



What is Dyscalculia?

- Dyscalculia is a condition that affects the ability to acquire arithmetical skills.

Dyscalculic learners may have:

- Difficulty understanding simple number concepts.
- Lack number sense.
- Lack an intuitive grasp of numbers.
- Have problems learning number facts and procedures.
- Struggle with accurate and fluent calculation.
- Struggle with accurate maths reasoning.
- Even if they produce a correct answer or use a correct method, they may do so mechanically and without confidence.

Indicators to look out for:

- A presence of difficulties in mathematics
- Despite support and educational opportunities being in place, difficulties are still present.
- The degree of difficulty is evidenced to be below expectations for the individual's age.

What do we know about dyscalculia?

- No feel for numbers
- An inability to see even small quantities without counting (i.e to subdivide)
- Very little sense of magnitude or of relative sizes/numbers
- Trouble with sequencing numbers
- An overreliance on counting in ones (because the child has not developed the ability to separate and combined numbers)
- An inability to memorise number facts (e.g. times tables)
- A tendency not to notice patterns (e.g. numbers going up in tens)
- Left/right confusion and a weakness in visual-spatial orientation
- Difficulties dealing with money and time (reading clocks).

Top Tips for supporting children

- Relate maths to real life as much as possible, e.g. money/coins.
- Use apparatus and visuals when solving problems.
- Review a recently learned skill before moving on to a new one.
- Talk through the problem-solving process and encourage 'self talk'.
- Always do maths on squared paper.
- Allow plenty of time to complete work.
- List the steps for a multistep problem and leave worked examples.

Levels of supporting children with dyscalculia

- Use the right kind of concrete materials - Cuisenaire rods, base ten blocks, dice, counters.
- Play with dice and dominoes (as this improves recognition of spot patterns and reduces the need to count in ones)
- Encourage the child to see numbers as component chunks rather than as single units, e.g when playing with dominoes make sure that the child can see a 6 as a group of two threes or show them 9 as two arrays, one of 4 and another of 5.
- Uses games and activities rather than worksheets.
- Highlight the decimal structure of the counting system (arranging Dienes on place value mats - hundreds, tens and ones).
- Concepts need to be understood at the concrete level before writing anything down will make sense.

Resources/Signposting

- The dyscalculia toolkit book – Kept in Beehive

Training staff have had in school:

- Kerry Jackson- supporting children with SpLD's
- Solent therapy pack
- Evidence based numeracy interventions
- Educational psychology team