

## Supporting Students Struggling with Handwriting

Between 10% and 30% of students struggle with handwriting. Early difficulties in this area are significantly correlated with poorer performance on composition tasks. The following are research-based elements of effective handwriting instruction. These elements, which apply to both manuscript and cursive handwriting, may not necessarily apply to an entire class but instead may be used to support instructional methods delivered in small groups with students whose penmanship is illegible or dysfluent.

1. Show students how to hold a pencil.
2. Model efficient and legible letter formation.
3. Provide multiple opportunities for students to practice effective letter formation.
4. Use scaffolds, such as letters with numbered arrows showing the order and direction of strokes.
5. Have students practice writing letters from memory.
6. Provide handwriting fluency practice to build students' automaticity.
7. Practice handwriting in short sessions.

—Adapted from Berninger et al., 1997; Berninger et al., 2006; Denton, Cope, & Moser, 2006; Graham et al., 2012; Graham, Harris, & Fink, 2000; Graham & Weintrub, 1996.

Some students who struggle with handwriting may actually have dysgraphia. Dysgraphia may occur alone, or with dyslexia. An assessment for dysgraphia, as it relates to dyslexia, is important in order to determine whether children need additional explicit, systematic instruction in handwriting only; handwriting and spelling; or handwriting, spelling, and written expression along with word reading and decoding (IDA, 2012).

Texas Education Code §38.003(b) states, “In accordance with the program approved by the State Board of Education, the board of trustees of each school district shall provide for the treatment of any student determined to have dyslexia or a related disorder.”

While it is important for students with dysgraphia to receive the research-based elements of handwriting, spelling, and written language instruction as part of the core curriculum, for those students who require additional supports and services for dysgraphia, instructional decisions must be made by a committee (either Section 504 or ARD) that is knowledgeable about the instructional elements and delivery of instruction that is consistent with research-based practice.

## Handwriting

The research-based elements for effective instruction of handwriting as stated above for all students are the same for students with dysgraphia. However, the intensity, frequency, and delivery of instruction may need to be adjusted to meet specific student need as determined by the Section 504 or ARD committee. Figure 5.4 below provides a hierarchy of instruction for handwriting as a reference to best practice:

<b>Figure 5.4. Handwriting Hierarchy of Instruction</b>	
Posture	Also known as “Watch Our Writing” (W.O.W) <ul style="list-style-type: none"><li>• Feet are flat on the floor</li><li>• Back is straight</li><li>• Paper slanted so that the edge of the paper is parallel to the writing arm</li><li>• Paper anchored with non-writing hand</li><li>• Pencil grip and position correct</li></ul>
Grip	Normal tripod grip with pencil resting on first joint of middle finger with the thumb and index fingers holding the pencil in place at a 45° angle.
Letter Formation	Emphasis placed in the following order: <ul style="list-style-type: none"><li>• Shape</li><li>• Proportion</li><li>• Size</li><li>• Rhythm/fluency</li><li>• Slant</li></ul>
Sequence	<ul style="list-style-type: none"><li>• Lower case letters first; Capitals as needed beginning with first letters of student name</li><li>• Manuscript – group by stroke formation</li><li>• Cursive – group by beginning approach stroke</li><li>• Letters</li><li>• Syllables</li><li>• Words</li><li>• Phrases</li><li>• Sentences</li><li>• Paragraphs</li></ul>

## Spelling

Handwriting supports spelling, a complex process of translating a phoneme (spoken sound) to the corresponding grapheme (orthographic representation) in order to generate written text to express an idea. Orthography is the written spelling patterns and rules in a given language. Students must be taught the regularity and irregularity of the orthographic patterns of a language in an explicit and systematic manner. The instruction should be integrated with phonology and sound-symbol knowledge. Because spelling is meaning driven and draws upon the phonological, orthographic, and morphological aspects of words, students will benefit from systematic, explicit instruction based on the following guiding principles:

Supporting Students Struggling with Handwriting. (2018). *The Dyslexia Handbook - 2018 Update: Procedures Concerning Dyslexia and Related Disorders*, 67-69. Retrieved March 7, 2019, from <https://tea.texas.gov/academics/dyslexia/>.

- Phoneme-grapheme correspondence
- Letter order and sequence patterns, or orthographic conventions:
  - syllable types
  - orthographic rules
  - irregular words
- Position of a phoneme or grapheme in a word
- Meaning (morphology) and part of speech
- Language of origin (Moats, 2005)

### *Writing*

A potential secondary consequence of dysgraphia is difficulty with students expressing themselves in written text. This difficulty may be attributed to deficits in handwriting, spelling, language processing, or the integration of each of those skills. In Chapter IV of this handbook, Moats and Dakin (2008) are quoted as stating:

*The ability to compose and transcribe conventional English with accuracy, fluency, and clarity of expression is known as basic writing skills. Writing is dependent on many language skills and processes and is often even more problematic for children than reading. Writing is a language discipline with many component skills that must be directly taught. Because writing demands using different skills at the same time, such as generating language, spelling, handwriting, and using capitalization and punctuation, it puts a significant demand on working memory and attention. Thus, a student may demonstrate mastery of these individual skills, but when asked to integrate them all at once, mastery of an individual skill, such as handwriting, often deteriorates. To write on demand, a student has to have mastered, to the point of being automatic, each skill involved (p. 55).*

Students with written expression difficulties because of dysgraphia would benefit from being taught explicit strategies for composing including planning, generating, reviewing/evaluating, and revising different genre including narrative, informational, compare and contrast, and persuasive compositions (IDA, 2012).

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