

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:

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| <input type="checkbox"/> lack of experience and background knowledge in math | <input type="checkbox"/> below average intelligence |
| <input type="checkbox"/> math instruction in the past has not matched the learner's learning style | <input type="checkbox"/> math anxiety |
| <input type="checkbox"/> lack of motivation | <input type="checkbox"/> doesn't see mathematics as useful |
| | <input type="checkbox"/> 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.