



## Get Smart about Specific Learning Disabilities (SLD)

### Dyslexia

**Dyslexia** (dis-lek-see-uh) is a learning difference that is neurological in origin. It is characterized by **difficulties with accurate and/or fluent word recognition, poor spelling and decoding**. Dyslexia is not linked to intelligence.

**Signs and Symptoms:**

**Early Clues**

- delayed speech
- difficulty in learning to tie shoes
- late to establish dominant hand
- trouble learning nursery rhymes; may not “hear” sounds that rhyme
- history of reading problems in parents and/or siblings

**Primary Grades and Beyond**

- mixes up sounds in multisyllabic words, i.e. “mazagine”
- difficulty sounding out 1-syllable words
- left-right/before-after confusion
- slow, choppy reading
- may skip unknown words or make unreasonable guesses
- unrecognizable, inventive spelling
- cannot retain sight words
- shows discrepancy between verbal skills and written expression
- may have an extremely messy bedroom, backpack, desk, etc.
- often are very bright, “big picture” thinkers, creative, often altruistic

**Approximately 20%** of the population has some degree of dyslexia, or 1-in-5. Of those, about 40% will have ADHD, therefore cross-checking symptoms is crucial. May co-exist with other SLDs.

**For latest research and a full list of clues, visit [dyslexia.yale.edu](http://dyslexia.yale.edu).**

### Dysgraphia

**Dysgraphia** (dis-graf-ee-uh) is a learning difference that is neurological in origin. It is characterized by **difficulties with written expression resulting in extremely messy handwriting and disordered content**. Dysgraphia is not linked to intelligence.

**Signs and Symptoms:**

- visual-spatial difficulties that cause inconsistent spacing between letters and words
- seemingly little regard for lines and margins
- distorted letter formation
- directional confusion
- inaccurate and/or inventive spelling
- struggle with sentence structure, punctuation and capitalization
- content shows lack of continuity
- often a large discrepancy between verbal skills and written expression
- difficulty copying from other sources
- poor fine-motor skills may cause an odd, tight pencil grip
- student may frequently erase for “do-overs”
- cursive and/or printing are slow, laborious, illegible

**Dysgraphia** often co-exists with dyslexia, dyscalculia, ADHD, autism or other differences.

**Dysgraphia and Dyslexia** both may affect the student’s ability to spell. However, it is possible to have dysgraphia and not have dyslexia.

**For latest research and best practices, visit [tinyurl.com/3fjj39ax](http://tinyurl.com/3fjj39ax)**

### Dyscalculia

**Dyscalculia** (dis-kal-kyoo-lee uh) is a learning difference that is neurological in origin. It is characterized by **difficulties with understanding the mechanics of doing simple and complex math**. Dyscalculia is not linked to intelligence.

**Signs and Symptoms:**

- difficulty with counting, learning number facts and working math problems
- struggles with telling time, measuring, and counting money
- may not recognize patterns
- directional confusion
- will show poor sequential memory; memorizing tables and facts will present significant challenges
- difficulty with subtraction and understanding place value
- may demonstrate pronounced anxiety toward math and have attention issues
- often responds well to more creative teaching methods

**Often dyscalculia** will co-exist with dyslexia, dysgraphia, Turner syndrome, epilepsy, Fragile X Syndrome and ADHD.

**Approximately 7%** of the population has dyscalculia, although research is not as rich as research on dyslexia.

**For latest research and remediation tools, visit [dyscalculia.org](http://dyscalculia.org).**





## Get Smart about Specific Learning Disabilities (SLD)

### Dyslexia

On an IEP, **Dyslexia** is identified as an **SLD in Reading**. The term “dyslexia” is used for evaluation and eligibility determination.

**The dyslexia intervention model** that is prescribed includes reading instruction that is explicit, systematic, phonetic, multisensory and ongoing.

**Dyslexia presents by degrees:** mild, moderate, severe, or profound. **Symptoms increase** when the student is tired, ill, hot, or hungry; timing of instruction and environmental control are important.

**Avoid situations that** put the student’s self-esteem at risk. Do not ask them to read out loud, write on board in front of the class, exchange papers to grade, or recite memorized content.

#### Classroom Supports:

Built-in device settings or software, i.e. text-to-speech, speech-to-text, audiobooks. Give explicit step-by-step instructions. Preview new content. Review previous learning. Shorten assignments. Allow extra time. Repeat what is important. Combine verbal & visual information. Highlight key points. Reduce copying by providing handouts. Allow keyboarding and spellcheck. Encourage paired learning. Allow use of an alphabet strip, number line, or raised-line paper. Record and share class lectures. Remember SLDs have an emotional component. Show respect and kindness. Acknowledge difference, not disability. Highlight strengths.

### Dysgraphia

On an IEP, **Dysgraphia** is identified as an **SLD in Writing**. The term “dysgraphia” is used for evaluation and eligibility determination.

**Intervention for dysgraphia** should include instruction that is systematic, explicit and ongoing.

**Dysgraphia** involves two weak skills coming together: poor visual memory and directional confusion.

**Avoid situations** that put the student’s self-esteem at risk. Do not ask them to exchange papers, write on the board, or copy from the board. Poor visual memory makes these tasks nearly impossible. Do not chastise students for being “sloppy” or “lazy”.

#### Classroom Supports:

For beginners, try programs such as Handwriting Without Tears. Use built-in device settings or software, i.e. speech-to-text, word prediction. Clay play and working mazes will help develop fine motor control. Allow extra time. Reduce copying by providing handouts. Allow keyboarding and spellcheck. Use alternate means of assessment, such as verbal instead of written. Show examples of finished assignments. Allow raised-line paper, an alphabet strip, a number line and graphic organizers. Provide a variety of pens, pencils and grips. Do not overcorrect. Show patience. Model acceptance.

### Dyscalculia

On an IEP, **Dyscalculia** is identified as an **SLD in Math**. The term “dyscalculia” is used for evaluation and eligibility determination.

**Intervention for dyscalculia** should include instruction that is systematic, explicit, multisensory and ongoing. **The difference between dyscalculia** and “doing poorly” in math is in the degree of difficulties and the lack of response to remediation.

**Avoid situations** that put the student’s self-esteem at risk. Do not ask them to work math problems on the board, have students exchange papers to grade or recite facts and tables aloud.

#### Classroom Supports:

Allow use of a calculator. Do not rely on memorization. Use graph paper to line up numbers. Allow extra time on tests and in-class assignments. Explain and explain again. Shorten assignments. Review previous learning before moving on. Preview new content. Watch and listen for clues to identify trouble-spots. Use grade-appropriate, multi-sensory manipulatives such as an abacus or coins and tiles. Allow the use of charts, multiplication tables, formulas, or examples of operations. Do not rush students. Be empathetic and friendly.