

Neuroplasticity and Mindset

Neuroplasticity has completely revolutionized our understanding of the brain's ability to adapt and grow. So, what is neuroplasticity? It refers to the brain's capacity and ability to reorganize itself, forming new neural connections and pathways in response to intrinsic and extrinsic stimuli. This has far-reaching implications for personal development and success. It is the science behind the cultivation of a growth mindset.

Henry Ford said, "There are two kinds of people: Those who think they can, and those who think they can't, and they're both right." Have you ever thought how true that is?

In her book, "Mindset: The New Psychology of Success," Carol Dweck explores the impact of mindset on our ability to embrace challenges, learn from failures, and ultimately achieve personal growth. She describes the concept of mindset, highlighting two distinct mindsets individuals can adopt: a fixed mindset or a growth mindset.

FIXED MINDSET: People with fixed mindsets assume their intelligence, talent, and basic abilities are fixed traits. They believe that intelligence and talent are inherent and cannot be developed. So, they avoid challenges and fear failure. For these people, "talent alone creates success without failure."

GROWTH MINDSET: On the other hand, people with a growth mindset believe that their intelligence, talent, and abilities can be developed through dedication and hard work. At any point in time, they see themselves at a starting point. They tend to embrace challenges and persist in the face of adversity and failure. These people are more likely

to achieve success and fulfillment in various domains, such as academics, sports, businesses, and personal relationships.

A growth mindset establishes an atmosphere that encourages and supports the plasticity of the brain. When individuals believe in their capacity to evolve and improve, they are more likely to engage in endeavors that push their boundaries and expand their understanding. Consequently, this prompts the brain to rearrange itself and form new neural connections, resulting in amplified learning and development.

She also introduces the concept that failures and setbacks should be viewed as opportunities for growth. By reframing failure as a stepping stone to success, individuals with a growth mindset are more resilient and motivated to persevere. What did Thomas Edison, the famous inventor of the light bulb say, "I have not failed. I've just found 10,000 ways that won't work."

Let's look at an example. Let's say you are working with a child who is having difficulty understanding long division.

In a fixed mindset, the child says it is "too hard", or "I am not good at math". The next time he/she is asked to solve a math problem he would avoid it. As an educator with a fixed mindset, one would believe "he/she just can't learn, I can't teach him/her."

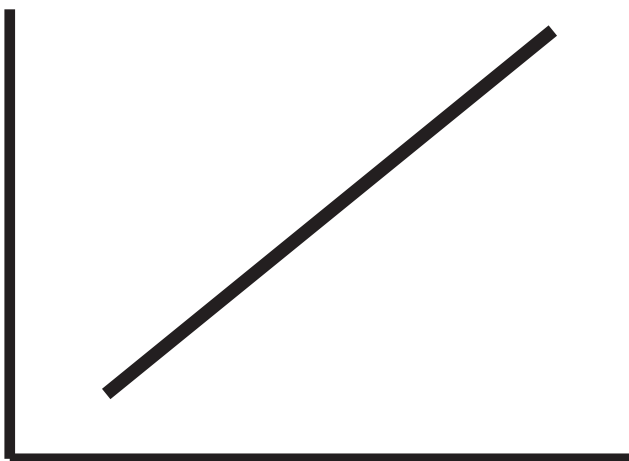
In a growth mindset, the child would think "Long division is challenging, but each time I practice it gets a little easier. I will get better if I keep practicing." As an educator with a growth mindset, one would think, "Let's figure out what is most challenging for the child. How can I provide extra support? How can I change my method of teaching to help the child learn? Visuals? Manipulatives?" A person with a growth mindset is more of a problem solver.

By understanding brain plasticity and embracing a growth mindset, educators and learners can overcome challenges, learn from failures, and unlock their full potential. The transformative power of neuroplasticity and the growth mindset offers a roadmap for personal and professional development and success.

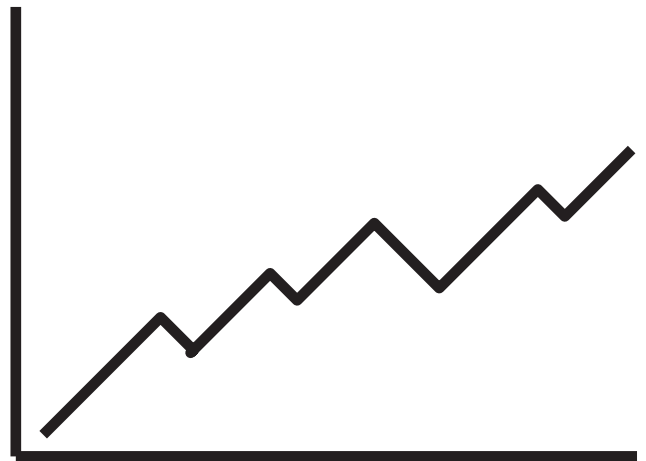
So how can you let go of the black-and-white view? Anne-Laure Le Cunff, a neuroscientist, and writer talks about strategies that you can use to develop a growth mindset. She talks about how changing your vision of effort and failure can change your whole outlook toward life. She offers fifteen strategies that one can use to develop a growth mindset.

1. **Remember the concept of neuroplasticity.** The brain rewires in response to stimuli, both physical and emotional. It does not stop after childhood. New neuronal connections are constantly being made. With every repetition of action, emotion, or thought, you are reinforcing those neural pathways. Think about learning something new like an instrument. How hard was it initially? Did it become easier with practice?
2. **Appreciate the process over the results.** Don't worry too much about the final result instead enjoy the process and try to learn as much as you can. Appreciate the effort put in both by the learner and the educator.
3. **Identify your weaknesses.** Awareness of weaknesses, both yours and the learners empowers you to actively address and improve upon them. Ignoring them only impedes growth.

4. **Cultivate your sense of purpose.** People with a growth mindset have a clear sense of purpose, they ask “why” more often. What do you want to achieve? What is your mindset holding you back?
5. **Don't say failing, say learning.** See each opportunity as a learning opportunity. Ask yourself what did I learn from this?
6. **Value effort over talent.** Be willing to put the work in. Instead of offering rewards for excellence, offer rewards/praise for the effort a learner put in, irrespective of success. Instead of telling someone they did well as they are smart, try saying “Great job on the test, you must have worked so hard!”
7. **Consider challenges as opportunities.** Set realistic goals. Acknowledge the challenge and your fears. Break down the challenge into smaller achievable goals.
8. **Place growth before speed.** Learning is hard and takes time. It is not linear. Focus on the upward trajectory. It is based on a solid foundation, building which can sometimes take time, repetition, and hard work.



What people think learning looks like



What learning really looks like

9. **Do not chase other people's approval.** Approval-seeking hinders growth.
10. **View criticism as a gift.** Use feedback to learn not to dwell. Use it as a data point to improve. Analyze it. Help your learners identify areas for potential improvement.
11. **Celebrate actions, not attributes.** Praise the learner for something he/she does well or worked hard on- not just for being smart or something inherent.
12. **Grow with others.** Share your successes with others. Learn from other people's mistakes.
13. **Take time to reflect.** Once a day or week write down your successes and reflect on your growth. At the end of the day/session talk about what went well for the learner and yourself.
14. **Cultivate perseverance.** Remind learners and yourself about a time you faced a challenge and how you overcame it.
15. **Use the "not yet" technique** Carol Dweck teaches. By adding "not yet" to any fixed mindset statement, you can start to reframe your thoughts. "I don't know how to teach this concept...yet." "He/she has not mastered/understood this concept ... yet."

She also offers a set of questions you can ask yourself every week to help foster the growth mindset. So, block an hour and ask yourself the following:

- What am I struggling with right now?
- What did I want to learn by the end of the week?
- What is the one thing I will try that will get me out of my comfort zone?
- Who can I reach out to for help this week?

These can also be tailored to kids according to their ability and have them take a shot at answering them. You might just learn something new about them or from them!

When struggling with daily challenges as an educator or learner you can ask the following questions:

- What did I do today that made me think hard?
- What new strategies did I try? What strategies did I find most helpful?
- What mistake did I make that taught me something?

By embracing neuroplasticity and adopting a growth mindset educators and learners can break free from self-imposed limitations, overcome challenges, and achieve remarkable success. Nevertheless, it is important to acknowledge that this journey is not a simple task; it requires a lifelong commitment to learning and personal development.

