

# What is maths anxiety and how can we support students to overcome it?

The term 'maths anxiety' refers to the worry students feel about working on mathematical tasks. People of all ages can experience maths anxiety, and it can have a significant impact on academic performance, career choice and mental health.

Students develop maths anxiety in response to negative experiences when learning maths, including activities that reward speed and precision; repetitive, procedural tasks; and the nature of testing in schools. It can also be influenced by negative attitudes towards maths in the community and the tendency to accept negative emotional responses as a normal part of learning mathematics.

The negative emotions that students with maths anxiety experience can interrupt working memory and lead them to make more errors. People who experience maths anxiety tend to avoid or procrastinate on maths-related tasks, have difficulty concentrating, and experience physical symptoms such as an elevated heart rate. They also have limiting and helpless thoughts, such as, 'I am not a maths person!'

These struggles lead some students to avoid mathematics subjects, courses and careers.

There are strategies that can help reduce maths anxiety, such as seeking support from teachers or tutors, practising relaxation techniques, and changing negative thoughts into positive self-talk about maths. Using emotional self-regulation strategies can help students lessen anxiety, develop a more positive attitude towards maths, and improve their confidence and performance in maths-related tasks.

We also know that a student's disposition towards mathematics can often be linked to how their family thinks about maths. It is very important that adults avoid passing on any of their own negative perceptions of mathematics. Parents and families can greatly influence how a child perceives maths, and themselves within the maths world, simply by the kinds of language they use about maths. In conversations with a child, it's best to avoid statements such as:

- I am bad at maths.
- I was never good at maths at school.
- I never liked maths.
- I hate maths.
- I never used any of the maths I learned at school.
- I'm not a maths person.

Together, parents and their children can develop positive, growth mindsets, which are not only restricted to mathematics, but can apply to learning in any subject. Some expressions to try instead:

- Maths can be challenging, but I love a challenge!
- I can't do that just yet, but we will work it out together.
- I realise now that maths is more fun than I thought it was when I was a student.
- Learning new maths skills is so useful for many areas of life!

Remember to celebrate achieving small steps in solving a problem. Persist, be supportive and focus on the thinking, not just getting answers.