

GROWTH MINDSET

Developing the Right Mindset for Your Goals



When psychologist Carol Dweck began her research career, she was fascinated with why some children, when faced with failure and setbacks, were able to bounce back and keep going while others were crushed. Through her research, she came to realize that the resilient children (and adults) shared one thing in common: they believed that they could grow in intelligence, skills and abilities throughout life. This worldview, which Dweck calls a “growth mindset”, helps build resilience because it suggests that growth is always possible, and therefore, a setback is never permanent.

Dweck has spent over 30 years studying the growth mindset and its opposite, the fixed mindset. She discusses her research findings in her book, Mindset, The New Psychology of Success. Since her research on mindsets has become popular, many more psychologists have supported her thesis, and many schools, universities, and corporations have adopted her ideas as part of their curriculum and training programs. Let's look at Dweck's theory of mindsets in more detail.

Fixed versus Growth Mindset

Imagine two students, Susan and Beth, waiting for their teacher to hand back their midterm test. It's an important part of their mark, but there's still half a semester to go. They both need to get a good mark in this course to get into the program they want to take next year. They get their tests and look at their marks. They both got a C.

Susan looks at the test, her heart sinking, and thinks, “I'm so dumb. I'm terrible at this course. I'll never amount to much. I guess there's no point studying for the rest of term.”

Beth is also upset and disappointed. She looks at her test and thinks, “Wow. I really need to pull up my socks. I'll have to study more for the next test. Also, I really didn't get that one concept. I'll have to talk to the professor and get some extra help.”

Which of these students is most likely to improve in the class, and go on to the program they are working toward?

The answer, based just on this moment, is of course Beth. But what is it about her response to a bad mark that suggests that she's more likely to succeed?

This example illustrates the mindset of the two students. Susan is demonstrating a fixed mindset, while Beth is demonstrating a growth mindset. Let's take a look at what these terms mean.

Fixed Mindset

People with a fixed mindset believe that people are born with a certain mix of skills, abilities, intelligence and character, and no amount of work or effort can change these basic facts about a person.

When someone has a fixed mindset, they tend to see the world in binary fashion. There are winners and losers, smart people and dumb people. For example, in the story above, Susan assumes that the midterm test has assessed her abilities and found her wanting. There's nothing she can do, so she might as well give up.

People with a fixed mindset often:

- Believe effort is a sign of stupidity (because smart/talented people shouldn't have to try)
- Believe that success or failure defines them
- Are reluctant to try challenging activities (in case they don't do well, and thus prove themselves to be not smart/talented/gifted)
- Ignore feedback (because they can't change anyway)
- Feel that feedback is a personal criticism
- Feel threatened by others' success

When someone has a fixed mindset, they are eager to demonstrate their good qualities. A child with a fixed mindset wants to show how smart, talented and good they are. After all, if these qualities are fixed, they want to be on the winning side.

Ironically, this need to demonstrate their skills can lead to rejecting opportunities to improve. For example, Dweck's research has shown that when children with a fixed mindset are given a choice between repeating an easy puzzle they've already mastered and tackling a new puzzle that they could learn from, these children generally choose to repeat the easy puzzle. Why would anyone redo something that's easy? Because if they try the new puzzle and fail, it might reveal that they aren't smart after all.

Growth Mindset

In contrast to those with a fixed mindset, people who have a growth mindset believe that one's talents, intelligence, skills, abilities, and even character traits and interpersonal skills can be developed over time. In this world view, challenges are embraced, and setbacks are viewed as opportunities for learning and growth.

People with a growth mindset don't see the world as divided into success and failure, winners and losers; they see setbacks as a sign that more effort and perhaps a different strategy is needed to achieve their goals. Of course, setbacks can still sting for a person with a growth mindset, but they don't see setbacks as failures – just as a sign that they need to work harder.

People with a growth mindset do recognize that everyone has a different mix of skills and talents, and they understand that not everyone can become Mozart or Einstein. But they do believe that with time and effort, skills in any area can be improved. People with a growth mindset tend to:

- Embrace challenges
- Enjoy learning
- Try various strategies to solve a problem
- Ask for help when they need it
- Listen to feedback
- Believe that effort is essential for gaining mastery
- Understand that mistakes are a part of learning
- See mistakes and setbacks as learning opportunities
- See others' successes as inspirational

Because people with a growth mindset embrace life-long learning, their achievements over time often eclipse those of people hailed as “natural talents” who don’t put in the work to reach their goals.

What You Can Achieve with the Right Mindset

What can you accomplish by cultivating a growth mindset? Well, the short answer is: anything you want. If there’s an area of learning or skill that you are interested in, you can learn, grow, and improve your skills if you apply a growth mindset.

Whether you want to improve your intellectual skills in logic, math, rhetoric or astrophysics; develop your creativity in music, drawing, writing, or film; or boost your athletic ability on the court, on the trail, or on the yoga mat, you can improve in any area you wish.

To understand why this is true, it’s helpful to know the concept of neural plasticity.

Neural Plasticity

The human brain has around 100 billion neurons, which are a special kind of nerve cell. These neurons connect to each other through connection points called synapses to make around 100 trillion connections.

This vast network of neurons controls everything about our bodies and minds, from our digestion and breathing to our mental functions such as memory, knowledge, thoughts, and emotions. Crucially, this neural network allows us to take in information, process it, remember it, and make new connections between things we know (animals with big teeth can bite) and new things we encounter for the first time (I’ve never seen that animal before, but it’s got big teeth! Run!).

Up until a few decades ago, scientists believed that the neurons in our brains grew rapidly in childhood, but then stopped growing as we reach maturity. The lack of new neural growth, it was thought, limited how much adults could learn and change in later life. In essence, the scientific understanding of our brain was, “you can’t teach an old dog new tricks.”

However, recent developments in neuroscience have completely changed this understanding. With new tools that allow us to look inside the brain, scientists have discovered that neurons can grow and change throughout our lives. For example, after a stroke, humans can relearn skills such as walking, speaking, and fine hand movements, even if the original part of the brain that controls that function is damaged. The ability of our brains to change and grow is known as neural plasticity.

One moving example of neural plasticity is that of actor Christopher Reeve, known for his role as Superman. Reeve turned out to be a real-life Superman after a horse-riding accident left him a quadriplegic. Before Reeve, the established medical wisdom was that people with spinal cord injuries might continue to improve and regain some function for months after their accident, but, by around two years post-accident, no more improvement would be possible. Reeve, however, was determined to beat the odds.

Shortly after his accident, Reeve began physical therapy. Around five years after his accident, he regained the ability to move his index finger. Inspired, he began even more intensive training. While he would never walk or gain control over some parts of his body, he was able to dramatically improve his health and regain some movement and sensation.

Perhaps most importantly, his example opened up new avenues of research. Scientists have since built on these early findings and are making great strides in helping people with spinal cord injuries regain function, sensation and movement.

While Christopher Reeve might be an extreme example, his story illustrates an important truth: we can learn and grow at any age. In other words, a growth mindset isn't just a nice idea; it's the scientific truth of how our brains work. No matter what you wish to improve, with strategic effort, growth and learning is possible.

Inspiration for Growth Mindsets

The world is full of examples of people who exemplify a growth mindset. Here are just a few:

Athletics

While many athletes are hailed as naturals who somehow have an almost magical gift for their sport, this idea belies the intense work and determination it takes to be competitive. In fact, most of the sports heroes we know, from Mohammad Ali to Tiger Woods, were not hailed as naturals at the start of their career. Only extremely hard work made them seem, at the peak of their powers, to have been naturals all along.

For example, consider the story of Fauja Singh, multiple world record holder in running, who didn't learn to run until he was 89.

Fauja Singh, the world's oldest marathoner, was a sickly young boy growing up in India. He was often teased by his peers, but still developed an interest in running as a young man. He soon gave up running, though, and didn't return to athletics until 1995, when he was in his 80s.

Spurred on by deaths in his family, he wanted to take care of his health. He ran his first marathon in 2000, at age 89. In 2003, at age 93, he beat the world marathon record for his age group by 53 minutes. Singh held multiple age group awards in various running distances, and was the first centenarian to finish a marathon in 2011.

If there is a sport or activity you'd like to try, know that while you may not become Michael Jordan or Serena Williams, you can learn and improve at any age.

Art

Even for people who believe that intelligence can be cultivated and developed, creativity and artistic ability can seem impossible to acquire if they aren't inborn. Yet, creativity and artistic skills can be learned and cultivated just like anything else. In fact, many famous artists struggled for decades before mastering their craft and gaining recognition.

For example, Impressionist painter Claude Monet didn't begin painting seriously until his 40s and painted his most successful works amidst his beloved gardens as he aged. Monet's fellow Impressionist Paul Cezanne also got off to a slow start. He was repeatedly rejected from art school and didn't find any success until his 40s. Getting an even later start was American artist Anna Moses, commonly known as Grandma Moses. She didn't begin painting seriously until she was 78.

Literature

Writing is another field in which success might seem due to natural talent, and yet, hard work and determination are the deciding factors more often than not. For example, Laura Ingles Wilder, writer of the Little House on the Prairies series, didn't begin writing until her 40s, when she started a freelance journalism career. It took another twenty years before she published her first novel.

Poet Charles Bukowski published his first book at age 51, Nobel prize winner Toni Morrison didn't publish her first novel until age 39, and novelist Donald Ray Pollock started writing in his 50s, finishing MFA at 55 with his debut novel coming three years later.

For more examples of how a growth mindset helps people succeed in sports, music, business and relationships, read Dweck's book, Mindset, The New Psychology of Success, which is full of examples of how a growth mindset leads to success, while a fixed mindset hinders it.

Develop Your Growth Mindset

Through her research, Carol Dweck has discovered many ways to help anyone change their mindset. Here are a number of research-proven ways to help you unlock the power and potential of a growth mindset.

Learn about How the Brain Grows

It may seem too simple, but Dweck's research shows that simply becoming aware that growth is possible in any area helps people shift to a growth mindset.

Great books that can teach more in this area include Dweck's own book mentioned above (*Mindset, The New Psychology of Success*) as well as *Grit, The Power of Passion and Perseverance*, by Angela Duckworth, which examines how passion and perseverance can help people achieve their dreams. There are also many books, magazines and blogs that discuss the latest findings in neuroscience and how to apply them to your own life. The more you learn about your own brain, the more you can achieve with it.

Plan for Growth

A specific plan of action will help you achieve your dreams. For anything you wish to achieve, Dweck advises that you ask yourself, "When, where, and how will I embark on my plan?" The more specific your answer is, the more likely you are to follow through with it.

For example, instead of thinking, "I'll start eating better tomorrow", think: "I'll add a piece of fruit to my breakfast, and have a plain black coffee instead of a mocha latte during my coffee break."

Instead of thinking, "I'll start asking for help in class," think: "The teacher always asks if we have questions at the start of class. Tomorrow, I'm going to put up my hand and ask about that problem I'm stuck on."

Open Yourself Up to Feedback

When in the grips of a fixed mindset, people tend to close themselves off to feedback. After all, if you can't change, what's the point of listening to criticism? However, feedback is an incredibly useful tool for helping identify where and how to improve yourself. Ask for constructive feedback from your teacher, boss or mentor, and spend some time thinking about a concrete plan for improving your work.

Reflect on Your Growth

Take a few moments each day to reflect on puzzles you've solved and challenges you've met. How did you solve them? What strategies did you use? At the same time, think about the mistakes you've made. What did you learn? How will you do things differently?

Regularly reminding yourself that you can learn and grow from challenging situations helps reinforce a growth mindset. If you have kids, this is a great conversation to have around the dinner table, to model a growth mindset and help your children learn that trying, failing, learning, and trying again is the key to achievement.

Getting Back on Track When Things Go Wrong

Developing a growth mindset isn't a matter of flipping a switch. In fact, that's a very fixed mindset view of the issue: "I'll just decide to have a growth mindset, and then I'll have one!" Instead, working on a growth mindset is more like caring for a new kitten. A growth mindset needs care and nurturing. If you find yourself slipping back into fixed mindset habits, try these tips:

- Keep trying! A growth mindset teaches us that learning and growth are always possible. If you struggle to internalize this idea, just keep holding it as an ideal. The more you strive toward a growth mindset, the more you build it in yourself.
- Embrace challenges. Don't shy away from difficult problems. Tackling something challenging and mastering it is the best way to build a growth mindset.
- Try different ways to learn. Not everyone learns in the same way. If you are struggling to master a subject, try different strategies. Most colleges and universities have study skills classes that can teach you different ways to tackle learning. Keep trying until you find what works for you.
- Delete "failure" from your vocabulary. In a fixed mindset, not completing a task perfectly can feel like failure. It's not. It just shows that you have more learning to do. When you don't do as well as you like, you haven't failed; you just haven't mastered the task yet. Keep trying, keep learning, and you'll get there.
- Hold realistic expectations. It takes time and energy to learn a subject or improve your skills. If you are getting frustrated because you can't (yet!) do something, make sure you have realistic expectations about how quickly you can improve.
- Love the process, not the outcome. People with a growth mindset develop a love of learning that leads them to ever greater challenges. Along the way, they tend to accumulate successes, but the success wasn't the point — the challenge was. Embrace this way of thinking. Learn to love the process of learning and keep challenging yourself as you move through life.

Conclusion

The science is clear: it is possible to learn, grow, and change throughout your lifetime. No matter what you think your traits, abilities, and skills are, it's possible to improve in any area that you chose to focus on. In contrast, believing that your skills are fixed has a way of limiting what you can achieve.

To truly unlock your potential, work on developing a growth mindset. Once you develop a love of learning and belief in your own capacity for growth, you can achieve anything you set your mind to.