Thinking Differently: Studying Maths with Dyslexia

From an early age, I knew I saw the world differently. While I struggled to decode phonics or remember the order of letters, I could visualise mathematical structures with ease. Logic made sense when language often didn't. But because I excelled in maths, the idea that I might be dyslexic (see box) was regularly dismissed.

For years, my difficulties with reading and writing were considered irrelevant because my grades, especially in maths, were strong. I now know this is a common experience, especially for women and girls, who are more likely to mask learning differences and therefore less likely to be diagnosed. But at the time, it left me internalising a simple, unspoken rule: if I was good at maths, my other struggles weren't taken seriously.

It wasn't until university that I was formally diagnosed with dyslexia, where more funding made assessment accessible. The irony wasn't lost on me: it took going to Queen Mary University of London (QMUL), a maths department known for its rigour, for me to finally get a formal test and subsequent diagnosis. The specialist's assessment was blunt: my dyslexia was one of the most pronounced cases he'd seen. Suddenly, the friction I'd always felt when reading, planning essays, or interpreting written instructions made sense.

And yet, in mathematics itself, I had often thrived.

Mathematics as a refuge

In many ways, mathematics was a safe space. Unlike disciplines that rely heavily on extended prose or fast-paced reading, mathematics rewards clarity of thought, abstraction and creative problem-solving. My dyslexia didn't hinder these skills; it may even have strengthened them. I learned early on to think in pictures, patterns and processes. I became used to holding multiple layers of logic in my head while working through problems slowly and carefully.

At its best, mathematics is a subject that welcomes different cognitive styles. But the ecosystem around it – lecture slides, assessment formats and institutional bureaucracy – often isn't so accommodating.

When support fails

After my diagnosis, I received a Study Support Plan with reasonable adjustments: access to lecture recordings, advance notes, extra time in exams and permission to record sessions. These interventions were simple and inexpensive, but they made a world of difference. At QMUL, I was no longer using half my energy just to keep up.

That said, not all universities have been consistent with this support. Where I study now, I've encountered modules where my Study Support Plan was ignored. In one course, key materials were withheld, despite clear accessibility requirements. As a result, I lost access to core content and had to rely on partial lecture recordings that didn't include board work, a crucial element in mathematical teaching.

What is dyslexia?

Dyslexia is a specific learning difficulty that mainly impacts reading and writing abilities. It is characterised by difficulties with accurate and fluent word recognition, spelling and decoding, which stem from challenges in language processing, particularly phonological processing. Although commonly linked to reading and writing, dyslexia can also affect areas such as verbal memory, processing speed and organisational skills. It's important to understand that dyslexia is a neurological difference that can range in severity and is not a reflection of intelligence (see [1–4], for example).

This wasn't just an administrative issue. It affected my learning, my well-being and my sense of belonging in the academic mathematics community. It made me realise how easily mathematical talent can be lost, not through lack of ability, but through lack of support.

Rethinking mathematical environments

Dyslexia doesn't make you less capable of learning or achieving. It impacts how your brain processes information. For me, this shows up in how I structure arguments, how I approach notation and how I prioritise understanding over memorisation. These are not deficits; they are differences. But without adequate support, they can become obstacles.

Mathematics as a discipline needs to recognise this more openly. We often talk about rigour, precision and clarity, but we rarely talk about accessibility. Lecture-heavy formats with dense notation and no accompanying material make it harder for students like me to engage fully. Small changes, like sharing notes early or recording classes, can create a more inclusive learning environment without compromising academic standards.

Moving forward

In my service as Diversity and Inclusion Leader Designate with the ECM and EDI committees, I advocate for a simple principle: diversity of thought is not just valuable in mathematics, it's essential. But if we want to cultivate it, we need to look beyond the stereotype of the 'ideal mathematician' and recognise the many different ways that people can think mathematically.

My dyslexia doesn't make me less of a mathematician. In many ways, it's the reason I became one.

Suzie Norton AMIMA
ECM and EDI Committees

References

1 British Dyslexia Association (2025) *What is dyslexia?*, British Dyslexia Association.

2 NHS (2022) *Dyslexia*, Health A to Z, NHS.

3 Dyslexia Scotland (2024) *What is dyslexia?*, Dyslexia Scotland.

4 University of Birmingham (2025) *We need a new definition of dyslexia, research says*, University of Birmingham.