# "But I'm no good..."

**Colin Foster** suggests some ways in which teachers can better understand and support those students who have convinced themselves that they're simply 'no good' at maths...

erv young children often have boundless overconfidence. They think they know everything and have no sense of their own limits - they're the epitome of the Dunning-Kruger effect. They'll often receive lots of encouragement from adults, both at home and at school, and perceive little sense of pressure, since nobody expects them to know everything.

However, this blissful state can't continue forever. By the time these same children have reached secondary school, they'll have often become disillusioned about education and their own abilities. They may have already concluded that they are simply 'no good' at certain subjects, with maths often near the top of that list.

Why does this happen, and could it be prevented? And when it does happen, how can schools best support these students?

## Cultural issues

It's far too easy to blame teachers for this. It's sometimes implied that negative attitudes towards maths can be ascribed to previous teachers not having provided students with sufficiently positive early experiences of the subject. Certainly, if your everyday experience of maths lessons involves very little success  at least as defined by other people – it would be surprising if that didn't turn you off the subject.

But there's more to it than that. As a society, we have serious problems with how we view maths and maths ability. As Liz Truss put it in 2013: "There are deep-seated cultural issues with maths in this country which need to be challenged - in our culture where, inexplicably, it is completely acceptable for adults and children to shrug their shoulders and say, laughing, 'I'm rubbish at *maths.*' It would be unthinkable for anyone to say, almost proudly, *I can't* read,' or 'I've never quite got to grips with writing." (See bit.lv/ts105-mng1) Maths is indeed treated

differently from other subjects, but then some adults will often boast about their failings in other areas. People will happily admit to not being able to understand Shakespeare, an inability to sing or draw, having two left feet for dancing (see

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Leonard, Bannister, & D'Souza, 2020), having a 'brown thumb' for gardening, hopelessness at parallel parking or ignorance when it comes to using technology. I think we can sometimes make too much of maths being special in this respect.

# **Embracing the label**

Even maths teachers themselves aren't always comfortable with their identity as

'mathematicians'. Some time ago, a Twitter survey found that many maths teachers were uncomfortable describing themselves as mathematicians, whereas most music teachers will happily embrace the label 'musician'. It somehow seems easier to say Tm a musician,' even if you've never taken a music exam in your life, than it is to say 'I'm a mathematician'even if you have a string of maths qualifications to your name and earn a living as a maths teacher!

This is perhaps because many people will study maths until they find it too hard and then stop. This applies even to people who have completed maths degrees and PhDs. They'll start off confidently, but by the final year of their degree, will be desperately looking for 'easier' module options –

pptions – something they would never have anticipated doing when they

began. I

personally know of someone with a doctorate in maths who says they don't feel that they're 'really very good at maths', because they needed considerable help to complete their PhD.

There seems to be a view that if you struggle at all with maths, then there must be something wrong with you. I prefer to take the view that 'Mathematicians aren't the people who find maths easy; they're the people who enjoy how hard it is.'

# "Mathematicians aren't the people who find maths easy; they're the people who enjoy how hard it is"

# Placing the 'blame'

It's also wrong to blame parents. Everyone knows that a guaranteed way to annoy your child's maths teacher is to turn up to parents evening and dismiss concerns about your child's progress by saying, "Oh, I was never any good at maths when I was at school." This is obviously unhelpful, because it gives the child a ready-made excuse for failure, and potentially sets up a self-fulfilling prophecy – but does it follow that parents are supposed to conceal their true feelings about maths? If parents themselves had a negative

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learning maths in school, they can hardly be blamed if they haven't yet got over it. Besides, we all know that teenagers don't blindly follow their parents' viewpoints – if anything, they'll often take pride in liking things their parents don't. We can't lay the blame at parents' doors.

Finally, it's also far too easy to blame the students themselves – they didn't try hard enough, they weren't prepared to think, and so they got left behind. I'm

sure we've all come across students who seem fine at most school subjects, but for some reason have a real block when it comes to maths.

In some of these cases, there could be issues of maths anxiety or dyscalculia at play that have gone unrecognised. More generally, however, if students have a consistently low view of their mathematical capability, then ascribing that to their own fault is clearly only going to make matters worse.

# Play the long game

There's no quick fix. None of us, adults or students, change our attitudes in a hurry, and that's normally a good thing. We need to start by recognising how students feel and accepting those

feelings, at least for now. Trying to argue students out of it – 'You ARE good at maths, really – look, you got this right' – is well-meant, but can communicate that we don't take students' feelings seriously. Students will sometimes think they're bad at maths because they feel that they don't understand anything, even if they can perform certain procedures and arrive at the right answers.

They might not realise that other students similarly don't understand certain concepts all that well, but are perhaps simply less reflective or concerned about it. It's sometimes the most thoughtful students, those with lots of potential to make sense of the subject, who feel that they're 'no good'.

A more positive approach is to spend time working on sense-making with difficult concepts, rather than aiming for quick and cheap successes by saying 'Never mind; just do this'. Shortterm strategies are unlikely to convince students that they can really be comfortable with maths.

Likewise, attempts to motivate students by bringing in tenuous 'fun', pseudo-real life contexts will often fall flat. Instead of trying to generate superficial enthusiasm so that they work harder and are ultimately successful, it's usually better to turn this round. Focus instead on direct ways of engineering students' success and understanding, which can then lead to more genuine motivation and a more positive outlook on the subject. Play the long game and you'll see those attitudes gradually change.



### ABOUT THE AUTHOR

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