

For tutors: Dyslexia

Introduction

Dyslexia is lifelong. It can impact on reading, spelling, working memory and organisation. Dyslexia encompasses a spectrum of difficulties that can affect learners in different ways. Some learners will have strong mathematical skills but struggle with accessing and communicating information. Others may struggle with arithmetical procedures and foundational understanding. The dyslexic student may have some of the following **strengths**:

- Visual thinking
- Taking big-picture views/approaches rather than linear step-by-step approaches
- Thinking outside the box
- Problem solving
- Good at mathematics
- Preference for conceptual fluency over procedural fluency

Possible Impacts on Mathematics (suggested strategies in brackets)

- Reading the question text, having to read several times to gain meaning (A, B, C, D)
- Reading a mix of text and non-text, finding it difficult to move from text to notation (A, B, C, D, F)
- Reading, remembering and recalling new technical words (B, E, J)
- Taking notes at speed while a tutor is talking (E, J)
- Difficulty documenting a full solution (H)
- Aligning digits (G)
- Copying errors, e.g. switching digits or signs (G, I, J)
- Remembering and recalling notation, maths facts and procedures (B, E)
- Getting lost in the middle of a problem (C, F, H)

Strategies to Help

- A. Allow time for the student to read
- B. Highlight key points in the material using highlighters and post-its
- C. Use of colour for different aspects of a problem, e.g. different variables
- D. Use bullet points to break up the text
- E. Make a list or glossary of technical words, symbols or notation
- F. Use diagrams to replace verbose sections of text and non-text and to guide problem solving where possible e.g. flow diagrams or trees to capture processes
- G. Use squared paper
- H. Encourage the student to write down all their working in an orderly way
- I. Encourage/support the student to check for mistakes and to cross check their notes
- J. Write down what you say as the student will be likely to not recall this

Further information

Further assistance on time management, organisational and other study skills can be accessed from your Disability Department or relevant Student Support.

Further information from Trott C. (2012) Mathematics, dyslexia, and accessibility. In Good Practice on Inclusive Curricula in the Mathematical Sciences, Ed. Cliffe E and Rowlett P.
<http://www.mathcentre.ac.uk/resources/uploaded/inclusivecurricula.pdf>