What is Dysgraphia?

Dysgraphia means difficulty with handwriting (dys=difficulty; graphia = handwriting). What can make handwriting hard? Handwriting is a complex activity that requires the simultaneous integration of multiple components:

- **Appropriate pencil grip** – The traditional pencil grip is a “tripod” grip, with the thumb and first 2 fingers. Many children with dysgraphia have an abnormal pencil grip. Sometimes the thumb crosses over and is used for control, a “fist” is used, or the pencil is gripped too tightly, in a “death grip.”
- **Fine-Motor and Visual-Motor skills** – Handwriting requires solid fine-motor skills and visual-motor integration. Preschool activities such as cutting, copying, and drawing can help develop the fine-motor and visual-motor skills needed for handwriting.
- **Visual memory** – Handwriting requires visual memory for letter and number patterns. Children with poor visual memory forget letter patterns, and can have difficulty copying from the board.
- **Spatial skills** – Signs of spatial weaknesses are letters that do not all “sit on the line”, inconsistent letter sizing, letters that slant in different directions, “drifting” paragraph margins, and inconsistent spacing between letters and words.
- **Sequencing** – Each written alphabet letter is a pattern that is executed in a specific sequence. Children with weak sequencing skills have difficulty memorizing these patterns, and letter formation is inconsistent.
- **Directionality** – Directionality weaknesses result in confusion between similar letters and numbers. The most commonly confused letters are b-d (left-right directionality). Some children also confuse p-b (up-down directionality).

Effects of Dysgraphia

For children with dysgraphia, handwriting is an extremely cumbersome and energy-draining activity. Their dysgraphia significantly impedes their ability to express ideas in written form. Written expression requires generation and organization of ideas, language formulation, and attention to mechanics (spelling, capitalization, punctuation). If handwriting is not highly automatic, the effort required to produce written output is completely overwhelming. Written content is sparse with minimal elaboration of ideas, and written expression is significantly disparate from oral expression. Writing mechanics are also poor. Written work takes significantly more time than it does for the average student. Children with dysgraphia may begin to hate written assignments, and avoid or fail to complete written work.

Do Dysgraphia and Dyslexia go together?

Dysgraphia is often present in children with dyslexia, but many children with dyslexia have no trouble with handwriting. Conversely, a child can have dysgraphia without dyslexia. They are two separate disorders that sometimes co-occur.
About Dysgraphia – Difficulties with Handwriting

Children with both dyslexia and dysgraphia often possess solid fine-motor and visual-motor skills, but have other weaknesses that affect both handwriting and other academic areas. These include weak visual memory, poor sequencing skills, and directionality or spatial weaknesses. Visual memory deficits can make handwriting difficult, impact the ability to remember word spellings (after the spelling test), and create confusion between small words when reading (for/from). Early sequencing weaknesses may appear as difficulty learning to tie shoes, trouble with memorization of name/address, or difficulty remembering the alphabet sequence (without singing). Later sequencing weaknesses include trouble with “skip-counting”, difficulty reciting the months of the year in sequence, and trouble remembering the steps of multi-step math operations. Directionality weaknesses are also common in children with dyslexia, manifesting as left-right confusion, lateness in establishing a dominant hand, and letter-number reversals. While early letter/number reversals are not uncommon, persistent letter/number reversals after 2 years of handwriting instruction are a warning sign of dyslexia. Children with dyslexia also have core deficits in areas that affect reading and spelling, including phonological awareness, phonological memory, phonological processing, and visual-linguistic retrieval. Rote memory, word-finding, or oral expression are also sometimes weak. A child with dyslexia may have many of these symptoms or only some of them.

What can be done?

The first step is to obtain a professional evaluation to determine whether your child suffers from dysgraphia or dyslexia. In addition to professional treatment, a student may also need formal school accommodations. Typical accommodations include allowing a student to dictate written work to a “scribe”, extended time to complete tests and assignments, copies of written notes, and technology supports for written expression. Both professional treatment and accommodations can alleviate the emotional impact of dysgraphia, and help a student to build important skills in written expression.

Linda Balsiger, M.S., CCC-SLP is a literacy and learning specialist and certified state-licensed speech-language pathologist. She is the owner of Bend Language & Learning, a private practice dedicated to the treatment of dyslexia and other language-based learning disabilities (www.bendlanguageandlearning.com).

Reprinted with permission from Central Oregon Family News