Learning Disabilities Fact Sheet

Dyscalculia

What is dyscalculia?

Dyscalculia is a learning disability that affects a person's ability to do math problems. It can involve the following:

- Difficulties remembering math symbols and terms
- Problems with basic operations – adding, subtracting, multiplying and dividing
- Problems with math concepts using pictures, diagrams or manipulatives
- Poor writing of math symbols and terms
- Difficulty understanding math concepts

Problems with math can be due to other factors, which make dyscalculia hard to diagnose:

- ❑ lack of experience and background knowledge in math
- ❑ math instruction in the past has not matched the learner's learning style
- ❑ lack of motivation
- ❑ below average intelligence
- ❑ math anxiety
- ❑ doesn't see mathematics as useful
- ❑ non-mathematical learning disabilities

Signs of Dyscalculia

- Poor mental math, difficulty handling money, making change, etc.
- Fails to notice math signs and symbols → + - x ÷ =
- Can get problems right, but doesn't understand why, so can't transfer the knowledge to new problems
- Doesn't remember the basic math facts – addition and multiplication tables, etc.

- Poor sense of direction, trouble reading maps, telling time, understanding schedules
- Mistakes in working with numbers – reversals, substituting other numbers & leaving numbers out
- May have trouble learning musical concepts or following directions in sports

What specific strategies can help?

- Teach math using concrete objects or manipulatives; then progress to pictures, diagrams & other visuals. Later present abstract concepts
- Teach the basic math facts thoroughly, instead of covering a lot of information too briefly
- Explain how new skills relate to other skills they already know
- Review concepts regularly
- Observe learners to find out where they usually make mistakes & work on these areas
- Provide opportunities for success, so learners can conquer math anxiety
- Play math games
- Teach math through real-life activities – cooking, reading maps & measuring distances, making & following simple budgets
- Use word problems that reflect real-life situations in the learners' environment
- Make photocopies of problems, so learners don't have to copy them from a text
- Teach learners to show their work beside each problem – use post-it notes
- Post math symbols and numerals on the wall and provide handouts for the learners
- Use graph paper to help line up the numbers on the page
- Encourage learners to use calculators