**Dyscalculia, a difficult word to pronounce, for those living with it the difficulties can be debilitating beyond words**



* A series of articles Promoting Inclusion and Increasing Awareness of SEND  
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**March 3rd Dyscalculia Awareness Day**

How aware of Dyscalculia are you?

Dyscalculia is defined by the British Dyslexia Association as a specific and persistent difficulty in understanding numbers which can lead to a diverse range of difficulties with maths.

Estimates suggest 1 in 20 people in the UK have Dyscalculia, it is as likely to affect females as males. Compared to an estimated 1 in 10 with Dyslexia, with a higher prevalence amongst males.

Common traits can include recognising numbers, estimation, learning number sequences, reading analogue clocks, arithmetic, planning journeys and understanding the value of numbers. Dyslexic learners have problems learning number facts and procedure.

**Dyscalculia is lifelong and the impact can be great**

Difficulties may include handling money and keeping track of finances. Everyday activities such as driving can be affected, driving too fast or too slowly. Journeys and timekeeping are common difficulties, including following timetables. Phone numbers may be hard to recall. Purchasing a morning cup of coffee may cause immense stress due to difficulties with money transactions and recalling pin numbers, mental arithmetic may be extremely difficult, relying on finger counting and formal calculations.

**Other areas of difficulty**

Other areas of difficulty can include memorising basic number facts and slow to perform calculations. Addition is often the default operation used. Multiplication and fractions can cause immense difficulties. A poor sense of numbers, that is the oneness of one and estimation accompanies Dyscalculia. Dyscalculia learners lack an intuitive grasp of numbers. A poor understanding of place value makes it difficult to progress with formal teaching methods. The concepts behind word problems may be difficult to grasp. Keeping scores in games and any other application of number, time and sense of direction can be impacted. High levels of anxiety and frustration surrounding maths is common.

**Unique Profile**

It may not be all areas of maths that are impacted, some individuals may even be good at geometry and algebra. Like all difficulties every person has their own unique profile.

**Famous People**

There are many famous people reported to have Dyscalculia, these include Robbie Williams, Mick Hucknall, Benjamin Franklin, Cher and Thomas Edison. Strengths associated with having Dyscalculia include intuitive and strong strategic thinking, very creative and a love of words. Individuals with Dyscalculia are more likely than the general population to have co-occurrence with ADHD, Dyslexia and Dyspraxia.

**Support**

It's important to recognise the difficulties and support children’s learning through concrete apparatus, with the need to build conceptual models before internalising. Anxiety surrounding maths can exacerbate the difficulties, with the stress response leading to a shut down, unable to assimilate new learning. Teachers can develop ways to improve retention and learning of number facts through a range of multisensory activities, moving away from worksheets, playing games and demystifying the language of maths by using mathematical language widely. Visualisation, including drawing the problem, song and rhythm are often used as tools. One of my pupils, a dancer, learnt times table through dance, another using the drums and song. For fractions I set up a fraction café, so the children could visualise their learning. As a learning support teacher of maths it was important to me that my pupils understood the reason for maths. They would spend time thinking about maths and its application to them, to give it a sense of purpose. Lessons were always fun and often taken outside, angle walks, use of hopscotch, ball games, drawing, chalking, board games, cards, dominoes, role play, whatever was meaningful to the pupil. Each person is unique, has their own learning preferences and using these can enhance the retention and application of number facts.

For adults with Dyscalculia a calculator, handheld or the calculator function on a phone can be hugely beneficial, as well as memory prompts for pin numbers and other areas of difficulty.

There is further help and support via British Dyslexia Association (bdadyslexia.org.uk) and Steve Chinn (stevechinn.co.uk), author of award-winning books on Dyscalculia, including myths, checklists and information on assessment.

**Dyscalculia is lifelong and it is necessary to support through adaptations. Being aware and understanding the difficulties is key.**