

What is a math LD or dyscalculia?



Dyscalculia is a life long learning problem involving mathematics. Dyscalculia encompasses a wide variety of math-related learning difficulties. The level and type of mathematical difficulty varies from student to student and may be serious enough to qualify a student as having a learning disability.

What are some characteristics of dyscalculia?

- Poor at computing mental math problems
- Difficulty understanding and remembering math concepts or processes such as, addition and multiplication, sequencing, or formulas.
- Poor long-term memory when it comes to mathematics. A student may be able to do a specific math problem initially, but not after some time has passed.
- Difficulties with games involving mathematics or daily tasks that use math concepts. Examples are balancing a checkbook, keeping score at a baseball game or while playing a board game, telling time, and handling money.
- Poor spatial awareness that affects ones sense of direction; getting lost or disoriented easily.
- Difficulties learning to play an instrument and reading music.

How is a specific learning disability in mathematics (dyscalculia) identified?

To determine the existence of a specific learning disability that adversely impacts mathematics or other areas, there must be evidence of:

- A. Severe Underachievement** in mathematical computation or mathematical reasoning. Classroom observations and documentation of prior interventions attempted (for K-12 students) are usually required to proceed to the assessment (testing) stage. Underachievement is determined through such measures as diagnostic testing, classroom work, teacher reports, etc.
- B. Significant Gap** between ability and achievement in the area of mathematics as measured by individually administered ability and achievement tests. The standard for a significant gap may vary depending on the age of the person being assessed, state eligibility criteria for disability services, or other factors.
- C. An Information Processing** deficit involving visual, auditory, kinesthetic, processing speed, or various memory functions is present. Evidence of a breakdown in learning is gathered through standardized tests, observations, review of records, etc.

Please note that the underachievement cannot be the result of environmental, cultural, or economic influences.

What are some strategies that will help me or my child?



- Find the student's strengths. Use the student's strengths to help him/her solve math problems. If a student is a strong auditory learner have them read the math problem out loud. For a visual learner have them draw pictures or visualize the problem in their head.
- Do math problems on graph paper. This may help keep the problem organized and numbers lined up.
- Use real world examples when doing math problems.
- Begin by learning math in a concrete format (e.g. manipulative items, such as blocks or counters) and moving to an abstract format.

Where can I get more information?

LDA of America: www.ldaamerica.org

LDA of Minnesota: www.ldaminnesota.org or 952-922-8374

LD Online: www.ldonline.org

National Center for Learning Disabilities: www.getreadytoread.org

Garnett, K. Math Learning Disabilities. (n.d.). Retrieved November 24, 1999, from http://ldonline.org/ld_indepth/math_skills/garnett.html

Wright, C.C. Learning Disabilities in Mathematics. (n.d.). Retrieved November 24, 1999, from http://ldonline.org/ld_indepth/math_skills/math-1.html

Dyscalculia. (n.d.). Retrieved February 1, 2002, from <http://www.nclد.org/info/indepth/dyscalculia.cfm>

LDA of Minnesota

For more than 36 years, **Learning Disabilities Association of Minnesota** has been serving the needs of people of all ages with or at risk for learning disabilities or related learning difficulties by maximizing their potential so that they may lead more productive and fulfilled lives. Services include educational assessments, individualized and small group tutoring, consultations, family literacy activities, school-to-work transition programming, professional training, public education, and high-quality educational products.

LDA of Minnesota is the state affiliate of LDA of America, a non-profit organization of volunteers dedicated to identifying causes, promoting prevention of learning disabilities, and enhancing the quality of life for all individuals with learning disabilities and their families by encouraging effective identification and intervention, fostering research, and protecting their rights under law.