Inspire a POSITIVE Growth Mindset in Your Students and Yourself

What is a growth mindset versus a fixed mindset, and how does it directly relate to the Common Core standards? Come investigate your own mindset and how it affects your teaching and your student's learning. Experience powerful videos, interactive activities, annotated note—taking strategies and quality questioning techniques that you can use now and throughout your career. Inspire your students to persevere through rigorous challenges and fully enjoy the discovery and learning process!

Presented by Alyson Hoberecht

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12- Item Grit Scale

Directions for taking the Grit Scale: Please respond to the following 12 items. Be honest – there are no right or wrong answers!

1. I have	Mostly like me Somewhat like me Not much like me
2. New i	Mostly like me Somewhat like me Not much like me
3. My int	Mostly like me Somewhat like me Not much like me
4. Setbac	Mostly like me Somewhat like me Not much like me
5. I have	Mostly like me
6. I am a	hard worker. Very much like me Mostly like me Somewhat like me Not much like me Not like me at all

 7. I often set a goal but later choose to pursue a different one.* Very much like me Mostly like me Somewhat like me Not much like me Not like me at all
 8. I have difficulty maintaining my focus on projects that take more than a few months to complete.* Very much like me Mostly like me Somewhat like me Not much like me Not like me at all
9. I finish whatever I begin. Uvery much like me Mostly like me Somewhat like me Not much like me Not like me at all
 10. I have achieved a goal that took years of work. Very much like me Mostly like me Somewhat like me Not much like me Not like me at all
11. I become interested in new pursuits every few months.* Uvery much like me Mostly like me Somewhat like me Not much like me Not like me at all
12. I am diligent. Uery much like me Mostly like me Somewhat like me Not much like me Not like me at all

Scoring:

- 1. For questions 1, 4, 6, 9, 10 and 12 assign the following points:
 - 5 = Very much like me
 - 4 = Mostly like me
 - 3 = Somewhat like me
 - 2 = Not much like me
 - 1 =Not like me at all
- 2. For questions 2, 3, 5, 7, 8 and 11 assign the following points:
 - 1 = Very much like me
 - 2 = Mostly like me
 - 3 =Somewhat like me
 - 4 = Not much like me
 - 5 =Not like me at all

Add up all the points and divide by 12. The maximum score on this scale is 5 (extremely gritty), and the lowest scale on this scale is 1 (not at all gritty).

Duckworth, A.L., Peterson, C., Matthews, M.D., & Kelly, D.R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, *9*, 1087-1101.



Grit

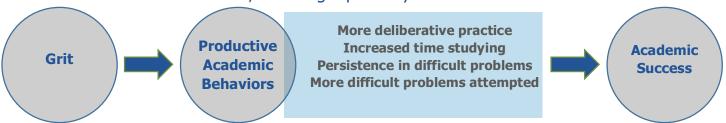
♦ What is grit?

Grit describes the capacity to sustain effort and interest in projects that take months or even longer to complete. The main components of grit are perseverance of *effort* and consistency of *interests* over time. People who demonstrate grit intentionally choose long-term goals and work continuously toward those outcomes – even in the face of adversity, with repetitive tasks, or in the absence of positive feedback.



What are the benefits of grit for learning?

Research has shown that grit is associated with positive outcomes for youth and adults. Specifically, grit has been shown to predict a number of important academic behaviors in students, fostering a pathway for academic success.



♦ How does EOS learn about students' "grittiness?"

We ask students research-based questions that have been shown to be valid indicators of grit. Our survey includes four items about grit, asking students whether they agree that, for example, "I am a hard worker" or "I have been obsessed with a certain idea or project for a short time but later lost interest."

"Grit entails working strenuously toward challenges, maintaining effort and interest over years despite failure, adversity, and plateaus in progress. The gritty individual approaches achievement as a marathon; his or her advantage is stamina. Whereas disappointment or boredom signals to others that it is time to change trajectory and cut losses, the gritty individual stays the course."

(Duckworth, Peterson, Matthews, & Kelly, 2007, p.1087)





Grit

What does EOS do with this information?

We present this information to school counselors and staff through Student Insight Cards to highlight students who demonstrate grit as potential candidates for outreach and enrollment in AP or IB classes. School staff can choose to share these Insight Cards with students.

♦ Why does grit matter for equitable access/success in AP/IB classes?
Grit provides a non-traditional indicator of student readiness for AP/IB classes.
Students who demonstrate grit are more likely to persevere in their academic work and persist in repetitive practice problems sometimes necessary for success.
For underrepresented students, grit can fuel students' ability to overcome obstacles, embrace challenges, and persevere in the challenging context of AB/IB classes.

How can we cultivate grit in students?

Although grit is a personal characteristic, it is also something that is fostered by a positive context. Students can develop psychological resources that promote grit, for example:

Growth Mindsets

The belief that intelligence is not fixed but can be developed with hard work



Willpower to regulate attention to achieve longterm goals

Strategies/ Tactics for Learning Actionable skills for taking responsibility or initiative (planning, defining tasks)

Research warns that grit is not a positive resource when it happens in fear-based contexts (e.g., "You better pass this test, or you'll never go to college!"). Instead, grit is best cultivated in a positive culture focused on the learning process. It is also critical to remove obstacles to goal setting and perseverance, for example by ensuring students have adequate resources and eliminating extrinsic rewards that undermine intrinsic motivation. Immersing students in projects they value that require consistent practice can foster grit in other pursuits.

◆ Want to know more about grit? Check out these resources:

- o A. Duckworth, C. Peterson, M. Matthews, & D. Kelly (2007). Grit: Perseverance and Passion for Long-Term Goals. *Journal of Personality and Social Psychology*, Vol. 92, p. 1087-1101.
- o Duckworth, Kirby, Tsukayama, Berstein, & Ericsson (2011). Deliberate Practice Spells Success: Why Grittier Competitors Triumph at the National Spelling Bee. *Social Psychological and Personality Science*, Vol. 2, p. 174-181.
- Tina Barseghian (February 20, 2013). How to Foster Grit, Tenacity, and Perseverance: An Educator's Guide. KQED, Mind Shift. Available at: http://ww2.kqed.org/mindshift/2013/02/20/how-to-foster-grit-tenacity-and-perseverance-an-educators-guide/
- o A. Duckworth (April 2013). TED Talk, The Key to Success? Grit.



Angela Duckworth and the Research on 'Grit

BY EMILY HANFORD

How Gritty Are You?

Before she was a psychology professor, Angela Duckworth taught math in middle school and high school. She spent a lot of time thinking about something that might seem obvious: The students who tried hardest did the best, and the students who didn't try very hard didn't do very well. Duckworth wanted to know: What is the role of effort in a person's success?

Now Duckworth is an assistant professor at the University of Pennsylvania, and her research focuses on a personality trait she calls "grit." She defines grit as "sticking with things over the very long term until you master them." In a paper, she writes that "the gritty individual approaches achievement as a marathon; his or her advantage is stamina."

Duckworth's research suggests that when it comes to high achievement, grit may be as essential as intelligence. That's a significant finding because for a long time, intelligence was considered *the* key to success.

Intelligence "is probably the best-measured trait that there is in all of human psychology," says Duckworth. "We know how to measure intelligence in a matter of minutes."

But intelligence leaves a lot unexplained. There are smart people who aren't high achievers, and there are people who achieve a lot without having the highest test scores. In <u>one study</u>, Duckworth found that smarter students actually had *less* grit than their peers who scored lower on an intelligence test. This finding suggests that, among the study participants -- all students at an Ivy League school -- people who are not as bright as their peers "compensate by working harder and with more determination." And their effort pays off: The grittiest students -- not the smartest ones -- had the highest GPAs.

The Grit Test

Duckworth's work is part of a growing area of psychology research focused on what are loosely called "noncognitive skills." The goal is to identify and measure the various skills and traits other than intelligence that contribute to human development and success.

Duckworth has developed a test called the "<u>Grit Scale</u>." You rate yourself on a series of 8 to 12 items. Two examples: "I have overcome setbacks to conquer an important challenge" and "Setbacks don't discourage me." It's entirely self-reported, so you could game the test, and yet what Duckworth has found is that a person's grit score is highly predictive of achievement under challenging circumstances.

At the elite United States Military Academy, West Point, a cadet's grit score was the best predictor of success in the rigorous summer training program known as "Beast Barracks." Grit mattered more than intelligence, leadership ability or physical fitness.

At the Scripps National Spelling Bee, the grittiest contestants were the most likely to advance to the finals -- at least in part because they studied longer, not because they were smarter or were better spellers.

Grit and College Completion

Angela Duckworth is now turning her attention to the question of grit and college completion. In <u>a study</u> funded by the Gates Foundation, Duckworth and a number of other researchers are trying to understand what predicts college persistence among graduates of several high-performing urban charter school networks: <u>YES Prep Public Schools</u> in Houston, <u>Mastery Charter Schools</u> in Philadelphia, <u>Aspire Public Schools</u> in California and <u>Achievement First Schools</u> in Connecticut.

These charter school networks serve mostly students from low-income and minority families. The schools were founded to close the "achievement gap" between these students and their higher-income peers. The ultimate goal of these charter school networks is to get students to go to college and earn degrees.

The charter schools <u>have succeeded</u> in providing strong academic preparation. Most of their students go to college. Yet the students graduate from college at lower rates than would be expected based on their academic preparation.

The charter schools want to know why that is. Angela Duckworth wants to know if grit has anything to do with it.

Duckworth's previous research shows that people who have "some college" but no degree are lower in grit than people who have college degrees. Does that mean the charter school students who are not making it through college are lacking grit? And if that's the case, can grit be learned?

These are complicated questions, and the answers aren't in yet. Duckworth says there are a number of things to think about before jumping to the conclusion that students who don't finish college *aren't* gritty. Many factors contribute to college success, including money, what colleges students go to, and what Duckworth calls "social-psychological" barriers. She says low-income and minority students often feel out of place on college campuses, especially more elite colleges where the majority of students are upper- income, white and have college-educated parents. Duckworth thinks a sense of social belonging may be key to persisting through college. One of her research goals is to "sharpen insights" about the psychological barriers that prevent well-prepared students from completing degrees -- and to test interventions that might help students overcome those barriers.

But Duckworth thinks grit is likely a significant factor when it comes to college completion among the charter school students she is studying. That's because grit is a particularly helpful trait when it comes to *challenging* experiences, and for the charter school students, college tends to be a challenging experience.

Most of the students are first generation; their parents didn't go to college -- in many cases, *no one* in their family has any experience with higher education. College can be a difficult and confusing experience even for people who come from college-educated families, but for first-generation students, college is like learning a new language, says Tenesha Villanueva, a co-director of alumni programs at YES Prep Public Schools in Houston.

"It's like going to a foreign country and trying to navigate systems and programs that you have never come in contact with before," says Villanueva.

When first-generation students come up against obstacles in college, they have no one in their families to turn to for help, says Villanueva. College-educated families provide their students with support that many students and families may not even be aware of, but it's a powerful force that helps propel students through college. Villanueva says first-generation students are at a disadvantage.

Not only do first-generation students lack the kind of family support that can help them overcome obstacles in college, they also tend to face more obstacles than higher-income students from college-educated families, according to Villanueva and her colleagues at YES Prep. They may have trouble with money or financial aid paperwork. A lot of the students have to work while going to school. Many live at home and have family obligations, such as taking care of siblings or grandparents and helping to pay the bills. Research shows all of these things make going to college harder and increase the chances a student will quit.

YES Prep graduated its first class of seniors 11 years ago. So far 40 percent of the students have earned bachelor's degrees within six years of finishing high school. Twenty-eight percent have dropped out. The rest are still in college, gritting it out years after they were expected to finish.

The Grittiest College Students

When college is hard, grit helps, according to Angela Duckworth's research.

In fact, people who succeed in getting associate's degrees are, on average, *more* gritty than people who get bachelor's degrees, according to Duckworth's research. It takes as much grit to get an associate's degree as it does to get a Ph.D.

"Graduating from a two-year college versus a four-year college is a much greater difference than people might imagine," says Duckworth.

Community colleges are full of students who are a lot like the students at YES Prep and the other urban charter schools Duckworth is studying: first-generation college students from poor families who have to balance work and family while going to school. The community college dropout rate is high.

"If you're going to get through a two-year college where the attrition rate is 50 or maybe even 75 percent, maybe you do need more grit to surmount all those obstacles," says Duckworth.

Learning to Be Gritty

It's not clear what makes some people grittier than others, but Angela Duckworth believes grit is something people can probably learn.

She says every human quality that has been studied has proven to be affected at least in part by a person's environment -- even intelligence. In addition, people change over time.

"Think about things about your personality like, "I'm a pretty extroverted person," says Duckworth. "Well, how fixed is that?"

It turns out a personality trait like extroversion can change a lot over a person's life. "If you look at large population data, people get more or less extroverted over time," says Duckworth. "There's no reason to think that grit is any different."

She believes grit can wax and wane in response to experiences. In addition, people might be gritty about some things and not others.

"You can see a child be exceptionally self-disciplined about their basketball practicing, and yet when you see them in math class, they give up at the slightest frustration," says Duckworth.

Donald Kamentz, director of college initiatives at YES Prep, says students he's worked with are some of the grittiest people he's ever met. They "deal with things and persevere through situations that most people would find insurmountable," he says.

He's known students who get jobs to pay the bills when their parents are laid off, or figure out how to get the electricity back on when the power company shuts it off.

"And then they go to college and they're struggling with financial aid or their financial aid didn't come through and they don't know what to do," he says. Some of them drop out when confronted with these kinds of challenges. He says they're not gritty enough when it comes to college.

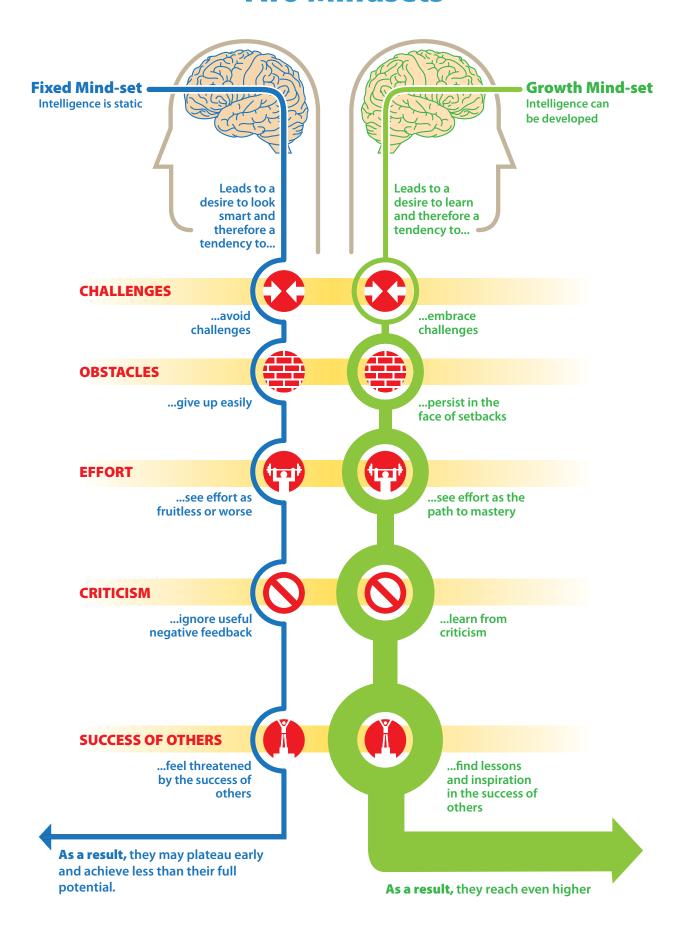
A question for YES Prep and other charter schools in Duckworth's study is not necessarily how to get students to be gritty, but how to get them to be gritty about college completion.

"Which experiences do we give kids to get them in the direction of more grit and not less?" asks Duckworth.

One of the goals of Duckworth's research is to figure this out. Her current project began in the fall of 2011 and is scheduled to wrap up in 2014.

http://americanradioworks.publicradio.org/features/tomorrows-college/grit/angela-duckworthgrit.html

Two Mindsets





Growth Mindset

♦ What is a growth mindset?

Growth mindset emphasizes that intelligence can be developed – it's not a "gift" that students either have or do not have! Students who demonstrate a growth mindset enjoy difficult tasks that require hard work. Making mistakes and focusing on the *process* of learning are key to a growth mindset.



What are the benefits of a growth mindset for learning?

Students demonstrating a growth mindset often show improvements/positive outcomes in:

Performance

GPAs Reading standardized tests Math standardized tests

Motivation

Enjoyment of learning Response to difficulty Classroom motivation

Participation

Academic engagement Academic persistence Advanced course enrollment

Staff demonstrating a growth mindset tend to approach learning with an emphasis on:

Challenge/Effort

High expectations for self and students Demonstrating the value of effort in achievement

Mistake-making

Creating tasks that will allow all students to make mistakes Praising student mistakes alongside student successes

Feedback

Process-oriented praise over person-oriented praise Expressing caring/concern without lowering the bar

♦ How does EOS learn about student and staff growth mindsets?

We ask using research-based questions! Do students and staff believe they can change how intelligent they are? Do they value school learning because they want to think deeply and learn from mistakes?

"Perhaps the most common misconception is simply equating the growth mindset with effort. Certainly, effort is key for students' achievement, but it's not the only thing. Students need to try new strategies and seek input from others when they're stuck. They need this repertoire of approaches — not just sheer effort — to learn and improve." Carol Dweck, Education Week, 2015





Growth Mindset

What does EOS do with this information?

We present this information to school counselors and staff through Student Insight Cards to highlight students with a growth mindset as potential candidates for outreach and enrollment in AP or IB classes. School staff can choose to share these Insight Cards with students.

♦ Why do growth mindsets matter for equitable access/success in AP/IB classes?

Growth mindsets provide a non-traditional indicator of student readiness for AP/IB classes. Growth mindsets cultivate perseverance when students experience difficulty and can also foster a sense of belonging that helps protect students – especially low-income students and students of color – from negative stereotypes about their abilities.



How can we cultivate growth mindsets in students?

DO: evaluate students for personal improvement, encourage hard work, suggest changes in study strategies, encourage mistakes for learning **DON'T:** focus on comforting students after failure ("it's okay - not everyone is good at math"), make work less challenging when students struggle, evaluate students only on final products. For example:

Instead of This	Try This
Great job! You must be smart at this.	Great job! You must have worked really hard, and you're improving constantly.
This test was probably too hard. We'll try something more manageable next time.	You did a great job trying many different solutions to these challenging problems.
I know math is difficult, but remember that you have many other wonderful talents!	You've learned so much in class this year, I know you will continue improving!

Want to know more about growth mindsets? Check out these resources:

- o The Mindset Kit, Produced by PERTS at Stanford University. Available at https://www.mindsetkit.org
- Carol Dweck: Book, Mindset (2006); TED talk, The Power of Believing that You Can Improve, (2014);
 Education Week (September 2015), Carol Dweck Revisits the 'Growth Mindset.'
- o E. Blad, Education Week (September 2015). *Teachers Nurture Growth Mindsets in Math.*
- A. Rattan, C. Good, & C. Dweck (2012). "It's ok-not everyone can be good at math": Instructors with an entity theory comfort (and demotivate) students. *Journal of Experimental Social Psychology*, 48, 731-737.
- EOS offers growth mindset interventions for staff and students as part of our Continuing Services available to partners following the first year of programming.



You CAN Grow Your Intelligence!

The brain changes and gets stronger, when you use it!



Inside the cortex of the brain are billions of tiny nerve cells called neurons. The neurons have branches connecting them to each other in a complicated network. Communication between these brain cells is what allows us to think and solve problems. When you learn new things, these tiny connections in the brain actually **multiply** and get **stronger**.

The more you challenge your mind to learn, the more neuron connections you make in your brain.

If you continue to strengthen these connections, things you once found very hard to do – like remembering information for a test or doing algebra or playing the trumpet –become easier.

Why? You are creating a stronger, smarter brain.

THE REAL TRUTH ABOUT "SMART" AND "DUMB"

Nobody thinks babies are stupid because they can't talk or walk or read, right? They just haven't learned yet.



But some people call themselves, or others, "dumb" or "stupid" if they can't solve math problems, spell very well, or read quickly – Even though brain research proves that <u>all</u> of these things can be improved and learned with **practice.**

So ... How do you grow your brain? What do you think?

GROW YOUR BRAIN?

- Challenge it!
- ❖ Solve problems!
- Make mistakes!
- Practice, practice, and practice some more!

You Can Grow Your Intelligence New Research Shows the Brain Can Be Developed Like a Muscle

Many people think of the brain as a mystery. They don't know much about intelligence and how it works. When they do think about what intelligence is, many people believe that a person is born either smart, average, or dumb — and stays that way for life.

But new research shows that the brain is more like a muscle — it changes and gets stronger when you use it. And scientists have been able to show just how the brain grows and gets stronger when you learn.

Everyone knows that when you lift weights, your muscles get bigger and you get stronger. A person who can't lift 20 pounds when they start exercising can get strong enough to lift 100 pounds after working out for a long time. That's because the muscles become larger and stronger with exercise. And when you stop exercising, the muscles shrink and you get weaker. That's why people say "Use it or lose it!

But most people don't know that when they practice and learn new things, parts of their brain change and get larger a lot like muscles do when they exercise.

Inside the cortex of the brain are billions of tiny nerve cells, called neurons. The nerve cells have branches connecting them to other cells in a complicated network. Communication between these brain cells is what allows us to think and solve problems.

When you learn new things, these tiny connections in the brain actually multiply and get stronger. The more that you challenge your mind to learn, the more your brain cells grow. Then, things that you once found very hard or even impossible to do — like speaking a foreign language or doing algebra — seem to become easy. The result is a stronger, smarter brain.

How Do We Know the Brain Can Grow Stronger?

Scientists started thinking that the human brain could develop and change when they studied animals' brains. They found out that animals who lived in a challenging environment, with other animals and toys to play with, were different from animals who lived alone in bare cages.

While the animals who lived alone just ate and slept all the time, the ones who lived with different toys and other animals were always active. They spent a lot of time figuring out how to use the toys and how get along with the other animals.

These animals had more connections between the nerve cells in their brains. The connections were bigger and stronger, too. In fact, their whole brains were about 10% heavier than the brains of the animals who lived alone without toys.

The animals who were exercising their brains by playing with toys and each other were also "smarter" — they were better at solving problems and learning new things.

Even old animals got smarter and developed more connections in their brains when they got the chance to play with new toys and other animals. When scientists put very old animals in the cages with younger animals and new toys to explore, their brains grew by about 10%!

Children's Brain Growth

Another thing that got scientists thinking about the brain growing and changing was babies. Everyone knows that babies are born without being able to talk or understand language. But somehow, almost all babies learn to speak their parents' language in the first few years of life. How do they do this?

The Key to Growing the Brain: Practice?

From the first day they are born, babies are hearing people around them talk — all day, every day, to the baby and to each other. They have to try to make sense of these strange sounds and figure out what they mean. In a way, babies are exercising their brains by listening hard.

Later, when they need to tell their parents what they want, they start practicing talking themselves. At first, they just make goo-goo sounds. Then, words start coming, and by the time they are three years old, most can say whole sentences almost perfectly.

Once children learn a language, they don't forget it. The child's brain has changed — it has actually gotten smarter.

This can happen because learning causes permanent changes in the brain. The babies' brain cells get larger and grow new connections between them. These new, stronger connections make the child's brain stronger and smarter, just like a weightlifter's big muscles make them strong.

The Real Truth About "Smart" and "Dumb"

No one thinks babies are stupid because they can't talk. They just haven't learned how to yet. But some people will call a person dumb if they can't solve math problems, or spell a word right, or read fast — even though all these things are learned with practice.

At first, no one can read or solve equations. But with practice, they can learn to do it. And the more a person learns, the easier it gets to learn new things-because their brain "muscles" have gotten stronger!

The students everyone thinks are the "smartest" may not have been born any different from anyone else. But before they started school, they may have started to practice reading. They had already started to build up their "reading muscles." Then, in the classroom, everyone said, "That's the smartest student in the class."

They don't realize that any of the other students could learn to do as well if they exercised and practiced reading as much. Remember, all of those other students learned to speak at least one whole language already — something that grownups find very hard to do. They just need to build up their "reading muscles" too.

What Can You Do to Get Smarter?

Just like a weightlifter or a basketball player, to be a brain athlete you have to exercise and practice. By practicing you make your brain stronger. You also learn skills that let you use your brain in a smarter way-just like a basketball player learns new moves.

But many people miss out on the chance to grow a stronger brain because they think they can't do it, or that it's too hard. It does take work, just like becoming stronger physically or becoming a better ball player does. Sometimes it even hurts! But when you feel yourself get better and stronger, worth it!

Why the Growth Mindset is the Only Way to Learn

By Edudemic Staff on November 28, 2014

http://www.edudemic.com/growth-mindset-way-learn/

"You're too old to learn a foreign language." "I couldn't work on computers. I'm just not good with them." "I'm not smart enough to run my own business."

Do you know what these statements have in common? They're all examples of the fixed mindset- the belief that intelligence, ability, and success are static qualities that can't be changed.

When you have a fixed mindset, you believe that at a certain point, what you have is all you're ever going to have: You'll always have a set IQ. You're only qualified for the career you majored in. You'll never be any better at playing soccer or dating or taking risks. Your life and character are as certain as a map.

The problem is, this mindset will make you complacent, rob your self-esteem and bring meaningful education to a halt.

In short, it's an intellectual disease and patently untrue.

The fixed mindset's antithesis, the growth mindset, may be the cure. It's the opposite way of thinking; a malleable approach to the world that makes you strive for accomplishments, imbues you with curiosity, and helps your explore the boundaries of your full intelligence.

Dr. Carol Dweck has devoted her career to probing into the idea of the growth mindset. In her twenty years of research, she's uncovered some interesting things about how we learn.

But before the good news, we have to address the bad. Many of us are still living in the "fixed" camp, and it's important to know your enemy.

The Fixed Mindset in Action

Do you find yourself trying to prove how smart you are? Are you constantly anxious of being called out? These are all symptoms of a fixed mindset.

Within a fixed framework, progress is impossible. Sure, you may pick up an odd and minor interest here and there, but you're never really going to change. The big problem is that this thinking nurtures a fundamental insecurity; it crushes resilience and those who have this mindset struggle to overcome setbacks of any kind.

But where do these mindsets come from?

If you're regularly praised for your intelligence by a teacher or parent, for example, you internalize that praise. It becomes a part of your identity. You work to prove yourself over and over again in just one area.

If you're then criticized or discouraged when you fail, you also internalize that negative feedback and try to avoid it at all costs.

When something threatens your competence, you let it threaten you. Rather than take risks and make moves to grow in your understanding – which might mean you get things wrong or that your intelligence is called into question – you defend against having to grow because it might mean you'll fail.

There's another piece of the puzzle that deserves its own consideration. It's a very dirty word that too many are subscribing to: "talent."

The Great Myth of Talent

In conversation, "skill" and "talent" are often used interchangeably – but there's an essential difference: Talents are innate. Skills are earned.

Talents are like skills you didn't work for: Having better hand-eye coordination than most, an ability to stay on the beat when playing music or an ease of working with math.

But is talent an absolute predictor of long-term aptitude? Absolutely not.

So the next time you find yourself discouraged by the gifted, try to keep a couple of things in mind: First, the environment of affluence, free time, and imposed practice many of these individuals inhabit. And second, the countless examples of people who came to excel in their fields without the benefit of inherent gifts.

Enter the Growth Mindset

The growth mindset is the opposite of the fixed: It thrives on challenge and sees failure as an opportunity for growth. It creates a passion for learning instead of a hunger for approval.

The Way into Growth Mindset

Accepting the premise that growth mindset is healthier and more productive, the question becomes how does one cultivate it?

It would be nice if there was a scientific process or a step-by-step approach, but the truth is that the journey to a growth mindset is a personal one, with different paths for different people. Here's are a few practical ways you can begin today:

Find peers

No one can put in the work or learn for you. But having a support community is the single most effective supplement to the learning process. Collaboration maintains focus, speeds up learning, and sustains interests. No matter what it is you're pursuing, find a group or a mentor for it.

Take Your Ego Out of Learning

As much as possible, take object orientation out of the equation. Focus on the task at hand. Don't compare yourself to others or worry if you're making the knowledge stick. Just learn- stolidly, patiently, and without tripping over your own expectations.

It helps to actively listen to your own thoughts and speak back to fixed thinking with a growth mindset. When you find yourself thinking "I'll never get this right" or "I'm just not good at this", combat it by actively affirming for yourself that failure is okay and the process is what is important.

Give Up Perfectionism

Here's something that no one with a fixed mindset has managed to internalize: Humans aren't perfect and neither is the process of learning. You'll experience winding courses, make many mistakes, and do bad work whenever you set yourself to learn.

Stop insisting that your endeavors all be perfect. Just aim for doing better each time and excellence will find you all by itself.

Learn to Enjoy Being Lousy

Giving up perfectionism and an obsession with outcome, you're left free to enjoy things just because you're doing them! Dweck summed up the benefits like this:

"The growth mindset does allow people to love what they're doing – and continue to love it in the face of difficulties. ... The growth mindset allows people to value what they're doing regardless of the outcome."

Remember those students in Hong Kong. Be humble, act as if you're remedial, and you'll learn all the more!

Final Thoughts

Learning your way into a growth mindset is like learning anything else. It'll be incremental and even difficult at times. But whenever you feel your confidence flagging, try to remember that there are some very smart people who struggle as you do.

And if they're winning their way to intellectual freedom, why can't you?

"Failure is so important. We speak about success all the time. It is the ability to resist failure or use failure that often leads to greater success."

J.K. Rowling

How does resisting failure limit your success?

"Failure isn't fatal, but failure to change might be."

— John Wooden

Why do some people consider failure to be fatal?

"When you take risks you learn that there will be times when you succeed and there will be times when you fail, and both are equally important."

Ellen DeGeneres

How can taking risks enable you to succeed and fail simultaneously?

"Our greatest glory is not in never failing, but in rising every time we fail."

Confucius

What do you think Confucius meant by "rising every time we fail"?

"Those who try to do something and fail are infinitely better than those who try to do nothing and succeed."

Lloyd Jones

How can failing and having to try again sometimes be better than succeeding the first time?

"A man may fall many times, but he won't be a failure until he says that someone pushed him."

Elmer G. Letterman

What are your options when you fall and how is this related to your mindset?

"Failure should be our teacher, not our undertaker. Failure is delay, not defeat. It is a temporary detour, not a dead end. Failure is something we can avoid only by saying nothing, doing nothing, and being nothing."

Denis Waitley

What kind of mindset does this person have and how does it affect his outlook on failure?

"My great concern is not whether you have failed, but whether you are content with failure."

Abraham Lincoln

Explain the type of mindset someone might have if they are content with failure.

"Winners are not afraid of losing. But losers are. Failure is part of the process of success. People who avoid failure also avoid success."

– Robert T. Kiyosaki

Compare and contrast the mindsets of winners and losers.









CHANGE

YOUR

WORDS - CHANGE YOUR

I am not a good artist.

> I'm going to train my brain to see and think more artistically.

I'm not good at this.

> Whatam I missing?

I give up.

I'LL USE SOME OF THE STRATEGIES I'VE LEARNED. I can't make this any better.

> I can always improve; I'll keep trying!

MINDSET

I'll never be as smart as her.

I'm on the right track.

CILETAE

I'm awesome at this

It's good enough.

> IS THIS ALLY MY WORK?

This is too hard.

THIS MAY TAKE

I made a mistake.

> Mistakes help me improve.



HOW TO LEARN MATH

learn a practice new skill

the skill

MAKE

ANALYZE 8

ask for help

MAKE MAISTAKES quiz on the skill

practice the skill

re-quiz on the skill

MASTERY

