

Dyslexia dyspraxia and dyscalculia



**ASSIGN
BUSTER**

A specific Learning difficulty is a classification including several disorders in which a person has difficulty learning in a typical manner. Usually this is caused by an unknown factor. The unknown factor is the disorder that affects the brain's ability to receive and process information. People with a learning disability have trouble undertaking specific types of tasks if they are not supported or if the task is not differentiated in order for them to complete the simplified version.

A child with a specific learning difficulty is as able as any other child, except in one or two areas of their learning. For instance, they may find it difficult to recognise letters, or to cope with numbers or reading. There are many different types of specific learning difficulties, but the best known and publicised is dyslexia.

With dyslexia, the child has difficulty with spelling and reading. It may be difficult for parents and teachers to realise that a child has this sort of problem, especially if their development has progressed without concern in their early year's education. Often, the child will appear to understand, have good ideas, and join in activities, as well as other children and in some instances better than others. Sometimes it can take years for adults to realise that a child has a specific difficulty.

Dyslexia

The British Psychological Society (1999) has given a broad definition of Dyslexia:

' Dyslexia is evident when accurate and fluent word reading and/or spelling develops very incompletely or with great difficulty. This focuses on literacy

learning at the 'word level' and implies that the problem is severe and persistent despite appropriate learning opportunities. It provides the basis for a staged process of assessment through teaching'

Dyslexia is an inherited condition that makes it extremely difficult to read, write, and spell in their subject language. There are many persisting factors in dyslexia, which can appear from an early age. They will still be noticeable when the dyslexic child leaves school; these include good and bad days for no apparent reason in relation to their attitude and behaviour, short-term memory loss and sequencing, organisation and spoken language skills. It is thought that the reason people with dyslexia have problems with phonological processing is that some areas, their brain functions in a different way than people without the condition.

There are number of different theories about the causes of Dyslexia which all tend to support each other. The main point is that it is a genetic condition that changes how the brain deals with information, and that it is passed on through families. Dyslexia is thought to be a genetic condition which means it runs in families. It is estimated that if you have dyslexia there is 40%-60% likelihood that your child will also develop the condition.

There are different strategies used for teaching children with dyslexia. For example if you are at a secondary school in a science lab using diagrams it would be easier to label the equipment that is for use, so the students can use this information when writing up laboratory reports. Using computers for a dyslexic child is advantageous as it would be easier for them to type the work rather than writing the work on paper. To support a dyslexic child you

need to make sure that messages and day to day classroom activities are written down, and never sent verbally. Also a daily check list for the pupil to refer to each evening would encourage a daily routine to help develop the child's own self-esteem and responsibilities and also encourage good organisational skills by the use of folders and dividers to keep work easily accessible and in an orderly fashion. Tasks need to be simplified down into small easily remembered pieces of information and if visual memory is poor, copying must be kept to a minimum as notes or handouts are far more useful. Another way of supporting the condition of the child is to sit the child fairly near the class teacher so that the teacher is available to help if necessary so that any support required is not to a minimum. A structured reading scheme that involves repetition and introduces new words slowly is extremely important. This allows the child to develop confidence and self esteem when reading. If there is one or two dyslexics in the class, a short list of structure-based words for their weekly spelling test, will be far more helpful than random words. Three or four irregular words can be included each week to challenge the child and eventually this should be seen to improve their spelling and writing skills.

Dyspraxia

Dyspraxia is a specific learning difficulty that affects the brain's ability to plan

sequences of movement. It is thought to be connected to the way that the brain develops, and can affect the planning of what to do and how to do it. It is often associated with problems of perception, language and thought.

“ Dyspraxia is often described as a hidden problem, because children with the condition appear no different to those who don't have it. Up to ten per cent of the population may show symptoms of dyspraxia, with around two per cent being severely affected. Males are four times more likely to be affected than females. Dyspraxia sometimes runs in families”. (BBC website 2008)

Students who have the learning difficulty dyspraxia will experience difficulties in gross motor skills meaning poor performance in sport, general clumsiness, poor balance, and difficulties in learning skills involving coordination of body parts, e. g. riding a bike or swimming. Also manual and practical tasks like using computer keyboards and mice will prove difficult, along with measuring accurately, slow or poor handwriting, messy presentation of work and problems with craft-work and cookery.

During the early formative years, a child suffering from dyspraxia may have difficulty learning to walk, run, and jump. Walking up and down a flight of stairs and dressing up will not be an easy task for them. Developing the ability to speak and communicate effectively is very slow for these children.

When the child attends school, mathematics and writing stories are often very difficult. Poor handwriting is among the most prevalent signs of dyspraxia. Other common symptoms include, short attention span, disorganisation, inability to tie shoelaces, tendency to avoid games in PE, and sluggishness in dressing themselves up.

During their adult years, routine tasks become very difficult for them to perform. Driving, riding bicycles, personal grooming, and certain household

chores are a cause for constant struggle. Dyspraxia sufferers walk in a clumsy manner and encounter problems with sports, especially those that involve the usage of bats. They often avoid work or things that are hard for them to do.

Strategies for teaching children with dyspraxia is as follows for handwriting- using pencil grips for better control with the pencil, writing on lined paper so they can write in straight lines and also using stencils. Difficulties with dressing themselves a suggestion for this is to wear loose-fit easy on easy off clothing with Velcro fastenings for shoes. For Difficulties for walking in straight line and bumping into people, balance or wobble boards need to be provided. If a child is unable to remember or follow instructions you need to get the attention of the child before giving instructions, provide time to process the information to the child and use activities, demonstrations and pictures to get the message across. To raise and develop their Social skills you need to use techniques in order to explain the social rules and expected behaviour as a dyspraxia child finds it difficult to concentrate so a distraction free learning environment is essential.

A Dyspraxia child has been used to failure repeatedly every effort must be made to raise their self-esteem. It is imperative that you use every opportunity to praise the child in order to raise their self-esteem. This will make the child feel better about themselves they are more likely to relax and learn. This is the obvious situation to strive towards making progress in their learning. It is important to remember that they have difficulty in absorbing information during lessons so allowing them extra time, teaching in small bursts, allowing opportunities to rest is very important and You will

be able to tell when each the child requires a rest. However, this will change from day to day and from child to child. Ensure that the child has understood what is being taught, repeat if needed. Check that the student is not falling behind because they cannot copy from the blackboard, Teach on a one to one level, with few distractions, when appropriate. If there is a learning support worker available, allow them to assist the child so they are taught at the same pace alongside their peers.

Therapy is a good way of alleviating dyspraxia. Speech and language therapists, occupational therapists, specialist teachers, and psychologists could be relied upon to help patients with dyspraxia. The specialists needed for therapy could vary, depending on the specific problem needs. A set of activities and exercises are given by these therapists to help patients in learning how to perform physical tasks. Reading and writing skills could also be developed with the help of therapists.

Dyscalculia

Dyscalculia learners may have difficulty understanding simple number concepts, and have problems learning number facts and procedures.

Dyscalculia is like dyslexia for numbers. But unlike dyslexia, very little is known about the causes or treatment. Current thinking suggests that it is a congenital condition, caused by the abnormal functioning of a specific area of the brain. People with dyscalculia experience great difficulty with the most basic aspects of numbers.

Dyscalculia children can usually learn the sequence of counting words, but may have difficulty going back and forth, especially in twos and threes when

Dyscalculia children find learning and recalling number facts difficult and they often lack confidence even when they produce the correct answer. Dyscalculia children may find it difficult to grasp that the words ten, hundred and thousand have the same relationship to each other as the numerals 10, 100 and 1000. Dyscalculia children often have difficulty when handling money or telling the time. They may also have problems with concepts such as speed or temperature. Dyscalculia children may be particularly vulnerable where teachers follow an Interactive lesson especially in a whole-class method of teaching, when asking dyscalculia children to answer simple math's questions in the class it will lead to embarrassment and frustration especially when they peers are there or other children . Dyscalculia is a special need and requires diagnosis and appropriate counseling as well as support away from whole class teaching, however, compared with dyslexia, very little research has focused on dyscalculia and how to overcome it. Consequently, there is relatively little ready made support available.

Strategies to support learners with dyscalculia is to allow extra time to complete a given task in class, encourage dyscalculia children to make use of calculators when necessary, using visual material to develop an understanding of maths concepts, make use of ICT as an aid to learning, encourage working with a partner to explain methods of working to each others in class. It is important to make the learning fun as dyscalculia children may have behaviour problems and some will resent doing extra math so it is better for teachers to be as upbeat and pleasant through activities as possible. Activities should be taught in short blocks of 10 minutes to maintain the attention of students. Parents should also be

involved in the learning and encouraged to participate in the learning and use positive and encouraging language if the child finds it difficult to carry out the task. Children who have a problem with math should be taught in a multi sensory approach in which they say, hear, write and handle numbers simultaneously.

Learning difficulties can be a lifelong condition, the best treatment is to provide special or differentiated education where needed. Once a difficulty has been recognised the best approach is to teach learning skills by building on the child's abilities and strengths whilst trying to correct the weaknesses. It is important to help the child learn by enhancing attention and concentration through various teaching strategies that best suit the need of the child ensuring progression is achieved and consistent throughout the subjects.