

Specific Learning Difficulties (Dyscalculia)

A ready reference for Parents & Teachers

For further information:

The British Dyslexia Association Tel: 0118 966 8271

www.bda-dyslexia.org.uk

Dyslexia Institute

Tel: 01784 222 300

www.dyslexia-inst.org.uk

Specific Learning Difficulties (SpLD)

The term 'specific learning difficulties' covers dyslexia, dyscalculia and dyspraxia.

Dyscalculia

The term 'dyscalculia' is used to describe a difficulty in mathematics. This might be either a marked discrepancy between the developmental level and the general ability on measures of specific maths ability, or a total inability to abstract or consider concepts and numbers.

Main Characteristics

- In numbers: The student may have difficulty in counting by rote, writing or reading numbers, miss out or reverse numbers, have difficulty with mental maths, and be unable to remember concepts, rules and formulae.
- In maths-based concepts: The student may have difficulty with money, telling the time, with directions, right and left, with sequencing events, or may lose track of turns, e.g. in team games, dance.

Potential Impacts upon Learning

When using mathematical concepts in relation to geography, for example, students may find it difficult to:

- Remember rules, formulae, order of calculations, basic addition, subtraction, multiplication and division facts.
- Read, write and record in mathematics figures and facts without making mistakes.
- Understand the technical language of mathematics even though they may understand the words in other contexts.
- Remember the 'layout' of things and geographical locations.
- Demonstrate a sense of direction and may easily become disorientated in new situations.

Suggested Support Strategies

- Whenever possible use concrete rather than abstract mathematical examples to illustrate a problem, for example use pictures/models when dealing with data.
- Prepare a prompt sheet electronically, with worked examples of regularly used mathematical tools that are used and applied in your subject. Students can refer to this at any time.
- Work through problems with the student, first breaking them down into small steps and allowing time for checking. This is particularly significant for students when they come to undertake their GCSE coursework.

Ask for a TA to work alongside students during this time and carefully consider how to enable peer support both whilst gathering data in the field and analysing it back in school. Seek advice from the staff and TAs who work with the maths department, so that they can give consistent support.

- Provide supplementary visual resources to support the mathematical processes or rules. Use pictures, photographs and models whenever possible.
- When using maps and scale for decision-making, cardboard templates drawn to scale should be used with the map, e.g. when siting a new development, the proposed shopping centre is produced on a cardboard template to scale to support the student in locational decision-making.
- Artefacts appropriate to the topics and themes being studied should be provided whenever possible.
- Support through the use of a calculator. Students may be given extra time to undertake coursework tasks. This should be explained thoughtfully to their peers so that they understand that this is fair and reasonable.
- Provide rough paper for working out.
- Extra practice given on data related tasks, including supplementary activities that involve counting objects rather than just dealing with numbers.

SEN Staffing

Deputy Head Student Progress & Inclusion: Mrs M Sims

Special Educational Needs and Disability Coordinator (SENDCo): Mrs J Hale

Specialist Teacher: Mrs J Wheeler