

What is Dyscalculia?

Many people may experience difficulty with maths. However, when these difficulties persist despite effective learning and teaching and supportive interventions, there may be a specific learning difficulty.

The following working definition of dyscalculia has been developed by the Scottish Government, Dyslexia Scotland and Dyscalculia National Working Group. East Ayrshire supports this working definition of dyscalculia.

“Dyscalculia is a neurodevelopmental learning difference which can co-occur with a range of other specific learning needs”.

Dyscalculia can be described as a specific difficulty in understanding number and number processes which persists despite the provision of appropriate learning opportunities. It is distinguishable from other challenges associated with numeracy and mathematics due to the:

- Persistent inability to understand and/or retrieve numerical facts from memory
- Use of underdeveloped procedures and processes
- Severity of difficulties with number sense

These difficulties often do not reflect an individual's cognitive abilities. They may not be typical of performance in other areas and cannot be attributed to other factors, for example gaps in learning, developmental, genetic and neurodevelopmental differences which include autism, dyslexia and

attention difficulties.

Possible indicators at Early Level

Has difficulty with:

- learning to count, especially when it comes to assigning a number to objects in a group
- connecting a number to a real-life situation, such as knowing that '3' can apply to any group that has three things in it - 3 biscuits, 3 cars, 3 toys
- remembering numbers and number sequences
- recognising number symbols
- recognising patterns
- sort items by size, shape or colour

Possible indicators at 1st/2nd Level

Has difficulty with:

- recognising numbers and symbols. e.g. making the connection between '7' and the word 'seven'
- writing numbers clearly or putting them in the correct order or the correct column (place value)
- devising a plan to solve a maths problem
- understanding words related to maths such as 'greater than' and 'less than'
- telling left from right and has a poor sense of direction
- remembering phone numbers and game scores
- playing games that involve number strategies
- learning and recalling basic maths facts
- identifying symbols such as +, -, x, ÷ and using them correctly

- telling the time
- using fingers to count instead of applying more sophisticated strategies
- playing popular games that involve numbers, counting and other maths concepts

Possible indicators in Secondary School age children

- Anxiety when presented with maths tasks across the curriculum
- Struggles to apply maths concepts to everyday life (including money matters such as estimating the total cost, calculating exact change and working out a tip)
- Has trouble measuring e.g. ingredients in a simple recipe (may also struggle to double or half quantities in a recipe)
- Struggles with finding their way around and worries about getting lost
- Struggles to interpret information shown on graphs or charts
- Has trouble finding different approaches to the same maths problem
- Lacks confidence in activities that require estimating speed and distance, such as playing sports and learning to drive
- Struggles to read scales e.g. thermometer

(Adapted from “What is Dyscalculia?” Dyslexia Scotland, 2018)

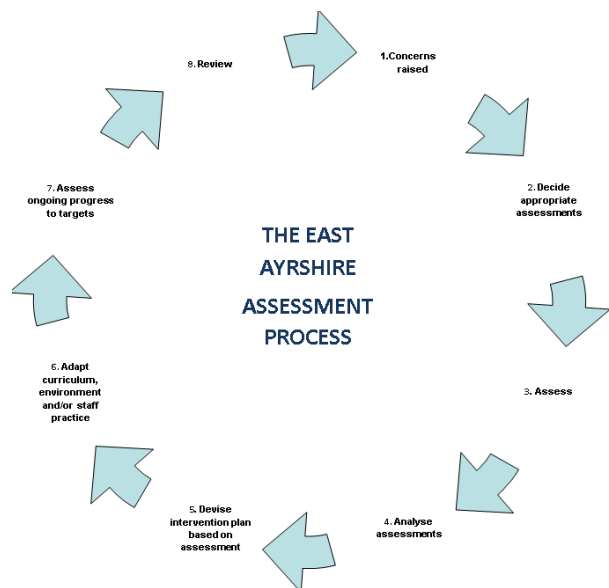
Assessment

Assessment is a process which can involve educational establishments, families and other professionals.

Assessment is not based on a one-off activity or test, it is a process. It involves working with others to gather a range of information from a number of people and places, over a period of time.

Assessment information could be gathered through:

- Discussions with parents/carers, children and young people, establishment staff and other professionals
- Staff reports or observations
- Samples of work
- Routine assessments gathered by establishments
- Checklists or questionnaires



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EAST AYRSHIRE SUPPORT TEAM

Information Leaflet

Dyscalculia

Guidance for Staff