

Developing a solution-focused (growth) mindset

This chapter looks into the concept of the solution-focused (growth) mindset, the science behind it, and the importance of developing such a mindset for educators. After reading the chapter, you should be able to:

- Explain what a solution-focused mindset is and why it is important for you as an educator,
- ✓ Differentiate between a growth mindset and a fixed mindset,
- ✓ Test yourself and estimate how open-minded you are,
- ✓ Use different methods for developing your own and then your students' solutionfocused mindset.

The chapter includes the following sections:

- 1. The solution-focused (growth) mindset definition and importance in education
- 2. The growth mindset and the educator
- 3. Practical advice and tips How to support learners in the development of a solution-focused mindset
- 4. Growth mindset in face-to-face, synchronous, and asynchronous education
- 5. Common challenges and misconceptions about the growth mindset
- 6. Questions for reflection
- 7. References and resources



Designed by storyset / Freepik

The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

1. The solution-focused (growth) mindset – definition and importance in education

The way you choose to engage with and think about problems, directly influences your ability to solve them effectively.

Before we start defining the concept, we should mention that solution-focused and growth mindsets are very often used as interchangeable concepts, so don't be confused with this different terminology. The concept of a growth mindset – the belief that intelligence can be developed through effort – is gaining considerable attention in the education world, and for a good reason. A learner's perspective or "mindset" can have a huge impact on their academic success, motivation, and future. Educators, as primary mentors, can play a big role in nurturing that mindset.

The difference between a growth mindset and a fixed mindset

The theory of fixed and growth mindsets comes from Dr Carol Dweck, a professor of psychology at Stanford University.

- Fixed Mindset Learners with a fixed mindset believe that any skills, talents, and abilities they have, are fixed traits. People with a fixed mindset believe that any challenges they face are due to their lack of natural skills and abilities. Another common belief is that they "aren't good enough". As a result, they are resistant to try any new assignment that seems too hard and unfamiliar. In the classroom setting, believing you are "good at maths" or "bad at maths" is an example of a fixed mindset.
- Growth Mindset Learners with a growth mindset believe that they can develop any competence if they invest enough time, effort, and patience. They generally have healthy self-esteem and confidence and that's why they believe that they can accomplish anything they put their mind to if they don't give up after mistakes. They see mistakes as natural and expected as a normal part of growth and development. Consequently, they are usually open to feedback and see it as a way for improvements.



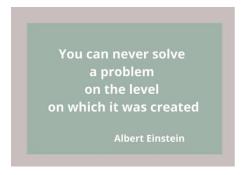
(Source: Army Resilience website)

The Importance of a solution-focused mindset in education

The biggest change we see in the global education system lately is the massive transformation from face-to-face to digital learning. We are witnessing a paradigm shift. To be able to adjust to the rapid changes, rethink and reinvent the educational landscape, we have to be open-minded.

One of the main goals of education is to develop competencies that are necessary for a given society and equip learners for solving different problems. We live in a complex world and sometimes problems we encounter seem so complex that finding solutions could be daunting. One way to overcome this is to focus on the solution rather than the problem. This approach aims to achieve small steps forward. It is purposeful and strives to improve a situation as quickly as is reasonable. It doesn't mean that all problems can be solved quickly, but there is always a way out if we look for solutions.

It is vital that we, as educators, welcome and develop a solution-focused mindset. It will help us to explore and amplify strengths and successes instead of concentrating and being stuck on problems. Using this approach emphasises choice and encourages people to take responsibility for their own behaviour and actions. The technique is universal and can be used both with adults and children. Using solution-focused ways of working promotes feelings of confidence and can encourage a positive ethos throughout a learning environment.



Science behind the concept

If you're skeptical about the growth mindset, it may be helpful to look into neuroscience that supports this idea. The concept of <u>neuroplasticity</u> shows that the neural pathways in our brain are constantly changing in response to our experiences. The brain is like a muscle – the more you practice, the stronger it becomes, and the process becomes more automatic.

What is Neuroplasticity?

Neuroplasticity is the brain's ability to change and grow and this process happens throughout all our life. For a long time, scientists believed that this was only possible in early childhood. They believed that with ageing, the brain becomes rigid and fixed. Recently, a large body of research has shown that the brain continues to change even in old age.

The brain is a "pattern-seeking device". If your brain neurons are activated in the same pattern over and over, it will be easier for the brain to "remember" and follow the same pattern over and over.

As you see, the brain has the ability to remember the task that you worked on, and in future, it becomes much easier every time you do the same task.

In conclusion, we can say that our brain is very plastic. Through various challenges and constant practice, we can build pathways that make our brains stronger.

2. The growth mindset and the educator

To be able to develop a growth mindset in our learners, we would suggest first, developing it yourself as an educator. We hope you agree with the saying "You should walk your talk". As educators, we should be the role models, and show the competencies we are trying to develop in our learners.

The first step in this direction might be finding an answer to the question: **Do I have a Growth-mindset?**

Take this test to find the answer.

Now let's see **HOW** can you develop your growth mindset. Try these practical steps and reflection questions.

Practices for developing a Growth mindset¹

1. Think about a time during the past week when you were faced with an academic, social, or personal challenge. Reflect on your experience - did you approach the challenge with a growth mindset or a fixed mindset?

How do you know? If you faced the challenge with a fixed mindset, how might you have approached it differently?

2. Reflect on real-life examples of the use of a growth mindset (by you or someone you know). Very beneficial, if you use some journaling or free writing to think through your experience. Try to describe how the growth mindset helped you (or someone you know) to solve a problem or achieve a goal.

Be as specific as possible. What did you think and/or do that allowed you to overcome the challenge?

¹ Taken/adapted from "<u>Growth mindset – discussion questions</u>", <u>ESU webpage</u>

After several times of written reflections, look into it. Do you see any patterns? Do you see similarities in actions, thoughts, or emotions?

Try to be specific. Identify thinking and behavioural patterns that clearly demonstrate a growth mindset. Remember these when you face a new challenge.

3. Think about something about yourself that you always wanted to change. What is it? What prevented you from acting on it? Was it a fixed mindset?

Reflect on it from a growth mindset. Create a concrete plan for that particular change.

- 4. When you're feeling frozen, or stuck, when you cannot see the light at the end of the tunnel, remember *the power of "YET"*! Words have power. When we say "I can't do" it triggers a belief that we never can overcome this challenge, it's beyond our reach. That makes us give up without even trying hard enough. When we say "I can't do ... yet" brings the thought that maybe right now I cannot do something, but if I put time and effort, and find a better strategy, everything is achievable.
- 5. Remember to:
 - Concentrate on effort, overcoming obstacles and determination despite setbacks
 - Pick tasks that are not easy
 - Focus on strategies
 - Reflect on different strategies that work and don't work
 - Focus on learning and improving
 - Seek challenges
 - Work hard



Designed by pcf.vector / Freepik

3. Practical advice and tips – How to support learners in the development of a solution-focused mindset

Helping learners develop a growth mindset requires deliberate effort from educators, but many of the methods can be easily integrated in already existing practices. The following strategies and tips can help you to foster a growth mindset in the learning environment:

- 1. Challenges and struggles. The first step would be to accept challenges and normalise struggle. For this, you should help your learners to see that struggle is part of the learning process. When we help learners to accept and welcome struggle as a part of the learning process, they will react much more positively when they feel challenged.
- 2. Engagement with challenges. Introduce challenges as fun and exciting parts of the learning process and emphasise that easy tasks can be boring. Part of developing a growth mindset is teaching learners how to overcome obstacles. A particularly hard problem or complex assignment that stretches their abilities can provide opportunities for growth and further instruction that emphasises problem-solving.

You could use these <u>8 challenge-based learning apps, tools and resources</u>.

- **3.** The power of the word "yet". If someone makes the statement "I'm not a maths person" or "I cannot do this," adding a simple qualifier will signal that there is a space for gaining ability. "You're not a maths person *yet*", "You cannot do this *yet.*"
- 4. Brain and hard tasks. Explain the value of hard tasks to the brain. Promote the idea that brains are soft "muscles" that can be developed. Brain research shows that due to plasticity, our brain neurons can grow and when a person believes in change, more effort is put into learning and development. <u>Try this 10 best</u> brain training apps.
- 5. Value of Mistakes. Explain that without mistakes learning is not possible. Help learners see mistakes as learning opportunities. Educators can model this outlook in reactions to their own mistakes and the steps they take to correct a mistake. Be a role model to your students accept the value of your mistakes.
- 6. Setting goals. Having learners set step-by-step, achievable goals shows them that growth and progress is possible. <u>Check out these goal tracking apps.</u>
- **7. Exercises and activities for cooperation.** When we work together for problem-solving, we learn how to cooperate, how to ask for help, and how to

find solutions using joint effort. It also reduces the importance of separate, individual results, and helps some individuals to feel more secure and comfortable. Use online team building and team bonding games and activities. Here you can find different games and activities for online teambuilding.

- 8. Danger of praising intelligence. This may sound strange but when we praise for "being smart" it reinforces the idea of intelligence as a fixed characteristic. For the students, who are praised for smartness, it can become a demotivating factor. They can "stop trying" because they already "know everything". For those who do not receive the praise, it can also become a demotivator they start comparing themselves with "smarter" ones and lose motivation.
- **9.** Don't oversimplify. It sounds like harmless encouragement and empowerment when we use the phrase "You can do anything!", but if we give this encouragement to the learners who didn't overcome any challenges, the phrase will be just empty words and you might lose credibility.



Designed by jcomp / Freepik

4. Growth mindset in face-to-face, synchronous, and asynchronous education

In face-to-face education you The	chronous education	Asynchronous education
to support learners, question their existing mindset and encourage and foster development of growth mindset. Because face-to-face learning ensures a real-time interaction it's the best option for those learners, who learn better through group work and cooperation. Use interactive activities to challenge them and at the same time provide immediate feedback. A face-to-face setting makes it easier to use experiential learning/learning by doing. You could create a simulation using a real-life scenario to make the learners question their existing points of view and see alternative options. One more characteristic of a face-to-face setting is that because of the close social proximity, it is much easier to create a trusting, intimate environment, which is beneficial when educators question deeply ingrained beliefs and assumptions. There is a connection between a growth mindset and self- confidence. You could use different activities and methods for building your learners' self- esteem and confidence.	elopment of a growth dset between face-to- e and synchronous online ching. Here too you can e real-time interpersonal munication, the use of aral language and hediate feedback. online synchronous cation, you can use the he tips as in a face-to- e setting, just with the use echnology, for example, up work and video cussions to challenge the d mindset and allow ners to share their eriences. vide learners with tools online collaboration <u>opbox, Google Docs</u>). can invite them to nstorm their views on en topics to find an rnative (<u>Padlet,</u> <u>dmeister</u>). te learners to prepare share their formal or rmal presentations. They record and then share link of their presentation	The differences between synchronous settings lie in the choice of methods used for achieving their educational objectives. There are five major differences between asynchronous education - communication tools, input methods, modes of collaboration, feedback types and targeted skills. Because an asynchronous environment is more content-oriented, use videos (<u>Moovly</u>), podcasts (<u>Audacity, Podbean</u>), and provide scripts for those who prefer to read. For finding resources and creating materials you could use <u>MERLOT</u> , <u>WikiMedia</u> . You can use interactive presentation tools <u>Nearpod</u> , <u>ClassFlow</u> to add self-check questions to lecture materials and videos. A great way to challenge your learners, engage them, and spark emotions is to create audio flashcards, jeopardy, word puzzles and quizzes using these tools (<u>Quizlet</u> , <u>Jeopardy Labs</u> ,

5. Common challenges and misconceptions about the growth mindset

Here are some of the most common misconceptions about growth mindset to look out for (Taken/Adapted from <u>Washington State Board for Community and Technical Colleges</u>):

• The belief that you already have a growth mindset.

No one has a growth mindset all the time, it must be developed through practice. Most of us have a growth mindset in some situations (e.g., our career) and a fixed mindset in others (e.g., our relationships). In some situations, a fixed mindset is needed. However, be careful because your fixed mindset might try to assure you that you already have a growth mindset. If you believe in this false statement, it can lead you to a false growth mindset, which can move our attention from the things we do and the choices we make. <u>Read more about the false growth mindset on Edutopia.</u>

Developing a growth mindset is a challenge that can be overcome only through a conscious approach. To do so, we should agree that all of us have some fixed habits, and fixed traits and our fixed mindsets can show in different areas.

• The belief that if you have a growth mindset it will naturally lead to a growth mindset in your learners.

Unfortunately, it's not that simple! We all know that it is not easy to break our habits, especially mental habits. Not easy when we try to change our own habits, and it's even harder when we try to help someone else to break out of their mental habits. It's one thing to have a growth mindset for yourself, but to help others to develop a growth mindset requires special skills.

One obstacle on the way to the growth mindset is that we all are prone to the <u>Fundamental Attribution Error</u> – usually, we are much more tolerant of our own mistakes. We see them as exceptions from the rule, something not natural for us, but others' mistakes we judge harshly, we see it as proof of their character. As the saying goes, "We judge others by their actions and ourselves by our intentions."

Growth mindset development won't happen automatically by itself, but there are different steps we can take to support learners practising a growth mindset. To be able to pass on a growth mindset, we should have the same mindset about others as we do about ourselves. Most important here is to show your learners that you believe in them, in their ability to grow.

• The belief that success in school means that the student has a growth mindset.

Very often students, who push themselves for academic success and are overachievers, are perfectionists and might have a fixed mindset. Experience shows that these students may have very unhealthy attitudes about the learning process and educational environment. They prefer to avoid challenges not to feel incompetent.

• The belief that according to the growth mindset theory we shouldn't praise our students.

As we already know, the best way to praise is to praise our learners' actions, not them as learners in general. In this case praise will be associated with actions instead of the learner's identity, as identity can be rigid. Read more about praise from the Florida Department of Education's <u>Growth Mindset module</u>.

Watch this <u>video</u> about the impact of praise.

Praise the process, not the person!!!

6. Questions for reflection and practical exercises

This adaptation of Carol Dweck's "Mindset" gives an extensive list of ideas on how to reflect about our mindset (Taken/adapted from "<u>Growth mindset – discussion questions</u>"):

 Would you say you are a smart person? When, in what conditions do you feel smart? When you're doing something without any mistakes or when you're learning something new?

Grow Your Mindset: How can you change something that's difficult into something that makes you feel smart?

2. Think back and remember the opportunity that you had, something important for you but you lost it, because of your fixed mindset. What holds you back? Your thoughts and worries about your skills, abilities? Fear of failure? Fear of judgements?

Grow Your Mindset: Now try to look into that opportunity or challenge through growth mindset eyes. Think of it as a great chance to learn something new.

3. Think of times other people outdid you and you just assumed they were smarter or more talented.

Grow Your Mindset: Now consider the idea that they just used better strategies, taught themselves more, practised harder, and worked their way through obstacles. You can do that too, if you want to.

- Are there situations where you get stupid where you disengage your intelligence?
 Grow Your Mindset: Next time you're in one of those situations, get yourself into a growth mindset think about learning and improvement, not judgement and hook it back up.
- 5. Is there something in your past that you think measured you? A test score? A dishonest or callous action? Being fired from a job? Being rejected. Focus on that thing.

Grow Your Mindset: Now put it in a growth-mindset perspective. Look honestly at your role in it, but understand that it doesn't define your intelligence or your personality or anything else about you. Instead, as: What did I (or can I) learn from that experience? How can I use it as a basis for growth? Carry that with you.

6. How do you respond to Feedback?

Grow Your Mindset: Remember that feedback helps you (and others) understand how to fix something. It's not feedback that labels something deficient. Use constructive feedback to improve, even if you believe you've already done your best work.

- Are you a person who tends to avoid responsibility for your problems or failures by making excuses or blaming others?
 Grow Your Mindset: Think of specific examples and discuss how you could use a growth mindset to take responsibility and start to correct the problems you face.
- 8. Do you use feeling bad as a reason for doing nothing? When you feel disappointed, thwarted, cheated, or depressed do you use this as a reason to stop trying?

Grow Your Mindset: What steps could you take to help growth mindset thinking overcome your fixed mindset? Discuss a specific plan.



Designed by pch.vector / Freepik

7. References and resources

Bradley Busch (2018) Research every teacher should know: growth mindset. The Guardian.

Carol S. Dweck (2007) Mindset: The New Psychology of Success. Ballantine Books; Updated edition

Dweck, C. S., and Yeager, D. S. (2019). Mindsets: A View from Two Eras. *Perspect. Psychol. Sci.* 14 (3), 481–496. doi:10.1177/1745691618804166

Limeri, L.B., Carter, N.T., Choe, J. *et al.* Growing a growth mindset: characterizing how and why undergraduate students' mindsets change. *IJ STEM Ed* 7, 35 (2020). <u>https://doi.org/10.1186/s40594-020-00227-2</u>

King, R. (2012). How You Think about Your Intelligence Influences How Adjusted You Are: Implicit Theories and Adjustment. *Personal. Individual Differences* 53 (5), 705–709. doi:10.1016/j.paid.2012.05.031

Webpages

- Growth Mindset Toolkit <u>Transforming education</u>
- Solution Focused Problem Solving
- <u>A summary of Growth and Fixed Mindsets</u>
- <u>MindsetWorks</u>
- Teaching growth mindset to your students
- The power of self-questioning
- Effective ways to develop a growth mindset in students
- <u>Growth mindset for educator teams</u> (materials, downloads)
- Developing growth mindset amongst teachers
- Why developing a growth mindset is important and how to implement it in the classroom
- How to foster a growth mindset in the classroom
- Practical tips for developing a growth mindset
- Neuroplasticity
- How do I actually develop a growth mindset?
- <u>Challenge-based learning apps and tools</u>
- <u>10 Best Brain Training Apps</u>
- Goal Tracking apps
- <u>Mindset Kit</u> a free set of useful online lessons and practices
- <u>Common growth mindset misconceptions</u>