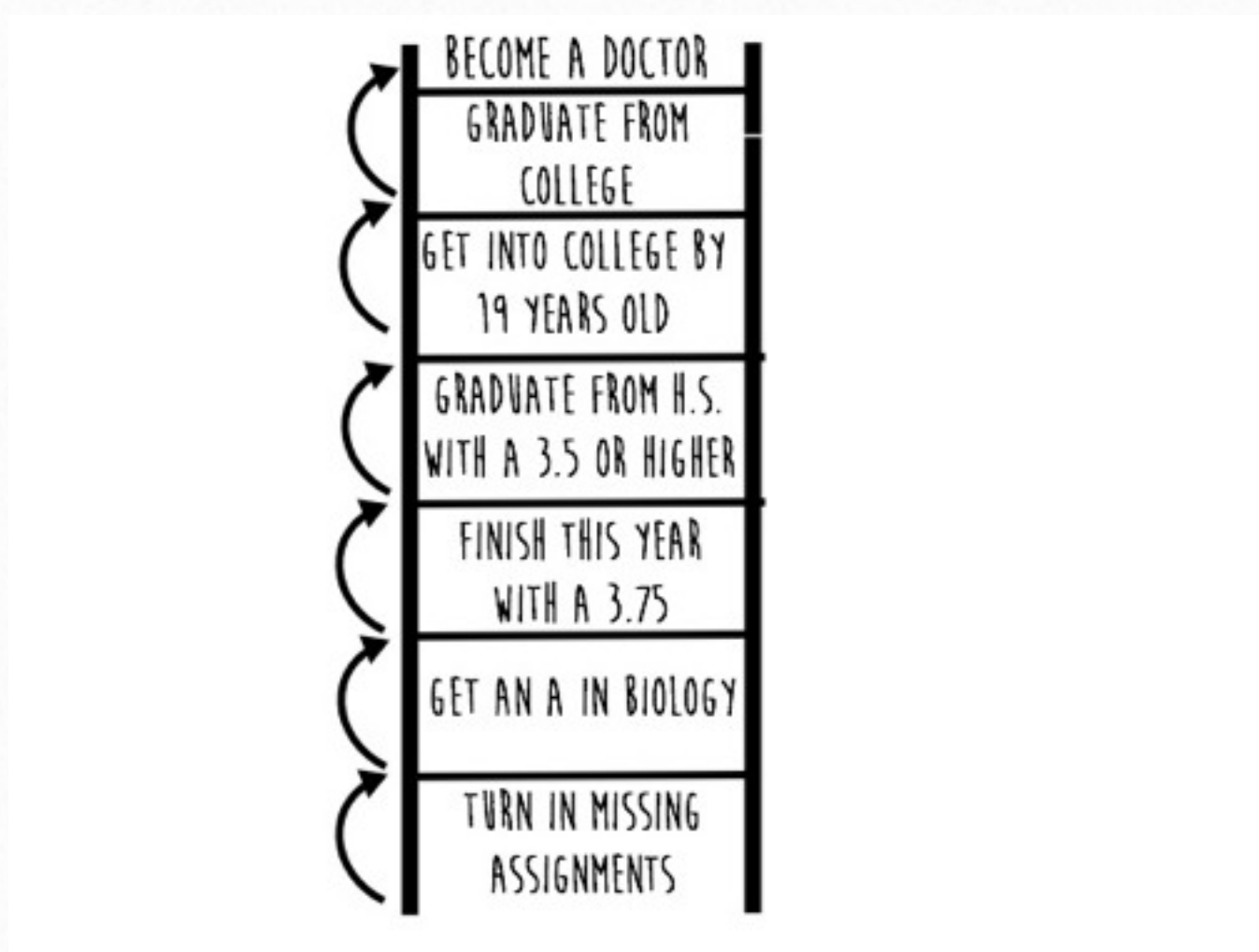
Ex:



2. Under this “top goal,” students write the step or goal they would need to accomplish just before the “top goal.”



3. Working backwards, students will map out each successive step necessary, eventually finding one small goal they can accomplish this week (or day) to get one step closer.



Tips:

- Coach students on how to make their goals as **SMART** as possible (**specific, measurable, attainable, realistic, time-stamped**) Ensure even the sub-goals are SMART.
- Some goals may have multiple “directions” of sub-steps.

Ex: Attending a college may have a series of steps solely focused on increasing g.p.a. as well as a series of steps focused on improving ACT/SAT scores, joining clubs, etc.;

- Continually check in with students each week to re-assess goals and support their moving onto the next step, etc. Outlining is a “process” and not just a “product.”
- Students can create graphics in their notebooks or somewhere in the class with “check-lists” for each step. Celebrate and acknowledge students when they check off a sub-goal.

Strategy #6: WOOP

What: Students visualize benefits of a goal, anticipate challenges, and create plans for overcoming their obstacles.

Why: Even grand goals have smaller steps and countless obstacles. Teaching students a cognitive skill to overcome obstacles can help them stay motivated and successful in being gritty. It's also important to help students see the shortcomings of just “wishful thinking.”

This strategy comes from the research of [Gabriele Oettingen](#). Who looked at the differences between people who had optimistic and pessimistic beliefs about their future goals. The finding: Neither style was particularly helpful. Optimists often gloss over real obstacles. Pessimists often discredit their own capabilities.

Instead, a balance between two cognitive strategies had a better effect on goal attainment:

A.) Mental Contrasting – visualizing the attainment of a desired future and recognizing current realities that stand in the way.

B.) Implementation Intentions – Planning a goal intention for overcoming barriers beforehand.

How:

1. Introduce WOOP

Lead students through the following visualizations**:

A. Wish – Think about something you would love to accomplish academically or that has been concerning you. Make sure this is something that you think you could overcome or achieve within a set amount of time – a day, a week, a month, a year.

B. Outcome – Visualize how it feels to achieve this goal – the sights, sounds, feelings. What is the best think you'd experience in achieving this goal?

C. Obstacle – Now, picture the things that have, or may, hold you back from getting this goal. Make sure you are thinking of an internal obstacle that is the most significant in stopping you. The obstacle may be an emotion, behavior, thought, or a bad habit.

D. Plan – After choosing this internal obstacle, now think of how you can respond to it if and when it happens. What can you do to overcome it? Name one action you can take.

Now, form an if-then statement:

“If (obstacle x) occurs, then I will (behavior/action Y).”

5. Have students share their WOOP in writing or conversation. Be sure to check-in with students during and after the process to give feedback, support, and suggestions.

Tips:

**Definitely check out Gabriele Oettingen's *Rethinking Positive Thinking* and the website www.woopmylife.org for a deeper understanding of WOOP (Life upgrade: they even have an app).

4

GROWTH MINDSET

“You have only failed if you’ve given up; until then it’s called learning.”



Let's re-visit that good ol' Rubik's Cube. For that massive majority of us who have tried but failed at solving the almighty "Cube," our lack of success probably boils down to one of the following reasons. We fail because:

1.) We don't see the value of completing one;

- 2.) We don't know good strategies for solving it;
- 3.) Because we don't have strategies -- and after consistent failures -- we develop the belief that we aren't smart enough to succeed;
- 4.) A combination of any or all of the above.

Each of these reasons connects directly with an education that helps students develop grit. In our last chapter, we addressed cause number 1, lack of personal value, by looking at the need for autonomous, purposeful goals.

Cause number 2, lack of strategies, is where great curricula and great instructional strategies come into play. And you, dear teacher, are already in a constant pursuit of progress with that one.

But, on day one, students walk into our room with pre-established beliefs about their abilities and our content. And we know that we can talk all day about goals and kick butt with instructional strategies. But, if students do not believe they can progress, we have an engine with no fuel.

So, this chapter is about influencing student beliefs and, in doing so, helping them develop the effort and perseverance they need to succeed.

With our definition of grit as **passion and perseverance towards long-term goals**, we addressed the “passion” and “long-term goals” ideas by helping students create life goals and link their short-term actions with long-term plans. Now, we dive into the “perseverance” part by helping students develop a belief that their effort and their cognitive risk-taking can help them grow (call this “growth mindset,” “internal locus of control,” whatever makes you feel warm and good inside).

The strategies that follow are designed to help students see the value and purpose of effort, especially long-term effort that requires perseverance.

Strategy #7: Grit-Zone Charts

What:

Using a visual anchor within the classroom, students chart something that is beyond their comfort zone in which they want to develop skill or ability.

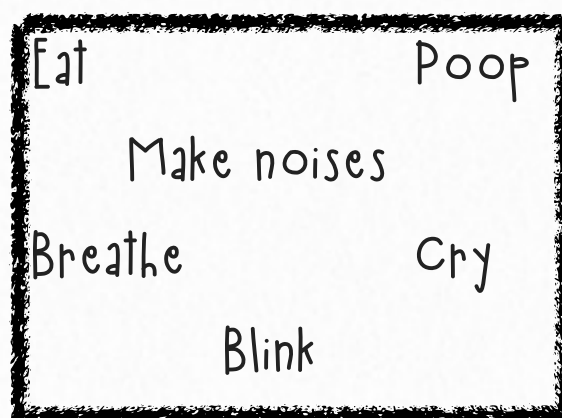
Why:

Providing a visual record of growth helps remind students about their goals and helps demonstrate the consistent effort needed to become comfortable/competent in something. In doing so, they see the link between effort and ability, which helps enhance a growth mindset.

By doing this class-wide, students are able to help support one another and hold each other accountable together.

How:

1. On a board/chart, create a graphic (such as a circle or square). Inside this graphic, elicit examples of things that are easy, comfortable, and take little effort for humans to do. I love to start by discussing what abilities we are born with as babies.



2. Describe how humans come “equipped” to live, but it takes effort and risk to develop new skills. A good example is walking: humans take physical risks of falling over and

over before mastering walking. Label this graphic a “Comfort Zone ” or “Established Habits.”

2. Outside the graphic, ask students for things that are uncomfortable for them that they would like to make comfortable. Label outside of the graphic a “Grit Zone.”

Grit/Growth Zone

Public Speaking

Asking questions in class

Playing guitar

Singing in public



Talking to new people

Asking for help

Reading out loud

3. Ask students to write one major thing on an index card they would like to work on this year in order to make it comfortable for themselves. Encourage students to choose things they can work on in your class.

4. On a board or wall within the room, have a pre-made “Comfort Zone” graphic. Ask students to tape/pin their notecard in relation to the comfort zone graphic (closer to the graphic = more comfortable; farther from the graphic = more uncomfortable).

5. Throughout the year/semester, check in with students about how they are progressing. Have them move the cards periodically (or autonomously) when they feel they are getting more comfortable. Provide challenges or opportunities for students to improve their comfort with their noted goal.

Strategy #8: Growth-Based Assessment

What:

Students are assessed based on their ability to improve rather than simply achieve certain benchmarks.

Why:

Much of academic assessment in school is benchmark or achievement based. Solely grading students in this way may inadvertently send the message that “having answers” is more valuable than working for growth. It may also frustrate lower-performing students who frequently are unable to hit benchmarks beyond their level.

Providing structured opportunities for growth-based assessment focuses efforts on improvement of skills over time. It can also help students focus on doing a small amount of improvements thoroughly.

How:

1. Find a task, skill, or ability that involves frequent effort to master. These tasks may also have a myriad of sub-skills.

Examples: Timed essays (or any formal writing)

 Complex/multi-step math problems or proofs

 Scientific experiments

 Extensive summative/formative assessments

2. Provide an initial benchmark measure or pre-test. Score the task and provide feedback on a few (2-3) specific steps needed to improve performance. Keep a copy of the score/rubric and provide a second to the student.

3. Provide a second opportunity involving the same (or very similar) task and set of skills. Compare the new score to the previous. Students who improve earn credit. Those who don't are able to revise again until improvements are made. Repeat this process as necessary.

Tips:

- To prevent students from intentionally “bombing” the initial measure, require a certain minimum of expectations (e.g. You must write for at least 20 minutes and use three paragraphs in your timed essay in order to get credit);
- Use rubrics that clearly quantify expectations and eliminate evaluative bias;
- Make sure feedback between rounds focuses on how to improve, not just what to improve. Effective feedback should answer:
 - A) What the target skill or ability is;
 - B) How the student measures in relation to the target;
 - C) What strategy or concept will help the student progress.

Strategy #9: Neuroplasticity 101

What: Give students a brief and basic, crash course on how neuroplasticity happens in the human brain.

Why: Beyond the fact that many students are fascinated with how their brain works, explaining the concept of neuroplasticity helps students see the physiological link between their efforts and their abilities. It can also provide the “why” behind many of the things we ask them to do in order to learn better in class.

How:

1. Ask students to brainstorm all the things they know about the human brain and why it works.

2. Provide them with “true or false” questions, such as,

We have more brain cells as babies than we do now.

IQ is fixed at birth.

Smarter people have bigger brains.

3. Have students make predictions on whether each statement is “true” or “false.” Feel free to let them discuss and debate their answers. Better yet, put them in teams and have them justify a response before revealing the answers.

4. Reveal the answers

We have more brain cells as babies than we do now.

True: Through adolescence, our brain actually loses brain cells in order to allow existing cells more room to develop strong and ample connections (think about the concept of “pruning” a rose bush). Although we can gain and lose cells as we age,

our abilities depend more on the amount and strength of connections between neurons than the sum amount of cells.

IQ is fixed at birth.

False: IQ can remain relatively stable; however, many studies show that influences such as effort, motivation, and practice can influence IQ scores.

Smarter people have bigger brains.

False: The volume of a brain does not dictate intelligence or skill. For example, by volume, the average male has a bigger brain than the average female, solely due to average cranial capacity (larger skulls). Don't fret though, because there is no correlation between volume and ability or intelligence.

5. Have students imagine that they are each a brain cell within a brain. Have them extend an arm with their fingers spread out. Label this arm their "dendrite." Have them bring their finger close to a classmate's fist. Label the fist an "axon." Explain to students that brain cells communicate by sending electrical and chemical signals from dendrites to axons across a "synaptic gap" (the space between the fist and the finger). Have them make a "zap" sound.

Sample explanation: *Every time we learn, certain cells send a signal. If we do this same thing again, it sends another signal. Overtime, if the signals happen often enough, our brain changes its structure so that this "firing" becomes easier. Furthermore, if we fire them often, the cells wrap these connections with a fatty substance called "myelin" to make firing more efficient (you can label this process "myelination"). In other words, our brain is constantly changing shape as we learn.*

You can extend this by having students extend multiple fingers or both arms to different "brain cells" or classmates in the room. This represents increasing and strengthening connections as we learn.

6. Teach students sayings to help them remember this idea like, "Use it or lose it," or "Neurons that fire together, wire together," or "Neurons that play together, stay together."

Strategy #10: Process-to-Product Project

What: Students investigate the lives of “talented” individuals and learn the process it took these individuals to become successful.

Why: Too often, when we see a talented person, we see them as naturally gifted. Unfortunately, this takes for granted the many intentional hours even “gifted” people take to become more talented at what they do. Much of our society glorifies the “product” of success rather than the “process.” The more we reveal the process, the more students can value intentional, effective effort as a pathway to success.

How:

Option 1: Film Analysis

1. Have students watch a film that depicts the “process” individuals took to become successful. Think of films like:

- Rocky
- The Pursuit of Happyness
- Cool Runnings
- Remember the Titans
- Rudy
- Miracle

If you get stuck with ideas, have students suggest some. The viewing of the film does not have to be in-class. Therefore, students can have some autonomy and choice in choosing a movie.

2. Lead students through a structured analysis of the films, noting examples in which the movie shows the individual(s) as “talented” and examples in which the movie shows them as “effortful.”

Option 2: Celebrity Research

1. Have students choose a famous person they admire or find interesting.

2. Provide students structure and time to research this individual's life and learn how many hours/days/years the person spent developing his or her skills. Challenge students to find descriptions of their "practice schedules" to see the specifics of the time they spent improving themselves. If the celebrity is still alive, encourage students to email or write the person and ask about how their efforts helped them become successful.

Option 3: Student Samples

Since your classroom is filled with talented individuals, highlight the "growth mindsets" of the students themselves.

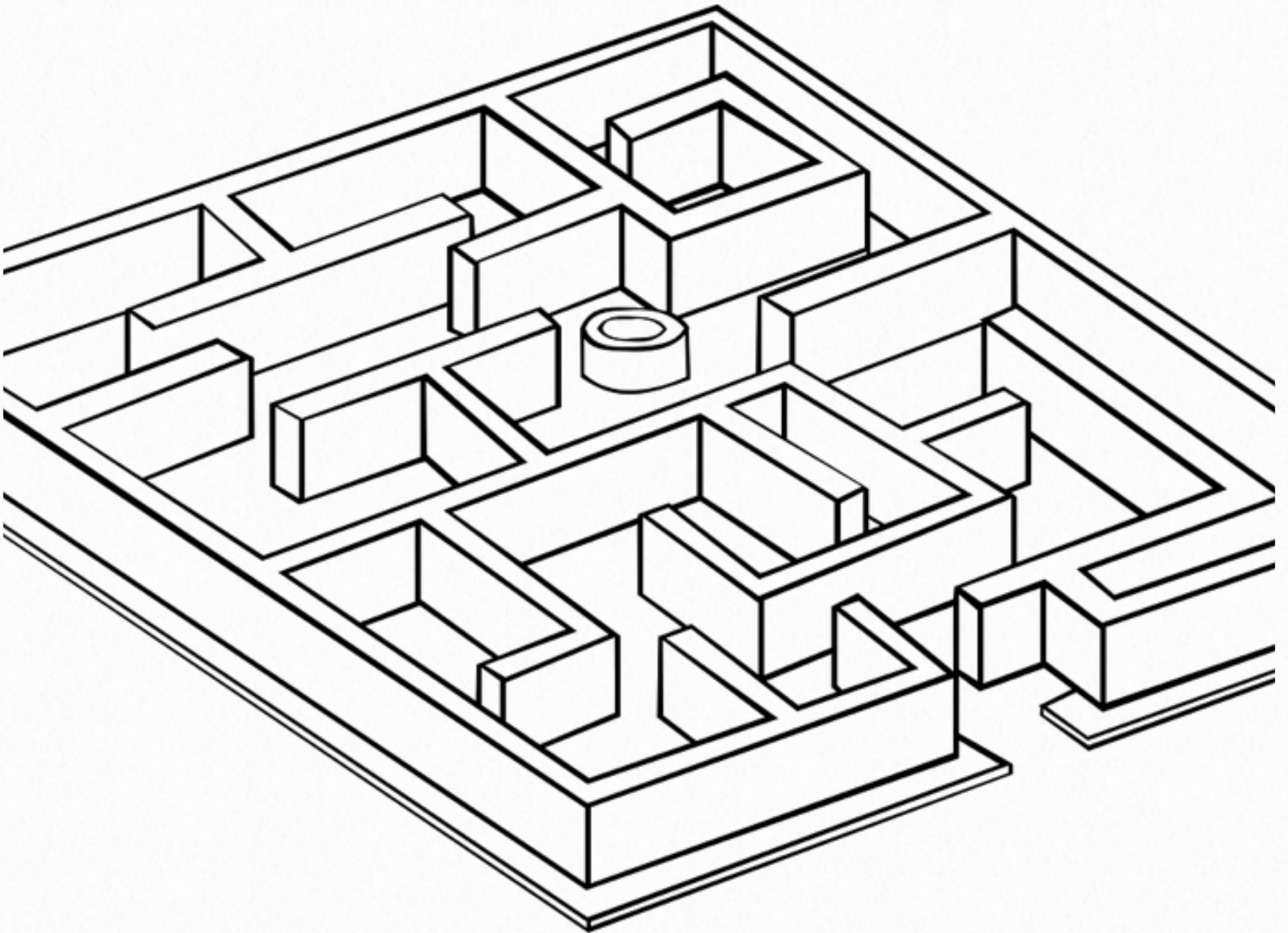
1. Have students identify peers who they find talented at something, such as art, a sport, or a content area.
2. Ask these students to describe how much time they have spent working on their skill. Be sure to chat with these students ahead of time so they understand what they are being asked to explain and feel comfortable sharing with their peers.

Note: It may be helpful to have students consider how much time they even "think" about their skill. For example, a student who is good at math may describe the small ways he or she does math, such as trying to add up the total of groceries before checking out at the super market, or a good artist may explain how often he or she thinks about unique art pieces or notices techniques in movies or advertisements. Even mental rehearsal can be seen as a type of cognitive effort.

5 FROM STRUGGLE BUS TO PARTY BUS

*“People tend to show up in the game
the way they show up in life.”*

-The Quantum Learning Network



Goals and passion: Check. Perseverance: Check. All good, right? But, what about when the goals aren't easy or when the challenges are too frustrating to simply chant a "growth mindset mantra"? What then?

One of my biggest findings from helping students develop grit is this:

Social-Emotional learning is enhanced when students learn to safely face real frustration, develop emotional regulation skills, and accomplish a task.

Now, if you're like me, you don't want to intentionally make kids fail your content or push them to frustration around the concepts you want them to love. So, I've learned to use a variety of games to help students learn to cope with frustration in a safe setting.

The beauty of these games is that they provide direct experience, they can be debriefed to help students better understand themselves, and they can become an anchor analogy for grit and growth mindset throughout the year.

There are actually tons of other benefits I've found, but you probably want me to shut up and just describe some games.

Strategy #11: Scramble

What:

As a class, students will work together to flip a sequence of plates in correct order as quickly as possible.

How:

Supplies:

- 15-20 paper plates.
- Tape

Preparation:

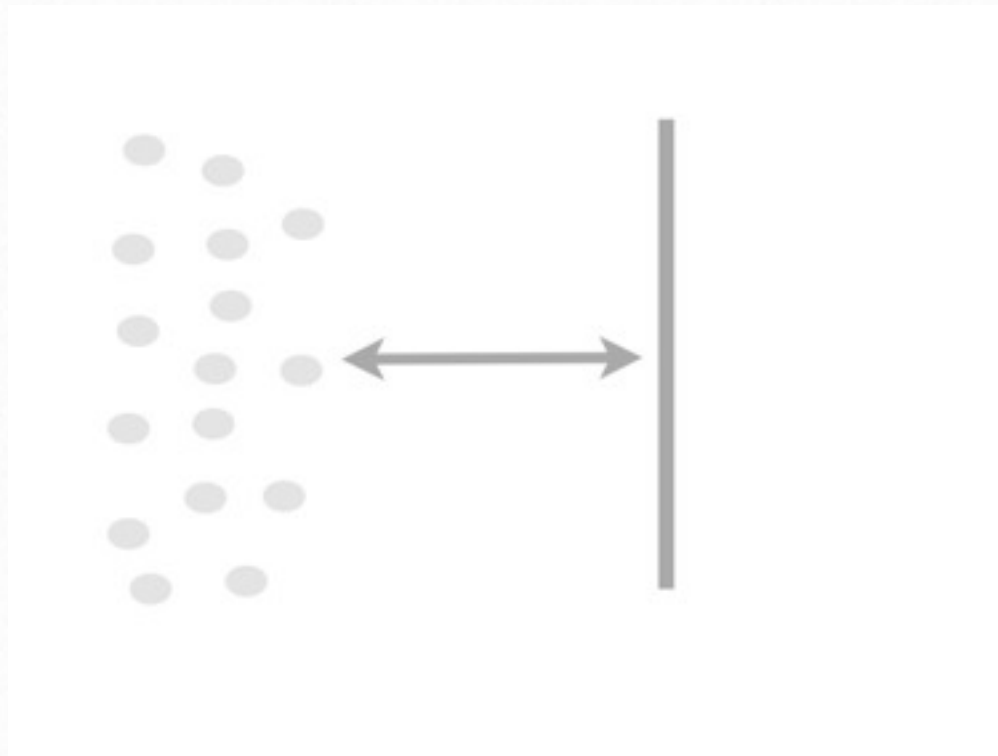
1. On one side of each plate write a number, 1-15 (or 1-20). Make sure there is only one number on each plate and no number is repeated.
2. Place the plates numbered-side down in random order on one side of the room.

3. Using tape, mark a line or space in the classroom that is the “homebase” or “checkpoint” for students.

Example:

Numbered Plates

Checkpoint/Base



Objective:

One at a time, students will take turns flipping a plate over in order to find the correct sequence of 1-15 [or 20] as quickly as possible.

Rules:

1. Only one student at a time may cross the line to try to flip a plate.
2. After revealing the number, the plate must be flipped back over to hide the number – no matter if it is correct in sequence or not.
3. If the number on the revealed plate is the correct order numerically, the student may try to flip another plate. If the next plate is not the next in sequence, the player must return back to home base.

4. Every student must participate before a player attempts to flip the plates again.
5. No use of external objects or props may be used (including paper, pencils, cell phones, etc.).
6. No known languages may be used – no talking or sign language.
7. If a rule is broken, the facilitator may choose to shuffle the order of the plates randomly.

Special Notes:

- This event is intentionally designed to be frustrating, so be ready to lead an honest but playful debrief so students do not leave angry at themselves or others.
- Adjust the rules to fit your students. Making it a silent event increases the challenge (and therefore the frustration), so it may not be an ideal rule for every class.
- Consider finding a few students, friends, or colleagues to practice the rules in advance.
- This event is more focused on emotional regulation and self-control, which are often correlated with grit. You can add the idea of goal setting by having students set a team goal of how quickly they complete the event.

Sample Debrief Points:

- What behaviors did you notice in yourself? Others? Why do you think these behaviors showed up?
- What do the following things symbolize in real life:
 - * A “correct order” of plates;
 - * Returning to home base;
 - * Having to flip plates alone;
 - * Not talking;

* Watching others flip plates;

* Plates being shuffled;

* Time-limits/being a timed event;

– What traits or skills were needed in order to be successful?

– What traits or behaviors made this harder?

– What was the role of “mistakes” in this game?

– What was the purpose of the event?

– How does this event relate to life?

Strategy #12: Memory 2.0

What: Students play a more challenging team version of the classic game “memory”

How:

Supplies:

A deck of playing cards

A projector (or a central table will work)

A notepad for jotting down which pairs have been discovered

Preparation:

1. Remove all the cards numbered 2-9, keeping only sets of 10, jacks, queens, kings, and aces;
2. Shuffle the deck;
3. Arrange the cards face down in four rows (five cards per row);

Objective:

The class must correctly match all pairs of cards as quickly as possible. Note: A pair consists of both black suits of a particular number or face card. Ex: The queen of diamonds is the correct match for the queen of hearts; The 10 of spades is the correct match for the 10 of clubs.

Rules:

1. Only one student may approach the set of cards at a time.

2. The student will flip two and only two cards waiting a few seconds to ensure classmates have seen which cards were flipped.
3. Regardless of whether they match or not, the student must flip the cards back over so they are both face down. If the cards matched, the teacher will note the match and the student may proceed and flip over two new cards, again returning both to the facedown position after selecting.
4. The team wins when a player is able to correctly flip and match each pair of cards without a mistake.
5. No talking or known languages may be used.
6. No props or objects may be used, including cell phones, paper, or other marking devices.
7. Every student must participate each round before someone may return to the board.
8. The teacher will add a minute to the overall time each time a rule is broken.

Special Notes (same as the previous game):

- This event is intentionally designed to be frustrating, so be ready to lead an honest but playful debrief so students do not leave angry at themselves or others.
- Adjust the rules to fit your students. Making it a silent event increases the challenge (and therefore the frustration), so it may not be an ideal rule for every class.
- Consider finding a few students, friends, or colleagues to practice the rules in advance.
- This even is more focused on emotional regulation and self-control, which are often correlated with grit. You can add the idea of goal setting by having students set a team goal of how quickly they complete the event.

Sample Debrief Points:

- What behaviors did you notice in yourself ? Others? Why do you think these behaviors showed up?
- What was the purpose of the event?
- How does this event relate to life?
- What traits or skills were needed in order to be successful?
- What traits or behaviors made this harder?

Strategy #13: The Maze

A HUGE shout out to [The Quantum Learning Network](#), which changed my world (and the world of thousands of students and teachers) with this game. If you really want to rock this event in your classroom, or be opened to a world of other experience-based lessons, hit up the Quantum Learning Network. In the meantime, here's a "taster" of "The Maze"

What: As a class, students will work together to find a pre-established path from one end of a grid to another.

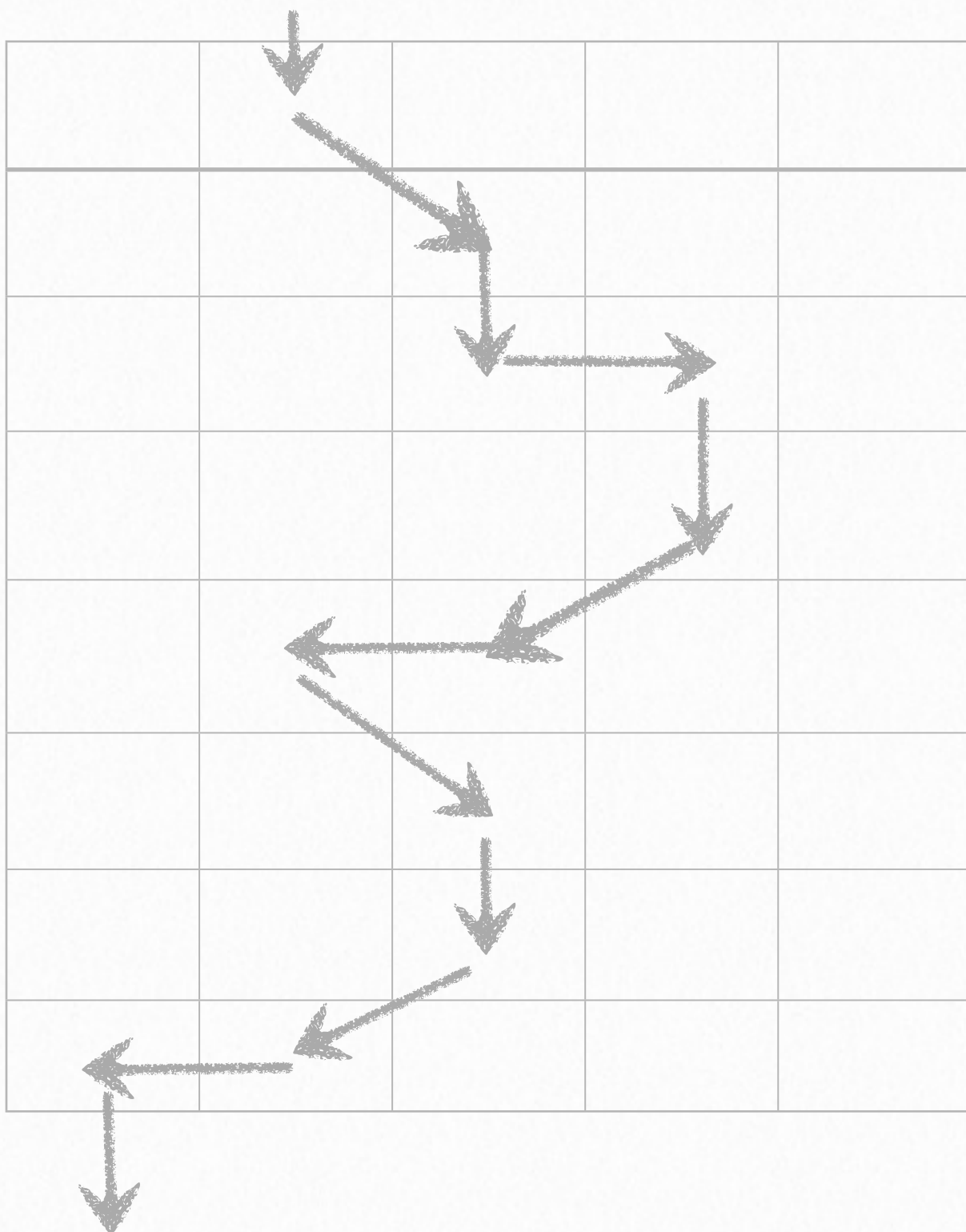
How:

1. Using tape on the floor (or a re-usable bed sheet or tarp), create a grid with squares large enough for students to fit both feet into. It looks like:



Note: The more squares you have, the more challenging (and time consuming) the event will be.

2. On a sheet of paper (that only you will see) write out the path students must find. It might look like:



END

3. Provide students with the following rules:

- The goal of the event is for your entire team to move through the correct path from one end of the maze to the other. This is a timed event, so your goal is to get each person to cross the maze as quickly as possible.
- To figure out the path, one person will make a two footed commitment into a square and wait. If the student hears nothing from me, he or she may continue. To continue, you may step with another two footed commitment into any adjacent square: forward, diagonal, left, right, etc. But, if the square is incorrect, you will hear me say, "Beep," at which point you must correctly retrace your steps out of the maze.
- You may not use any props or objects, including cell phones, paper, pens, or other objects -- at any point during the maze.
- You may not move the maze (tape or mat) or place any objects on the maze.
- Only one person is allowed on the maze at a time.
- Each member of the class must participate each round before someone may attempt the maze again.
- This is a silent activity. No talking is allowed.
- If any of these rules are broken, you will hear me say, "Beep." If a beep is made, whoever is on the maze must retrace his or her steps out of the maze. In addition, one minute will be added to your time for each beep you receive.

Notes and Tips:

1. There are ENDLESS ways to vary this event, so use your imagination :) For example, some include a rule that, once the path is found, students can have three people on the maze a time as long as they are physically connected (and any mistake by one sends all three back). Or, you can have "secret squares," that allow students help or add challenges if students step in them. Make sure though that your variations are purposeful; every piece of this game should have a symbolic meaning.

2. Wear sunglasses to keep students from reading your eye contact to guess the correct path.
3. The more steps you add, the more complex and challenging this is. Consider what amount of challenge will be beneficial for students without causing them excessive (and unproductive) frustration.
4. Try this event out with some kind-hearted friends (or people that owe you a favor) before introducing it to students. You'll learn a lot of "do's" and "don't's" this way.

Sample Debrief Questions:

What does each of these rules represent in real life?

- * Making a two footed commitment
- * Being alone on the maze
- * Being "beeped"
- * Being "buzzed"
- * Retracing steps
- * Watching others try (and fail)

What do the following observations suggest about how we approach risk, failure, and learning from mistakes:

- *Stepping back into a square that we already knew wasn't the right path?
- *People getting excited (and possibly cheering) when someone found the correct square, but not celebrating when someone found the incorrect square?
- *People refusing to try?

*People hesitating to try a new square, even though no one knew what the correct square was?

*People getting frustrated with themselves, with each other, and with the teacher when things didn't go well?

*I could go on with debrief questions, but trust me: You will find **dozens** of relevant lessons when you try this game.*

6 IS IT SAFE TO RISK?

“Doubt has killed more dreams than failure ever will.”

-Suzy Kassem



Imagine that you are teaching an amazing lesson on how to write a great essay or solve a challenging equation. Students are engaged. Relevance is ringing. Instruction is on fire. Will your students master the concepts after that lesson? Maybe . . . but most likely not. (Buzzkill accomplished).

We can't expect our students to master complex processes with just one exposure. Mastery takes time and effort. The initial instruction is critical, but we have to do more than "expose." We have to foster, coach, practice, encourage, and correct.

Character traits and social-emotional concepts are no different. If we think one lesson on grit will make students grittier, we are setting ourselves up for frustration.

Instead, we should picture grit instruction like a tree, which needs more than just a planted seed in order to grow. Plants need sunlight, water, and rich soil after they are planted. If you are thinking I'm about to drop the ol' "plant-grit analogy" on you, you are right my friend. Think of it like this:

Planting the seed = Direct instruction on concepts

Sunlight = Encouragement and support

Water = Practice, feedback, coaching; practice, feedback, coaching

Rich soil = A safe atmosphere for risk-taking

We've already tackled some direct instruction strategies for planting and watering our grit and growth mindset seeds. Now, we turn our attention to a few strategies for ensuring that our soil is rich and the sun is shining.

Strategy #14: Grit Award Ceremony

What:

Students recognize individuals who have demonstrated grit, creating an award ceremony to highlight the importance of grit in that person's life and accomplishments.

Why:

1. Encouraging students to recognize grit as a factor of achievement in others helps provide modeling and encouragement;
2. Whereas typical award ceremonies acknowledge the products of success, this ceremony acknowledges the process (such as grit and self-control) it took for others to succeed;
3. The process of preparing for the ceremony allows students to practice academic skills such as research, speaking/writing, etc.

How:

1. Show clips of popular award ceremonies, such as The Academy Awards, Grammy Awards, etc. Lead students through a conversation about why/how the awarded individuals reached this level of achievement.
2. Transition to introduce your class's Grit Awards Ceremony. Before outlining the process and requirements students will be asked to present, guide a brainstorm session for students to list out potential recipients they think would deserve a "Grit Award."
3. Tailor the process and requirements to your students. Consider:
 - Creating a formal tone where students dress up;
 - Making a "Hall-of-Fame" board in the classroom/hallways;

- Requiring students to nominate/award members of their community rather than already known celebrities;
- Have students “nominate” for various awards, such as “Grittiest Historical Figure,” “Grittiest Scientist,” or “Grittiest Woman.” Students could then be a part of selection committees to debate and decide on the actual award recipients.
- Host an actual ceremony in which nominated individuals are invited to attend. Send letters to nominees explaining what the ceremony is. Taking it to this level has huge benefits: I’ve seen parents’ eyes water as I read excerpts from their child’s nomination explanation. Talk about bonding.

Strategy #15: Grit Acknowledgments

What:

Students give weekly acknowledgments to one another for showing grit.

Why:

Student-to-student awards boost positive emotion and help students continually look for examples of grit in their surroundings.

How:

Choose a student that has shown examples of grit, such as setting goals, working through difficulties, showing growth mindset, etc. Bestow the first award to that student, being sure to explain what you saw and why it matters.

If you are into giving rewards with your acknowledgments, consider giving rewards that are free and help build a fun culture.

The next week, have the current award holder stand and present the grit acknowledgment to a classmate, explaining why he/she thinks the peer deserves it.

Again, I'll take any excuse I can to use a theme song, so feel free to make this playful, so long as students are giving authentic acknowledgments.

Strategy #16: Software Feedback

What:

In addition to feedback about content, teachers give feedback on the character traits and skills that are strengthened through the task.

Why:

If you've ever been asked, "Why do we need to learn this?" you know how students often fail to see the bigger picture of a lesson. Part of that is our fault: We often only focus on giving feedback and rationale for the content itself, which I call the "hardware."

But, we can help students see benefit of taking risks and trying difficult content if we help them understand the social-emotional benefits of our lessons too, which are the "software."

For example, we can give students the rationale behind solving a quadratic equation to improve their math skills. But, we can also show them the software benefit by helping them see the value of tackling a complex problem, trying a variety of strategies, self-assessing their progress, and re-working any issues. These "software" skills are not just about math -- they are about developing skills that are useful in any situation.

Here's an example: OHS

OHS (Objective, Hardware, Software)

Pre-Brief: "We are about to (Objective). In addition to learning (Hardware skill), you will also get a chance to improve (Software skill)."

Sample:

“We are about to read Martin Luther King Junior’s ‘Letter from Birmingham Jail.’ Not only will you develop your understanding of the historical context during this time and see more examples of rhetorical devices, BUT you’ll get a chance to strengthen your perseverance and problem solving as you come across challenging words and phrases.”

Debrief: *“Here’s how you did with (Objective). Now for the skill itself you did (Hardware feedback). Beyond that skill, though, I noticed you (Software feedback). Here’s what you can do next time . . .”*

Sample:

“Looking over your math exam, you didn’t get the right solution to number 7. If you look at the second step you took right here, you didn’t follow your order of operations. You multiplied before solving the parentheses. I know you know how to do that, so my guess is that you rushed to do this equation quickly. I’d like you to slow down and trace the parentheses in our questions today. That patience will pay off because you’ll avoid the minor mistakes.”

Strategy #17: The Sneaky Sticky Note

What:

The teacher uses a subtle sticky note to privately acknowledge something a student has done or is doing to demonstrate strong character.

Why:

Sometimes we assume that public praise or acknowledgment is best. In reality, though, a lot of students prefer private acknowledgment, especially if they are at that “too cool for school” level of life.

A more sobering truth: Teachers often use praise only as a means to manipulate or manage. I’ll save you the rant on this topic, but please use the Sneaky Sticky for genuine acknowledgment instead of “management praise.”

Lastly, we don’t always have time to pull students aside after class or connect with them before a lesson begins. So, this 30 second strategy can help us still foster an atmosphere of dedication.

How:

While students are working independently, write a brief but specific note to a student on a sticky note or index card. Subtly stick the note on the students desk as you walk by.

Tips:

- Set a simple goal to write one a day (or week).
- Acknowledge things beyond your classroom (especially since students are skeptical of the “praise-as-manipulation” phenomenon). Ex: “You’ve shown a lot of commitment this week: five shows with the musical in just three days!? You should be proud of your work ethic.”

Strategy #18: Outframe

What:

Use a verbal (and visual) cue to step away from the content in order to address or acknowledge a grit or character occurrence.

Why:

Bringing grit moments to students' attention helps them see the link between academic content and the soft skills needed to grow. It also allows us to keep the language of growth and grit consistent in the classroom.

How:

First, establish what your “Outframe” cue is. For example, I hold up my fingers in front of my head to form a frame (picture the stereotypical painter using his hands to “frame” a sunset before painting) and then move the “frame” to the side while saying, “We’re going to pause and outframe our lesson.” Some people use the “time out” hand T.

Then, bring the grit or character occurrence to students' attention before “Inframing” back to the lesson.

Examples:

The mid-moment acknowledgment

“Let’s outframe for a moment. I just want to acknowledge that you all are asking some amazingly detailed, solution-based questions to one another in your groups. That’s exactly the type of dedication to solving your own challenges that is going to help you with this lesson and in your careers.”

The mid-moment intervention

“Let’s pause and outframe for a moment. I’m seeing quite a few confused looks on your faces. I want to remind you that you have a right to ask me to adjust my teaching. Stay committed to your own learning by taking that risk to raise a hand. Let’s check in with our neighbors and summarize what we are thinking about this lesson. After you chat, I’ll open the floor to answer your questions.”

The own-and-model

“I’m going to pause. Let’s outframe. I want to own that I *totally* just rushed through writing this sentence on the board, even though my spelling is off and I didn’t even capitalize the first word. I’m sure you’ve been there with your own writing. But, if I’m going to stress the benefit of taking the time to get things right rather than rushing through them, I have to practice what I’m preaching. Let me fix this so I don’t develop a habit of rushing.”

Strategy #19: Daily Goal

What: At the beginning of a class or lesson, students identify on a sticky note one specific action step they can do to improve their growth or grit.

Why: By helping students identify a brief, daily goal, we can create habits of forward thinking. These daily check-ins can also allow students to take ownership, as well as allow us to identify which students need coaching.

How: Place a sticky note on each student's desk. Coach students to identify one, specific action step they can do to improve a social-emotional ability. For example:

"I will raise my hand to answer at least two questions."

"I will avoid getting caught in side-conversations that distract me."

"I will avoid saying, 'I suck at math.'"

Periodically, pause class to have students check-in internally or externally about how they are doing with their goal.

At the end of the class session, have students do any number of things:

- Place their note on either a "Successful" or "Not yet" board or chart. Keep track of these to follow-up the next day and offer support to the "Not yet" crew;
- Discuss with a partner how they think they did on a scale of 1-10;
- Write a brief summary of whether they were successful, why, and what's their next goal.

Strategy #20: Character Conference

What: Have students self assess specific components of grit and/or growth mindset. Then, conference with students individually or in groups to help coach and give support.

Why: The long-term goal is to help students self-regulate. By keeping concepts of growth mindset and grit in a student's mind throughout the academic year, we can habituate internal regulation. Additionally, these conferences allow opportunities for students to get and give feedback.

How: Provide students with rubrics that help break down self-assessment on specifics. Feel free to steal the ones in the following pages, or create your own.

Growth Mindset

	Wizard	Jedi	Ninja	Warrior
Belief in Effort	I rarely, if ever, say things internally or externally that limit my potential for growth.	I'm making progress in staying positive about my abilities.	From time-to-time I say things that limit my ability to grow.	I'm having a hard time maintaining a belief that my effort will pay off someday.
Risk-Taking	I have actively looked for opportunities to stretch my comfort zone.	I've made a couple efforts to stretch my comfort zone. I could benefit from doing more.	I have tried to stretch my comfort zone, but I either don't take much of a risk, or I don't do it enough to grow.	I'm struggling to push myself beyond my comfort zone.
Seeking Feedback	I actively ask for feedback from more experienced people (teacher, peers, coaches). I've made specific plans to use this feedback to grow.	I've asked for feedback a few times. I either forget to use this feedback, or I'm not using it as well as I think I should.	I've listened to feedback when it's given. But, I don't ask for it enough, or I struggle to use the feedback when I get it.	I haven't used or gotten enough feedback to help me grow. I need tips to help me seek it and use it better.

Grit

	Wizard	Jedi	Ninja	Warrior
Goal-Progress	I'm continually making progress on my goal, possibly even ahead of where I thought I'd be.	I'm making progress on my goal. Some coaching might help me excel.	I've made some progress on my goal, but I need to up my game and do even better. I could use some coaching.	I've struggled to make gains. I'm in need of some coaching.
Distraction Avoidance	I have rarely, if ever, gotten distracted or side-tracked from my goal I set.	I've had a couple distractions from my goal, but not enough to prevent me from making progress.	Distractions creep up from time-to-time. I could use some help avoiding getting side-tracked.	I'm struggling to stay focused on my goal. I'll need some support avoiding distractions in the future.
Perseverance	I've been using my failures or challenges as feedback for growth. Although I may get frustrated initially, I can coach myself to persevere.	I still get pretty frustrated when I experience failure. I've done better at using the mistakes as feedback and not letting my frustration get in the way too much.	I still get frustrated pretty easily. Although I can remind myself that failure is feedback and find some learning, I still am struggling to persevere when things get tough.	I rarely feel like I persevere with my goals. I either get too frustrated when things are hard, or I can't find lessons to learn from the difficulties.

ABOUT THE AUTHOR



Chase Mielke is a learning junkie who happens to have a love affair with teaching. A book addict by night and an award-winning teacher and instructional coach by day, he fantasizes about old libraries and fresh Expo Markers. He currently teaches full-time at Plainwell High School.

In addition to teaching full-time, he is a National Facilitator for Quantum Learning Excellence in Education, a freelance speaker, and a frequent blogger, contributing posts to publications like WeAreTeachers, Edutopia, and Huffington Post.

Aside from the educational jams, he is obsessed with his family, which consists of a plump newborn, Maddox, a beautiful and kind-hearted wife, Ashlee, and a spunky fur-baby, Penny. He and his family live in Kalamazoo, Michigan.

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