



Strategies for promoting a growth mindset



School resources

Teachers have an important influence on student mindsets. Teachers can transfer their mindsets to students and affect student achievement. When a teacher has a fixed mindset about their students, students maintain their level of achievement but when a teacher holds a growth mindset, student achievement increases, particularly among lower achievers.

Growth mindsets can be supported by a range of classroom practices. Research shows that you can directly teach students a growth mindset by talking to them about the nature of learning and the role of mindsets in learning and achievement, and by creating a classroom culture that supports and promotes growth mindset behaviours and attitudes.

How to teach students about the role of mindsets in learning

You can help students to develop a growth mindset by teaching them [how the brain works](#) and how it changes with learning. Students who are taught about the elasticity of the brain, and that it is possible to grow their brains, subsequently do better in academic work. Students need to know that when a person stretches themselves to learn something new, the brain forms new connections, and over time intellectual ability can be enhanced. In fact, scientists have discovered that the brain grows more when people try to learn something new, and less when they practise things they already know.

Researchers have investigated the malleability of the brain in order to show that intelligence can be developed. Students are asked to read an article which explains that the brain can get smarter the more it is challenged, just like a muscle gains strength with use. They watch videos about the anatomy and function of the brain, and read summaries of research showing that animals or people who repeatedly practise particular kinds of learning have denser networks of neurons in their brains. Students read quotes from admired adults and celebrities, and success stories of growth mindset-oriented people. The intervention then asks students to give a personal example of something they used not to know or be able to do but got better at with practice. Finally, students are given writing assignments in which they offer advice to a struggling student. The idea here is that 'saying is believing', and the act of forming key messages about the brain in their own words helps students internalise ideas, as well as offering them an opportunity to mentally rehearse responses they can use when they are struggling. Such interventions were found to impact students' mindsets in positive ways even after a relatively short amount of instruction, and to lead to more positive and constructive learning behaviours and attitudes.

How to create a classroom culture that encourages growth mindsets

A classroom that supports and promotes growth mindset is one in which **effort is expected and valued**, although it is important to avoid praising fast and easy work or answers: this kind of endorsement discourages children from sticking with a challenge and working hard, and students might come to think that doing things quickly and easily is valued as a reward. When students perform tasks quickly or easily, this means they were not challenged and very little learning occurred. An important caveat is that you must **value effort that leads to learning** rather than praising effort for its own sake. Don't praise effort when students aren't actually learning anything, and don't accept effort as a good

enough response: for example, telling students to 'just do your best' implies they can only do what they are capable of with their fixed quota of intelligence.

As part of emphasising productive effort, **focus on processes** such as challenge-seeking, focus, strategy use, hard work and persistence, rather than outcomes. Be honest about students' mistakes and failures, and you can work together to do something about it, empowering the student.

Growth mindset feedback informs students as to where they are in their learning and what they need to do to improve, so present yourself as a mentor and a resource for learning rather than a judge of performance and ability.

A growth mindset-oriented classroom culture **embraces challenge**. Whenever a student faces a challenge or gets stuck, frame it as an opportunity for learning or for growing the brain. Be excited and positive, and celebrate the moment as an opportunity to practise problem-solving skills and develop new learning strategies. It is important to ensure an **appropriate level of difficulty** because making learning too easy leads to a false sense of mastery without deeper processing. **Allow students to struggle** and avoid jumping in to solve every problem. This gives students the opportunity to work through problems, come up with answers and invent strategies for themselves. Jumping in to help conveys the message that their frustration should be minimised and prevents students from developing resilience and problem-solving skills. When teachers don't jump in to solve problems or provide answers, they also give students the message that they believe they can do it.

You can also support a growth mindset by **inviting confusion** as a means to greater understanding when introducing new ideas and strategies. Invite students to seek intellectual problems and frame instances of confusion as rich opportunities for learning. **Valuing and normalising mistakes** demonstrates that they are part of learning. Make your own mistakes visible and express an interest in mistakes as an opportunity to learn to do something differently. To reduce the stigma of mistakes, you might use a green pen rather than red for marking. Ensure that students understand that **tests and marks do not measure intelligence** but rather their performance at a particular moment in time, and offer opportunities for students to plan strategies to improve. Analyse the most common errors on a test with the whole class – students may be surprised to see the same errors when they realise they are not alone with their errors.

Another way to encourage a growth mindset is to **value risk-taking and having a go** by creating opportunities for students to try new things in fun, low-stress ways and highlighting the incremental progress made through effort and practice. Choosing activities in which there is no single right answer can encourage students to take on new challenges. You can also encourage students to **diversify their strategies** when they get stuck. Coach students on the need to change strategies or ask for advice from others when existing strategies have not been successful. Effort in itself is not enough to ensure learning if that hard work is wasted on ineffective learning strategies. Teach students to identify the problem and brainstorm three ways to overcome it before selecting one to try and evaluating their progress.

A classroom culture that supports a growth mindset is one in which **reflection is emphasised and valued** as a key part of the process of evaluating progress and learning from mistakes. Help students to identify and focus on areas for improvement by engaging in problem-solving, isolating one component of a task to master before moving on, or brainstorming other potential solutions or resources for problems to try next time. After practising a strategy or producing a piece of work, you might ask students to identify what worked well, how it could be improved, or to suggest three ideas to make it better.

Finally, you can **talk explicitly about the ideas and beliefs that go along with a growth mindset**, and develop some shared language indicative of a growth mindset. With younger students, it might be appropriate to come up with class slogans such as 'learning starts with error' or 'try something new and

share your interesting mistakes!' You can also use the powerful word 'yet', as in 'you haven't learned this yet' or 'I'm not a maths person yet'. Consider using 'not yet' rather than 'fail' on tests or assessed work, as these two words convey your belief that the required learning is well within the student's grasp. Encourage students not to compare themselves with others ('She is smarter than me') but to compare their learning and outcomes with their earlier performance ('I am better at this today than I was yesterday' or 'I got a better result on that test after I spent more time preparing for it').

References

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