



»Pearson

# Tackling Maths Anxiety

A guide to building more confident  
and resilient students, teachers  
and communities



## Contents

Introduction – Lucy Chowns .....	2
Foreword – Bobby Seagull .....	4
Numbers in the spotlight .....	6
What is maths anxiety? .....	9
What causes maths anxiety? .....	11
Supporting maths-anxious students .....	14
A spotlight on teachers' maths anxiety .....	20
Exploring the gender divide .....	28
A spotlight on societal solutions .....	30
Conclusion – looking to the future .....	37
References and further reading .....	39



## Let's tackle maths anxiety together

Introduction from **Lucy Chowns**,  
Head of Maths at Pearson.

### The power of maths is all around us – and it's a power that should be available to everyone.

That's why we want to play our part in enabling every student to engage with maths and what it can do. From promoting maths positivity, advocating for data literacy skills and tackling issues facing maths education, we're committed to working alongside students, the education community and beyond to help build a number-confident nation.

### Putting the spotlight on maths anxiety

Maths is key to unlocking so much in our lives – whether that's managing money, keeping time, supporting our homes and families, or making sustainable plans for the future.

Yet research suggests that millions experience anxiety around maths and numeracy – over a third (**36%**) of UK adults – with lasting potential impacts on education, employment and progress around the country.<sup>1</sup>

For many individuals, maths anxiety starts in childhood.



**Three quarters (75%)** of maths teachers said **self-motivation** was one of the capability factors holding their year 11 students back.\*

[Pearson School Report 2025](#)<sup>2</sup>

We are here to **collaborate** with teachers, students and experts in the field to **support students and teachers** to make the most of maths.

## Addressing the challenge in schools

We've been collaborating closely with teachers and experts in the maths community to take practical steps towards tackling maths anxiety in schools.

In 2019, after a ground-breaking roundtable event, we brought together insights and tips from teachers, academics, charities and business leaders to create our [Guide to Tackling Maths Anxiety](#).<sup>3</sup>

Much has happened since then - with national and global events impacting learning pathways for large numbers of students. Yet, throughout that time, we've continued to seek out routes to help address the pervasive problem of maths anxiety.

As the leading maths provider, we are here to collaborate with teachers, students and

experts in the field to support students and teachers to make the most of maths.

As igniting student confidence in maths is crucial, we've launched [Tackling Maths Anxiety](#), our updated guide to the issue of maths anxiety, including its causes and effects.

You'll find these pages packed with insights, professional wisdom and practical ideas as we aim to overcome the fears that can obstruct engagement and progress in maths.

Together, we can drive positive change to build more confident and resilient students, teachers and communities for today, tomorrow and the future.

## Foreword from **Bobby Seagull**, Maths Teacher, Author and TV Broadcaster

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Conversations about maths in the UK are **growing louder** – and for good reason.

Across homes, classrooms and workplaces, people are asking: **How can we foster confidence in numeracy?** How can we equip everyone with the maths skills they need to thrive in life?

At the heart of this conversation lies maths confidence, a crucial piece of the puzzle that cannot be addressed without acknowledging its counterpart: maths anxiety.

The evidence of maths anxiety is all around us. Parents and carers, often scarred by their own school experiences, feel unable to help their children engage with maths at home – something that became painfully clear during the Covid-19 pandemic.

We also have non-specialist teachers, who, despite feeling out of their depth, are required to teach maths due to recruitment challenges in the profession.

And then there are the 175,000 students who achieved below a grade 4 in their GCSE Maths in 2025.<sup>4</sup>

Securing a grade 1–3, although technically a pass, is seen as a “fail” in the current system. As history has shown, many students risk becoming trapped in a cycle of compulsory resits – only to grow more anxious about maths with each attempt.



For some, **the impact of maths anxiety can last a lifetime.**  
But it doesn't have to.

Earlier this year, I had the privilege of speaking at a parliamentary commission on the state of maths education in the UK. To prepare, I asked for stories about the experiences of schools and students with maths today.

Teaching is a challenging profession. Teaching maths, especially so. But what I heard consistently was a shared desire among teachers to create positive change in a subject that offers so much potential.

As someone who has spent years campaigning to combat negative perceptions of maths, I can confidently say that change is happening.

I see tools and technology, including the significant growth in AI, making maths more accessible and less intimidating.

I see meaningful discussions about reforming maths education from the early years, emphasising its importance in the real world. And I see an increasing acknowledgement of the need to dismantle the barriers that maths anxiety creates.

There is still more to do. But I am hopeful that these conversations will continue to grow louder and more widespread.



We are starting to recognise that: **(a)** maths anxiety is real and damaging, and **(b)** it is reversible.

**Maths confidence is within everyone's reach.**  
Now is the time to close the gaps.

## Numbers in the spotlight



**64% of maths teachers**

said in the last class they taught, some pupils experienced learning-related anxiety.<sup>2</sup>



**Over two thirds of maths teachers**

(67%) believe student disengagement will be a barrier to learning over the next six months.<sup>2</sup>



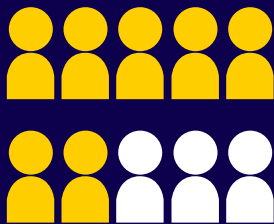
## 44% of maths teachers

believe that numeracy skills are one of the academic factors holding their year 11 students back\*. <sup>2</sup>



## Just 9% of maths teachers

believe that the current education system assesses skills well, while only 7% feel it helps them to meet their students' needs. <sup>2</sup>



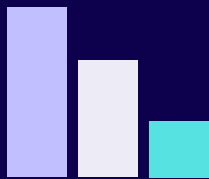
## More than 7 in 10 maths teachers

believe that if the curriculum were more relevant and representative of today's society, it would increase pupil interest and engagement in learning (Pearson School Report 2024). <sup>5</sup>



## Over a fifth of British adults

(21%) believe their fear of numbers is hindering their financial wellbeing (National Numeracy, 2024).<sup>6</sup>



## 44% of secondary maths teachers,

32% of teaching assistants, and 17% of primary maths teachers believe they have not been sufficiently trained to teach maths (Maths Anxiety Trust, 2022).<sup>7</sup>



## Over a third of adults

(35%) say that doing maths makes them feel anxious, while one in five are so fearful it even makes them feel physically sick (National Numeracy, 2023).<sup>8</sup>

## What is maths anxiety?

Definition by **Sue Johnston-Wilder**, Associate Professor, University of Warwick and leading academic on addressing mathematics anxiety and developing mathematical resilience.

It is a negative emotional reaction to mathematics that acts as an 'emotional handbrake' and holds up progress in maths. The severity can range from a feeling of mild tension to experiencing a strong and deep-rooted fear of maths.

Maths anxiety is not always obvious: it can sometimes be invisible and often unnoticed. It can manifest as poor behaviour, anger, frustration, avoidance, under-attainment and helplessness.

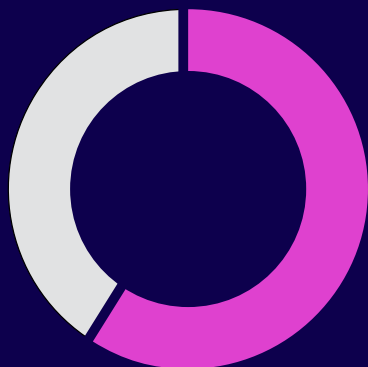
It doesn't begin or end within the school walls either: as well as impacting children, maths anxiety can affect adults right through to the

elderly, presenting in homes, classrooms and workplaces. In schools, it spans across the attainment spectrum, from high-flyers to those who find the subject more challenging.

Research suggests that the majority of those who experience maths anxiety are usually students who develop an early preference for 'feeling' when they evaluate information, rather than a 'thinking' preference.<sup>9</sup> These students, who are also known as empathisers, prefer to understand the value, meaning, purpose and narrative of the mathematical tools they are required to learn, rather than focusing on the mathematical task itself.



### Mental health



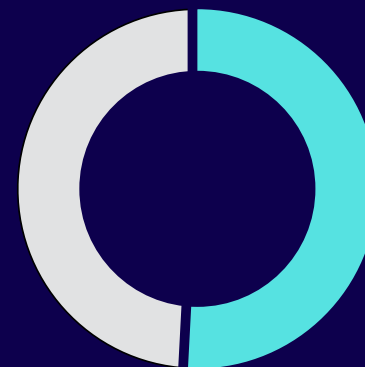
59%

### Attendance



52%

### Issues at home



51%

Mental health, attendance and issues at home were the three biggest external factors that maths teachers identified as holding some of their year 11 students back.\*

Pearson School Report 2025<sup>2</sup>

Maths anxiety is defined as...

“**A feeling of tension and anxiety** that interferes with the manipulation of numbers and the solving of mathematical problems in ordinary life and academic situations.”

Richardson and Suinn, 1972<sup>10</sup>

# What causes maths anxiety?

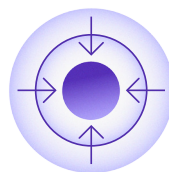
Maths anxiety has many possible causes and contributing factors that are currently being researched. However, these varied causes are all rooted in experiences our brains consider a threat to our wellbeing such as humiliation, being shouted at or being left behind.

We all have curious brains with an in-built, highly-tuned safety mechanism that protects us from danger and potential harm. When faced with a perceived 'danger', we have a 'fight, flight or freeze' response.

**35%** of maths teachers say pupil mental health and wellbeing will be a top challenge for their school to manage in the coming year.

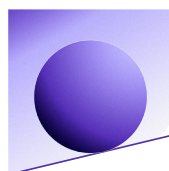
Pearson School Report 2025<sup>2</sup>

When it comes to maths anxiety, the same principle applies. If faced with a task that requires maths, and based on prior experiences, many can perceive 'danger' to be:



## Social threats

such as humiliation, exclusion and being left behind or isolated.



## Fear of failure

being asked to do something the student experiences as too hard through insufficient scaffolding, context, meaning or narrative.



## Fear of an authority figure (e.g. teacher or parent)

being reprimanded when making an effort.

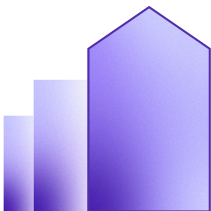
Our research has so far shown that these fears are common contributing factors to maths anxiety across different ages and stages of life:<sup>11</sup>



### In schools

Many students report experiencing maths anxiety as a result of:

- finding the work too difficult
- inappropriate competition with peers
- gender bias
- insensitivity from teachers or parents
- lack of remediation.



### Beyond the school gates

Being asked publicly to work out a share of a bill, help with homework or answer a quick-fire question involving maths can commonly invoke panic and anxiety for people of all ages.

The good news is that **maths anxiety can be tackled**. With the right tools and commitment, **everyone can build confidence and resilience** when it comes to mathematics.

## Building mathematical resilience

Once those students struggling with maths anxiety have been identified, what happens next?

How can their symptoms be addressed and what about those who are struggling under the radar?

It is important that we build mathematical resilience in our students. This focuses on encouraging mathematical engagement in a way that reduces the negative effects of maths anxiety.

It can be defined as “maintaining self-efficacy in the face of personal or social threat to mathematical well-being”.<sup>12</sup>

A prevalent view exists that mathematical ability is fixed, but mathematical resilience draws on the literature about growth mindset, as well as academic and emotional resilience.

Research shows that mathematical resilience should be taught and practised.

“Resilience tools have been astonishingly helpful for both adults and children and should be made available to all maths students.”

**Dr Janet Baker, Mathematical Resilience Coach**



# Supporting maths-anxious students

Many researchers and teachers suggest the following tools and approaches to help reduce the impact of maths anxiety and build greater resilience.

## The Growth Zone Model

The **Growth Zone Model** gives a framework for students to name and communicate their feelings.<sup>13</sup>

- **The comfort zone** is where a student could be working on familiar tasks independently, building their self-confidence and providing opportunities for practice and automaticity.
- **The growth zone (challenge)** is where new learning happens. It should be safe to make mistakes which result in growth promoting feedback, get stuck, seek support, and find activities challenging and tiring.
- **The anxiety zone (threat)** is where what is being asked is not within the student's reach at that moment. The student starts to experience threat rather than challenge, stress increases, cognition decreases, and little or no useful learning takes place.



## ✓ Practical tips

How to use the **Growth Zone Model** with students:

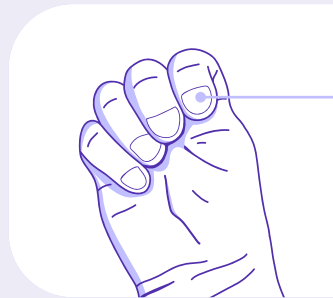
- **Introduce students to the model in lessons.** Encourage them to use their own words to describe their feelings when faced with different situations.
- **Print copies for your students as a tool to use regularly.** Students can place an object on the colours of the model to show their emotions. This allows teachers to better understand when to challenge students to come out of their comfort zone with a question or to support students to move from the anxiety (threat) zone.
- The model has been updated for teachers' **use to explain the four ingredients involved in developing the student's growth zone:** building a growth mindset, making the value of maths clear to each student, experiencing struggles and recruiting support, and feeling included in a learning community.
- Many teachers find this updated model useful when considering ways to **develop students' mathematical resilience.**



## The Hand Model of the Brain

Dan Siegel's Hand Model of the Brain illustrates to students how they cannot panic and think at the same time. A hand can represent different parts of the brain, including the thinking brain (the fingers) and the emotional brain (the thumb).<sup>14</sup>

- In a **fight-flight-freeze situation**, the emotional brain overrides the thinking brain. Recognising that this is a temporary and protective state can help students to reconnect their thinking brain and continue learning.



Thinking brain and emotion brain connected.

**Fingers represent the thinking brain.**

- When students are in the **anxiety zone**, healthy learning cannot take place - their brain is focused on protecting them from the perceived threat. The aim should instead turn to reducing the anxiety as quickly and supportively as possible. Only when the student is back in the growth zone can effective learning start again.



Thinking brain and emotional brain disconnected.

**Thumb represents the emotional brain.**



For a more detailed description of the hand model, watch [‘Dan Siegel presents a Hand Model of the Brain’](#) on YouTube.<sup>15</sup>

## The Relaxation Response

Learning to trigger the relaxation response can also be a helpful tool for anxious students to regulate their emotions. Developed by Dr Herbert Benson, it is a quick, effective way to switch off the brain's 'fight or flight response' by engaging the parasympathetic nervous system and returning the learner to a calm state.<sup>16</sup>



“You see it differently  
once you calm down.”

Devon, Year 7

## ✓ Practical tips

### Using the Relaxation Response with students:

- Help students **focus on their breathing**, surrounding sounds or the repetition of a well-chosen word, for instance, 'calm' or 'joy'
- As they **repeat their chosen word, in time with their breathing** (if possible), they'll be able to clear their mind, become calm and return to thinking effectively
- Students can **do this consciously**, as and when they are beginning to feel anxious
- Students could **take a break**, listen to calming music, have something to eat or drink, or go for a walk.

Every student and their experience of maths anxiety will differ, but depending on the severity and frequency of the anxiety, students may benefit from one-to-one intervention sessions with targeted support.



For a more detailed description of how to trigger the relaxation response, watch '[Relaxation Response: Dr. Herbert Benson Teaches You The Basics](#)' on YouTube.<sup>17</sup>

## Time for rethinking

Time pressures remain an ongoing issue that contributes to student anxiety in maths, yet time is also teachers' most precious resource.

Small changes can make a huge difference, such as allowing students more thinking time before they are asked to respond to questions.

“ Give students time to consider their answers. Seeking out opportunities to give different students their own individual ‘aha’ moment in maths can really help to impart and solidify their enjoyment.”

**Dr Meghna Nag Chowdhuri, Senior Research Fellow at the Institute of Education, UCL**



# The Ladder Model

The image of a ladder helps students to appreciate that they can break any mathematical task into manageable steps.

Students can be encouraged to take one step at a time, and to go at their own speed.

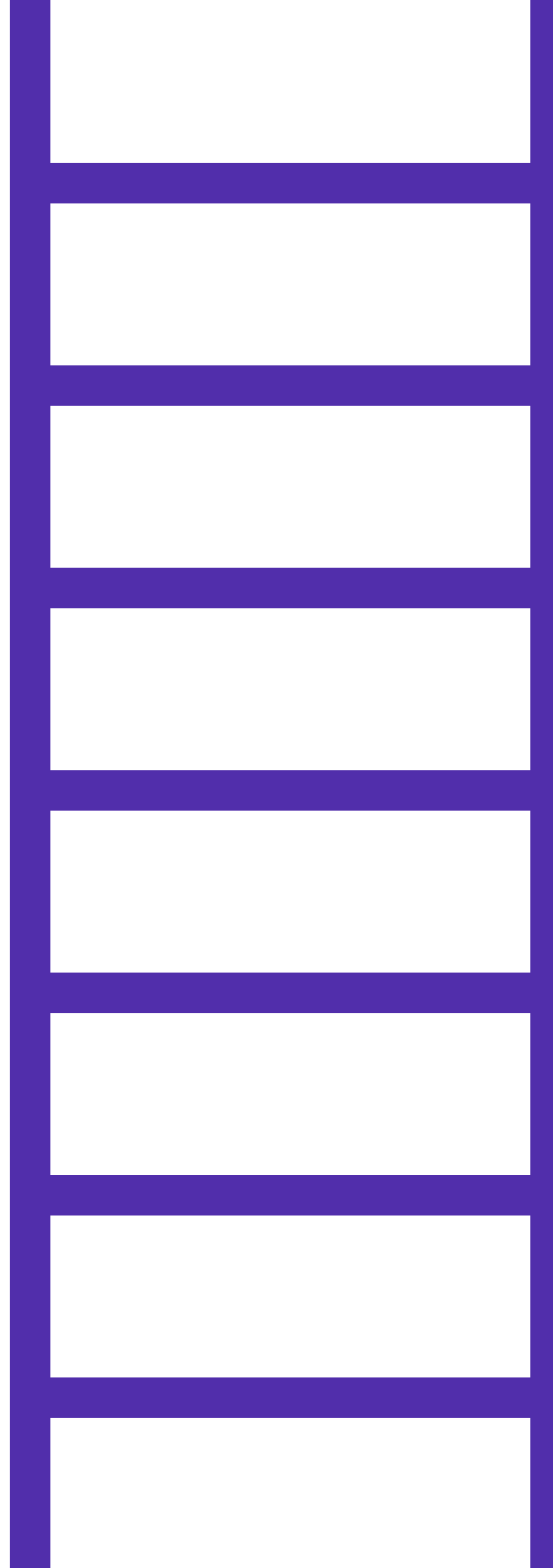
## Practical tips

When using the Ladder Model with students, encourage them to:

- **Ask for rungs that are the right size for them,** for now
- **Go at their own speed,** take a manageable step at a time and pause when they need to
- **Start where they are,** with what they can already understand.

“Have you asked Miss for another rung?”

Year 4 student



## A spotlight on teachers' maths anxiety

Insights from **Dr Thomas Hunt**, Associate Professor in Psychology, University of Derby.

Once considered a problem primarily for students, research has revealed that teachers, whether in training or experienced in the classroom, can also be deeply affected by their own negative encounters with maths.

These emotional struggles can manifest as a general discomfort or anxiety with the subject or, more specifically, as anxiety about teaching it.

For decades, research has shown that students who study education and teaching-based degrees are among the most maths anxious. More recent evidence suggests that even qualified teachers can experience this at high levels.



**5 to 10%** of primary and secondary maths teachers say they often suffer from maths anxiety.

Maths Anxiety Trust, 2022<sup>18</sup>





## Understanding the origins

Just as with students, a teacher's maths anxiety will be rooted in long-standing negative experiences, often during their own school years. These might include unsupportive teaching methods and harsh or judgemental learning environments.

Research has also shown that a significant number of trainee teachers associate maths with words like 'fear,' 'stress' and 'anxiety.'<sup>19</sup> These associations shape their self-perception and can persist long-term, causing them to doubt their own abilities.

Even as teachers progress professionally, the echoes of past experiences may lead them to avoid engaging with maths content, or to minimise exposure to certain maths topics.

This presents potential challenges to teacher recruitment, wellbeing and job satisfaction, retention, and the effect of teaching styles on students' own maths attainment and anxiety.

## Maths anxiety vs maths teaching anxiety

To understand this phenomenon, we need to distinguish between **general maths anxiety** and **maths teaching anxiety**.

- General maths anxiety is an individual's overall fear or discomfort with maths. In contrast, maths teaching anxiety relates to the pressures associated with delivering effective maths lessons (including whether teachers feel they can respond appropriately to student questions), and worries about their students' understanding and performance.
- A teacher might be comfortable solving mathematical problems alone yet feel overwhelmed complex concepts to students.
- The pressures of adhering to curricula and meeting high-stakes testing requirements can intensify this feeling, creating a cycle where the teacher's apprehension undermines their own confidence and affects their instructional methods.

“Research has demonstrated that students who perceive their teachers as less competent in maths tend to experience higher levels of anxiety themselves.”

Lau, Hawes et al, 2022 <sup>20</sup>



## Signals and students

The impact of teacher anxiety does not stay confined to the educator. Students are highly attuned to teacher signals, and when teachers seem uncertain or stressed, this can influence students' own attitudes.

These findings also feed into considerations around gender, with evidence suggesting that female teachers' maths anxiety may inadvertently influence maths attainment among female students, possibly explained by the greater likelihood of girls to endorse the stereotype that "boys are good at maths, and girls are good at reading".<sup>21</sup>

Of course, without larger-scale research, care must be taken not to make assumptions. A wide, complex range of variables are likely at play in classroom dynamics, all sparking individual reactions among teachers and students.

**"Teachers who self-report greater confidence with maths are more likely to have students who report less maths anxiety."**

**Lau, Hawes et al, 2022<sup>20</sup>**

## Tackling maths anxiety among teachers

Addressing the different forms of maths anxiety requires an approach that supports both teachers and students. It could include:

### 1. Professional development initiatives – e.g. targeted workshops and mentoring programmes – which give teachers strategies to manage their anxieties

By equipping teachers with coping mechanisms and reinforcing positive, growth-oriented beliefs about maths, schools can help break the cycle of negative experiences.

When teachers are supported to build their confidence, they are better positioned to create a positive learning environment that nurtures students' own understanding and enjoyment of maths. In turn, a more confident teaching approach can help mitigate the transfer of anxiety from teacher to student, fostering a classroom culture where challenges are viewed as opportunities for growth.

“Trainee teachers report significantly higher maths teaching anxiety compared to qualified teachers.”

Hunt & Sari, 2019<sup>22</sup>



## 2. Recognition from school leaders and policy-makers of the broader implications of maths teaching anxiety

Beyond its immediate impact on classroom instruction, this issue impacts wider teacher recruitment and retention. Those who feel overwhelmed by the demands of teaching maths may avoid working through challenging topics or, in some cases, steer clear of the profession altogether.

Ensuring that teachers have access to resources and professional support to manage maths teaching anxiety is a critical component of maintaining a robust, effective education system.



### 3. Acknowledging positive findings and sharing what works well

There are reports of teachers using their experience of maths anxiety to create a more compassionate learning environment, leading to greater empathy with students and the challenges they face in maths.

Interestingly, maths anxiety can sometimes disappear or dissipate as quickly as it appears, depending on the environment. We need to ensure that these more positive experiences can be shared and understood. At the same time, going forward, it's important that any teachers who feel they are in a growing minority of maths-anxious teachers receive the space they need to disclose and discuss the issue.

## Empowering environments

By addressing maths anxiety and maths teaching anxiety across the education system, teachers, school leaders and policy-makers can work together to create an environment where both teachers and students feel empowered to approach maths with confidence and curiosity.

**Ultimately, tackling teacher maths anxiety is not only about enhancing individual wellbeing—it is about laying the foundation for a more positive, effective and equitable maths education for all.**



## Exploring the gender divide

The impact of gender on maths anxiety is a topic that is often overlooked. Yet, with various studies suggesting a strong correlation, this area requires attention in order to drive forward equity and change in education.

In 2023, the widely reported TIMSS (Trends in International Mathematics and Science Study) International Report and Results research study showed that the attainment gulf between genders in Year 5 and Year 9 maths is currently widening, to the detriment of female students who are more likely to say they lack confidence in the subject.<sup>23</sup>

Elsewhere, existing research has shown that a perceived lack of confidence of girls in maths can result in them being entered into a lower entry tier for Maths GCSEs.

A survey of teens found that boys and girls tend to see their genders as being either equal in maths abilities or with girls having a slight advantage. However, the perception of maths anxiety on both sides was that girls are more prone than boys.<sup>24</sup>

The findings seem to ring true in studies of attitudes towards maths based on gender as students progress into adulthood, and may even contribute to lower maths performance among women from the age of 18 onwards.

“ Women are more than twice as anxious as men about using maths. ”

**King’s College London and National Numeracy, 2023<sup>25</sup>**

“ Boys in England significantly outperforming girls in maths for the first time in a decade. ”

**The Independent, 2025<sup>26</sup>**

## Gender and maths in the classroom

We know that among the key factors affecting maths anxiety lie the influence of role models and stereotypes on students.

The impact of these stereotypes can manifest differently between genders. For example, some boys may not report maths anxiety as readily as their female classmates because of their perceptions of how male maths students 'should' be in class.

“Math anxiety plays a key role in the relation between gender and math performance.”

Vos, Marinova et al, 2023<sup>27</sup>

## Snapshot from West Lakes Academy – a teacher’s perspective

“Girls were far more likely to report feeling anxious around mathematics – more than three quarters of our self-reported anxious students were girls.

Teachers predominantly identified girls as exhibiting symptoms of maths anxiety, but also identified boys who had not reported themselves as anxious.

Do fewer boys suffer from maths anxiety? Or are boys less keen to share their feelings or just less aware of their own anxieties?”

(From the original Pearson Guide to Tackling Maths Anxiety, 2019)<sup>3</sup>



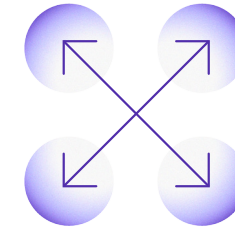
## A spotlight on societal solutions

While maths anxiety often manifests most obviously in schools, effective support to tackle the issue fully, and end the cycles that keep it going, can come within and outside the school community.

Eradicating maths anxiety is crucial, but it isn't simple. Doing so requires looking at the perceptions created around maths and maths students in society today.

We are seeing positive steps in the right direction. According to PISA 2022, 15-year-old students in England have, on average, a more positive attitude towards maths than their peers in other countries. The same report also found that 96% of students want to do well in the subject, strongly suggesting that those who feel they're not doing well may struggle with how they see their maths abilities.<sup>28</sup>

Almost one in five attendees at Pearson's Pathways For All roundtable in 2023 said negative depictions of maths in society and the media is the biggest barrier for schools to overcome in reforming maths.



**Together, we need to look at the bigger picture – both in schools and beyond.**

“In my opinion, people talk about maths in a negative way. They hear ‘maths’ and they freak out.”

Imogen, Year 9

## Celebrating representation and belonging

Feeding the maths anxiety of some students is the sense that the subject is not for them, or for people like them – whether that’s in relation to gender, race, ethnicity, ability or (dis)advantage.

Schools have the power to show that maths is for everyone, by demonstrating the real range and depth that exists within the subject.



“There’s... [a] common perception that maths is not creative, which couldn’t be further from the truth – just look at all the shapes, colours and proportions artists use to make a masterpiece! Still, for communities that take pride in being immersed in creativity, this misperception can mean certain groups don’t see themselves in maths...”

**Dr Nike Folayan, co-founder of the Association for Black and Minority Ethnic Engineers (AFBE-UK)**

“A third of maths teachers think the subject should be evolved to better reflect the world and its people.”

**Pearson School Report 2023<sup>29</sup>**

Maths lessons should encourage exploration and curiosity rather than traditional ‘right’ and ‘wrong’ answers that communicate success or ‘failure’. Teamwork in classrooms can be a great help too, supporting group engagement, collaborative problem-solving and open mathematical discussions.

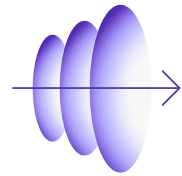
Considering how schools support different learning styles and abilities is paramount for combatting maths anxiety. In maths, as in every subject, there is no “one-size-fits-all” approach.

**Karen McGuigan**, Founder of **Maths For Life**, has identified the main obstacles around SEND teaching in maths in her **‘Improving accessibility for SEND learners’** blog.<sup>30</sup>



Karen offers further advice and support for students with SEND on Pearson’s **The Right Angle podcast** (episode 21).<sup>31</sup>

**Included in her guidance for boosting engagement for neurodivergent students is:**



### Connect with real life

When a subject is abstract, it doesn’t match young people’s experiences. Exercises based in reality, with steps that are practically-focused, can be much better for students with SEND.



### Nurture success from the start

Self-esteem is the key to mental wellbeing: achieving something of value at school sets them up for success in the world. Many students with SEND enter Key Stage 3 not secure with Key Stage 2 or indeed Key Stage 1 maths. Teachers need the skills to fluently differentiate lessons, working at the level of the student and supporting them with age-appropriate resources.



### See the benefits of being different

All students need to understand that difference is a great thing. We all need different approaches, and an open conversation about what maths is, rather than the concept of being either a “success” or a “failure”.

## Inspiring learning for life

Enabling students to see the long-term benefit of maths may also increase their motivation to overcome anxiety.



“ There are incredible opportunities to learn from what works in terms of how young people apply learning, giving them opportunities to translate knowledge into action through using real-world challenges, whether that’s cooking recipes, league tables, financial education.”

**Sharon Davies, Founder of Good Place Co and former CEO at Young Enterprise**

“ Real models are the new role models. We shouldn’t be looking at history books, but people students can actually see, hear and relate to. When a role model looks like you, sounds like you and shares your story, success doesn’t feel far away, it feels possible. Because representation isn’t just about visibility, it’s about possibility.”

**Lella Violet Halloum, Student and Digital Changemaker**



Read Sharon’s [‘6 tips to integrate financial education into the maths curriculum’](#) blog.<sup>32</sup>

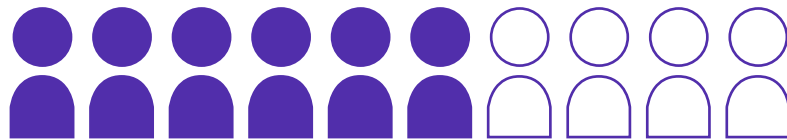


Read one student’s perceptions of [‘The secondary maths experience’](#).<sup>33</sup>

## The importance of parents and carers

Parents and carers play a crucial role in shaping their children's attitudes towards maths. By addressing their own anxieties, they can better support their children.

An intergenerational approach to addressing the problem can help to make sure maths anxiety is not unintentionally passed to students by parents and carers.



When parents express negative views about maths, their child's average confidence score drops to **6.8 out of 10**, whilst positive reinforcement raises their confidence level to **7.7**.

National Numeracy and Mumsnet research, 2024<sup>36</sup>

“Every child is more likely to hear ‘I’m rubbish at maths’ at home, than ‘I’m rubbish at reading’. This is especially likely for deprived low-attaining children.”

The Maths Summit, 2025<sup>35</sup>

“Our results found that parental maths anxiety is linked to children's maths outcomes, even when differences in parental education are taken into account. This effect continued as their children grew and entered school.”

Dr Kinga Morsanyi, Loughborough University<sup>34</sup>



Read Dr Ems Lord, former Director of the University of Cambridge's award-winning NRICH Maths programme, blog on '[Increasing Parental Engagement in Mathematics](#)'.<sup>37</sup>

## Finding the right resources

Textbooks and resources (print and digital) can be a brilliant asset for supporting maths learning and lessening anxiety. Look for:



**Resources** that are relevant to students, supporting them to think about the subject in different ways.



**Language** and content that matches their levels of literacy and previous maths experiences.



**Questions** that gradually strengthen and extend knowledge, step by step.



**Progression** between chapters that connects different parts of maths.

“Progression is one of the most important things we have to get right... because if you get it wrong, then you don't just interrupt students' understanding but you can really affect their confidence – and that's a disaster.”

**Dr Naomi Norman, Author and Education Researcher**

“Variety maintains interest and it provides different ways to access concepts... it's important that students have access to many different resources to support them.”

**Catherine Murphy, Educational Consultant, Teacher, Trainer and Researcher**



Hear Dr Naomi Norman and Catherine Murphy discuss how to make the most of textbooks and resources on Pearson's [The Right Angle Podcast](#) (episode 24).<sup>38</sup>

## Resources in action: ActiveHub

**Pinpoint where students are. Then take them further.**

**ActiveHub** Maths is Pearson's intelligent digital platform for Key Stage 3, GCSE and Post-16 Maths, as well as GCSE Statistics. It brings together bespoke assessments, real-time insights and trusted resources in one simple space - helping teachers save time, reduce workload and deliver more targeted support to their learners. With thousands of expert-authored questions and hundreds of ready-made papers, teachers can assess flexibly across the year, while the Insights Dashboard provides instant visibility of student and class performance, benchmarked against Pearson Edexcel averages.

Designed to support both specialists and non-specialists, **ActiveHub** Maths helps schools address challenges around recruitment, retention and budget. Teachers can act on meaningful feedback and next-step recommendations, while students benefit from engaging, accessible resources - from interactive quizzes and videos to auto-marked assessments and front-of-class eBooks. All of this is found in one intuitive place, making it easier to support every learner, at every stage.

Learn more about how **ActiveHub** can help support your teachers and drive student progress for mathematics.



Read Dr Naomi Norman's blog on '[Using digital innovations to help tackle the top challenges in Maths?](#)' <sup>39</sup>



## Looking to the future

Final thoughts from **Lucy Chowns**,  
Head of Maths at Pearson.

So much has happened since we published our first Guide to Tackling Maths Anxiety, and it's hugely encouraging to see the brilliant steps that many schools, teachers, parents and wider sector organisations are now taking.

It's clear that continuing to raise awareness of maths anxiety and the tools and approaches that help students progress can be transformative. The journey to tackling maths anxiety isn't simple, but it is possible.

Making progress depends on commitment, collaboration and a wider understanding of what students and teachers are experiencing every day in and out of the classroom. Together, we can create more confident futures for generations to come.

At Pearson, we remain committed to supporting maths positivity, ensuring everything we do builds confidence, skills and a lifelong belief that everyone can succeed in maths.

As we shared in the first edition of our guide back in 2019, this is not an issue schools can solve alone. Tackling maths anxiety is a societal challenge that calls on all of us – educators, families, policymakers, businesses, charities and the media – to play our part in creating maths-confident communities.

We believe maths classrooms can be places of enjoyment and achievement for every student. It must never be underestimated the impact that individuals can have on the lives of others, on their communities and on the world.

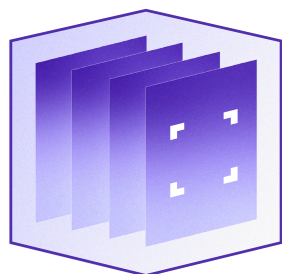
The more we work together – listening, sharing, exploring what's possible; speaking up about critical issues in and outside of the school walls – the louder our voices become, and the more chance we have of delivering lasting change.

That's why the conversation doesn't end after these pages. We'd love to hear your thoughts and insights, so please get in touch and help us spread the word.

**Let's make change happen, together.**

# Supporting maths confidence for life

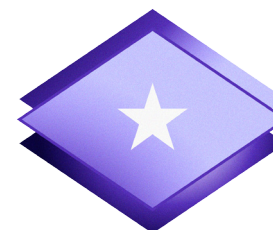
Pearson is here to help you support your students to reach their full maths potential with a range of qualifications and resources adapted to students of all abilities.



## Resources

- Pearson Revise revision resources
- Target Grade, 5, 7 and 9 books
- ActiveHub
- Mocks Service

[Browse our resources](#)



## Qualifications

- GCSE and A-level maths qualifications
- GCSE and A-level statistics
- Other Level 2 and Level 3 maths qualifications options

[Review our qualifications offering](#)

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## Wider resources and guidance

- [AFBE-UK's Making Engineering Hot](#)
- [Dyscalculia Network](#)
- [HipHopEd STEM](#)
- [Maths Calculation Anxiety Scale](#)
- [Maths Teaching Anxiety Scale](#)
- [Mathematics Anxiety Research Group \(University of Derby\)](#)
- [Twinkl guidance](#)
- [NCTEM podcast](#)
- [National Numeracy Challenge](#)
- [National Numeracy Day](#)
- [National Numeracy - Start Dash Studios smartphone game](#)
- [National Numeracy - The Family Maths Toolkit](#)
- [NRICH - Solving Together project](#)
- [Parentkind](#)
- [Pearson's Right Angle education podcast](#)
- [Teachwire](#)
- [Tes](#)
- [The Growth Zone Mode](#)
- [Growth Zone Model - printable template](#)
- [The Mathematical Resilience Network \(Facebook\)](#)
- [Young Enterprise Teachers Hub](#)
- [Pearson Maths Anxiety page](#)
- [Read insights from over 14,000 teachers, learners, tutors, home educators and more in the Pearson School Report 2025](#)



Visit our [Resit Rethink](#) page to learn more on the change we are calling for concerning post-GCSE.



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