

Possible Accommodations

Accommodations can be used at the school levels. They consist of support and compensation measures that generally allow students to bring their real potential to the forefront, since it is no longer hidden behind the learning disability. Such accommodations can include:

- use of graph paper for students with spatial organization difficulties;
- access to the teacher's course notes prior to class;
- use of a calculator or calculation tables for assignments or during exams;
- fewer similar exercises to complete during assignments, but the same academic standards;
- access to exams from previous semesters so students can familiarize themselves with the type of evaluation;
- have another person read the questions during exams;
- use of a sheet with a structured work method during exams for students with attention problems. This method could consist of a guide outlining the steps to follow in a specific situation (e.g. how to apply the rule of three);
- additional time for exams;



dyscalculia



How is dyscalculia "diagnosed"?

Diagnosis of dyscalculia is based on its effect i.e. difficulty with math. This is difficult because there are many reasons for being bad at math. Reasons other than dyscalculia include inadequate instruction, lack of motivation, attention disorders, anxiety disorders, or across the board academic difficulties. For this reason, most methods of diagnosis include not only identification of a difficulty in math that affects academic or everyday life, but also an attempt to rule out some of these other factors. Therefore, for teachers and parents, diagnosis should be done by an expert. This person will talk to parents and teachers, and run a variety of tests, including for math, but also for IQ, and possibly for reading or attention. Most importantly, they will then use their professional judgment.

In general, however, what really happens is that by the time parents and teachers realize that a child has a serious problem with math, and find out how to do something about it, the child is already 9 or 10 years old and is 3 years behind in school.

*Do you need Assistance?
Call the following Number*

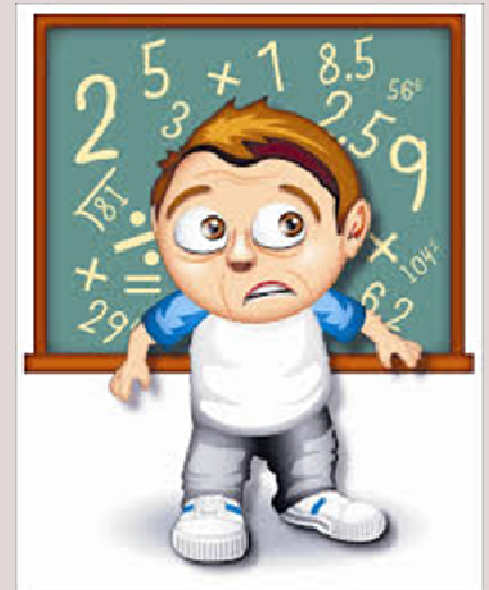
Eshe's Learning Center 662 6 7206.

Group Members:

Allison Granger
Javid Khan
Meshal Maharaj
Radica Joseph
Sharmila Labban

Lecturer: Dr. Elna Carrington-Blaidis

A Guide to DYCALCULIA



What is Dyscalculia?

Dyscalculia is a specific learning disability in mathematics. Children with dyscalculia face difficulties in learning numeracy skills and grasping mathematical concepts and procedures, despite the fact that they have normal or high IQ levels, and their general mental abilities are not affected.

Dyscalculia often accompanies other difficulties, such as language impairment, dyslexia, as well as poor fine and gross motor skills. The combination of these learning challenges can be debilitating, rendering children with dyscalculia helpless when it comes to math.

With early intervention and therapy, dyscalculia can be successfully managed to help each child reach his/her potential.

Characteristics of Dyscalculia

Since it is not possible to provide clear-cut clinical profiles of the different types of dyscalculia, below is a summary of the common characteristics of this disability:

- Difficulty Deciphering Arabic Numerals;
- Difficulty Converting From The Arabic To The Language System;
- Inability To Understand Mathematical Language (Symbols And Math Vocabulary);
- Difficulty Carrying Out Operations, Even Basic Ones;
- Altered Production & Comprehension Of Numbers;
- Inversion Of The Order Of Numbers;
- Difficulty Writing Large Numbers, In Words Or Numerals;
- Poor Spatial Organization;
- Poor Alignment Of Digits When Performing Mathematical Calculations;
- Poor Development Of Problem-Solving Strategies;
- Difficulty Thinking Of Several Possible Solutions;
- Cognitive Rigidity;
- Perseverative Errors, Or Difficulty Changing Tasks Quickly;
- Poor Or No Self-Correction Or Review Method;
- Impulsiveness That Hinders Their Ability To Follow The Steps Outlined;
- Difficulty With Mental Calculations;
- Difficulty Learning Calculation Tables (E.G. Multiplication Tables);
- Inability To Understand The Statements Of A Problem.

Causes of Dyscalculia

Developmental dyscalculia is assumed to be caused by a difference in brain function and/or structure in areas of the brain involved in mathematics. There are many possible causes, including both genetic and environmental, and an interaction of the two. The cause for one individual may not be the same as for another, and in many cases it may not be obvious.

- Genetic causes include known genetic disorders such as Turner's syndrome, Fragile X syndrome, Velocardiofacial syndrome and Williams syndrome. In addition, studies suggest that there are genes present in the general population which increase the risk of dyscalculia.
- Known environmental causes include alcohol consumption during pregnancy and pre-term birth. Both of these can result in underdevelopment of the brain.
- Dyscalculia often co-occurs with other learning difficulties such as dyslexia, dyspraxia, attention deficit and hyperactivity disorder (ADHD), and specific language impairment (SLI). This is probably because both environmental and genetic factors which affect brain development are likely to act on several areas of the brain at once.

1 + 1 = 3
IT'S O.K!
I HAVE
DYSCALCULIA