

Strategies for the Classroom

Mathematics

In some instances, individuals with learning disabilities have average or above-average mathematics skills. For others, mathematics is the primary area of disability or an area of disability in addition to other problems, such as a reading disability. Dyscalculia is the term used to refer to problems in mathematics.

An individual with a disability in math may have one or more of the following characteristics:

- Does not remember and/or retrieve math facts
- Does not use visual imagery effectively
- Has a visual-spatial deficit
- Becomes confused with math operations, especially multi-step processes
- Has difficulties in language processing that may affect the ability to complete math problem solving

Effective strategies that you can use in the classroom include:

- Highlight operation signs
- Provide written and oral directions
- Reduce the number of problems
- Shorten work intervals
- Use graph paper
- Use manipulatives

For more information on dyscalculia, click on the following hotlink to the article, *Accommodating Math Students with Learning Disabilities* from Focus on Basics, Vol 4, Issue B • September 00. Retrieved from the World Wide Web on October 14, 2001.

<http://gseweb.harvard.edu/~ncsall/fob/2000/kenyon.html>

Reading

Difficulty in learning to read is the most prominent characteristic associated with learning disabilities. The term dyslexia is often used to denote a reading problem. However, the term dyslexia actually refers to a disorder that interferes with the acquisition and processing of language and affects a variety of performance areas. Individuals with learning disabilities may demonstrate some or most of the following characteristics:

- Does not read for pleasure
- Does not use reading to gather information
- Has problems identifying sounds in spoken words
- Often needs many repetitions to learn to recognize a new or unused word
- Relies heavily on context to new or unused words
- Oral reading contains many errors, repetitions, and pauses
- Efforts in reading are so focused on word recognition that they detract from reading comprehension
- Has problems with comprehension that go beyond word recognition; may have limited language skills that affect comprehension
- Has a limited use of reading strategies; is an inactive reader, not previewing text, monitoring comprehension, or summarizing what is read
- Practices reading rarely, which may compound reading difficulties; lacks complex language and word knowledge

Effective strategies that can be used in the classroom include:

- Audiotapes
- Enlarging the print
- Magnifying devices
- Readers
- Shorten work intervals
- Use of mnemonics

Writing

Many individuals with learning disabilities have difficulties with written expression. These problems are often found in combination with reading and spoken language difficulties. Writing difficulties often continue after other learning problems have been accommodated. Dysgraphia is a term sometimes used to refer to writing problems. An individual with learning disabilities may demonstrate some or all of the following characteristics in writing:

- Has difficulty communicating through writing
- Written output is severely limited
- Writing is disorganized
- Lacks a clear purpose for writing
- Does not use the appropriate test structures
- Shows persistent problems in spelling
- Has difficulties with mechanics or written expression
- Handwriting is sloppy and difficult to read
- Demonstrates difficulties in revising

Effective strategies that can be used in the classroom include:

- Provide a variety of writing instruments
- Require less writing
- Triangular grips
- Make available a course outline or lecture outline

Strategies for Remembering Information

Students with learning disabilities, regardless of the area of disability, may have a difficult time remembering basic information. You may wish to use some of the following general modifications in your classroom:

- Provide repetition and practice needed to learn a new skill
- Use mind pictures/mapping – mental images that help students to recall information. Have students write or say the information to be remembered; have them form a picture in their mind. With their eyes closed, have students look at their mind picture and state the information that they see.
- Create acronyms as an informational organizer. Acronyms are formed using the first letter of each word to be remembered. The letters are arranged to form a pronounceable word or a complete sentence. A common example used to remember the order of the planets in our solar system is: My (Mercury) very (Venus) earthy (Earth) mother (Mars) just (Jupiter) served (Saturn) us (Uranus) nine (Neptune) pizzas (Pluto).
- Have students use graphic organizers to help them with organizational, categorizing, and writing skills.
- Provide students with advance organizers, such as an incomplete outline or a visual graphic that they can use to take notes or as a prompt for a writing or math process.
- Use lots of visuals in each academic area – drawings, cartoons, maps, tables, or graphs.

For information on how to use accommodations in the GED classroom, you may wish to read *The Special Connection* in each edition of the *GED Connections* Newsletter at: <http://floridatechnet.org/lib-ged.htm>.