



Edgewood ISD

Dysgraphia Handbook

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Dysgraphia Handbook and Manual

What Are the Legal Mandates?

In Texas, the identification and instruction of students with dyslexia and related disorders are mandated. As defined in TEC 38.003: (2) Related disorders include disorders similar to or related to dyslexia such as developmental auditory imperceptions, dysphasia, specific developmental dyslexia, developmental dysgraphia, and developmental spelling disability.

What is Dysgraphia?

Dysgraphia is a specific learning disability that affects writing abilities. It can manifest itself as difficulties with spelling, handwriting and expressing thoughts on paper (National Center for Learning Disabled, 2009). The International Dyslexia Association (2009) defined dysgraphia as “a specific learning disability that affects how easily children acquire written language and how well they use written language to express their thoughts” (p. 1).

“Dysgraphia is a Greek word. The base word graph refers both to the hand’s function in writing and to the letters formed by the hand. The prefix dys indicates that there is impairment. Graph refers to producing letter forms by hand. The suffix ia refers to having a condition. Thus, dysgraphia is the condition of impaired letter writing by hand, that is, disabled handwriting and sometimes spelling” (The International Dyslexia Association, 2008, p. 1).

Students “handwriting may be impaired in 1) legibility—how easily others can recognize their letters out of word context, 2) automaticity—how many legible letters they can write in 15 seconds, and 3) speed—how much time it takes them to complete a writing task” (Berninger & Wolf, 2009).

Does Dysgraphia Occur Alone or With Other Specific Learning Disabilities?

It is possible for a student to have dysgraphia without showing evidence of any other learning disability. On the other hand, Regina G. Richards (1999) stated that “dysgraphia is an inefficiency which seldom exists in isolation or without other symptoms of learning problems. It is most commonly related to learning problems

within the sphere of written language and is frequently associated with dyslexia" (p. 73).

A student with dyslexia can also have dysgraphia, but a student that has dysgraphia does not always have dyslexia. Students with dyslexia or oral and written language learning disabilities usually have spelling problems but they may or may not have dysgraphia. (Berninger & Wolf, 2009, p. xi). Students with difficulties in handwriting may also have difficulties with spelling. Occasionally, children with spelling problems do not have handwriting or reading problems. "It is important to remember that not all reading and writing problems are the results of dyslexia, oral and written language learning disabilities, and/or dysgraphia" (Berninger & Wolf, 2009, p. xi).

What Are Underlying Factors for Dysgraphia?

Students with dysgraphia often have problems with sequencing. Studies indicate that what usually appears to be a perceptual problem (reversing letters and numbers, writing words backwards, writing letters out of order and very sloppy handwriting) seems to be related to sequential and rational information processing. These students often have difficulty writing letters and words in sequence. The students could experience extreme difficulty with the "mechanics" of writing (spelling, punctuation, etc.). The students will also have a tendency to mix letters and numbers in formulas. In many cases, students have difficulty even when they do their work slowly. They will often lose their thoughts that they are trying to write about (West Virginia University, 2010).

Students with dysgraphia may also have ADHD - inattentive, hyperactive, or combined inattentive and hyperactive subtypes (International Dyslexia Association, 2008). These students will often experience difficulty with writing and handwriting. This is because the students "also have difficulty organizing and sequencing detailed information. In addition, ADHD students often process information at a very rapid rate and simply do not have the fine-motor skills needed to 'keep up' with their thoughts" (West Virginia University, 2010, p. 1).

Students with dysgraphia may also experience writing difficulties because of auditory or language processing (West Virginia University, 2010). "These students may be uncertain about what they hear and thus have difficulty in learning to spell and write words" (Berninger & Wolf, 2009, p. 32).

What Are Characteristics of Dysgraphia In a Classroom Setting of Younger Students?

"Specific symptoms which may be noted include:

- Cramped fingers on writing tool
- Odd wrist, body, and paper positions
- Excessive erasures
- Mixture of upper and lowercase letters
- Inconsistent letter formations and slant
- Irregular letter sizes and shapes
- Unfinished cursive letters
- Misuse of line and margin
- Poor organization on the page" (Richards, 1999, p. 63)

What Are Characteristics of Dysgraphia of Older Students?

• Rate and legibility could be affected. "Specific symptoms which may be noted include:

1. Inefficient speed of copying
 2. Decreased speed of writing
 3. Excessive speed when writing
 4. General illegibility
- Inattentiveness about details when writing
 - Frequent need for verbal cues and use of sub-vocalizing
 - Heavy reliance on vision to monitor what the hand is doing during writing •
- Slow implementation of verbal directions that involve sequencing and planning" (Richards, 1999, p. 63)

What Is The Process of Identifying Students With Dysgraphia Characteristics?

A team or committee of knowledgeable persons determines whether the student has dysgraphia characteristics. The team must be knowledgeable about the following:

- The reading and writing process
 - Dyslexia and related disorders such as developmental auditory imperceptions, dysphasia, specific developmental dyslexia, developmental dysgraphia, and developmental spelling disability
- Dysgraphia instruction
- District, state, and federal guidelines for assessment
- The assessments used
- The meaning of the collected data

A committee of knowledgeable persons determines the identification of dysgraphia characteristics after reviewing all accumulated data including the following areas:

- The observations of the teacher, district, and/or parent/guardian
- Data gathered from the classroom (including student work and the results of classroom measures)
- information found in the student's cumulative folder (including the developmental and academic history of the student)
- Data-based documentation of student progress during instruction/intervention
- the results of administered assessments
- Language Assessment Proficiency Committee (LPAC) documentation, when applicable
- All other accumulated data regarding the development of the student's learning and his/her educational needs

After taking into consideration the previous information, the committee of knowledgeable persons determines whether the student has dysgraphia characteristics. If the student has dysgraphia characteristics, the committee of knowledgeable persons **could** place the student under the Rehabilitation Act of 1973, §504, **(unless the parent does not consent)**. A student is considered to have a learning difficulty under §504 if the condition substantially limits the

student's learning. Students with additional factors that complicate their dysgraphia characteristics may require additional support or referral to special education.

What Are The Procedures For Students Identified Outside The District?

Students identified as having dysgraphia characteristics or other related disorders from an outside source will be evaluated for eligibility in the district's program. Edgewood ISD may choose to accept the outside assessment, or may reassess the student. In either situation, the committee of knowledgeable persons will determine the identification status of a student enrolled in Edgewood ISD, and the placement of the student in the dysgraphia program(s).

What Are The Instructional Considerations For Students With Dysgraphia Characteristics?

To group for instruction purposes and to plan for explicit instruction, it is important to know whether students have difficulties in:

- Handwriting only
- Spelling only
- Word reading and spelling
- Handwriting, word reading and spelling

What Can Teachers Do To Assist Students With Dysgraphia Characteristics?

Use the following to select and implement strategies that would be most beneficial for a student's needs:

1. Experiment with chair and desk size (ensure proper height and posture).
2. Provide a slanted writing surface (use a 4 in. binder as a slant board).
3. Provide increased opportunities for activities that require one-handed manipulation (MATN, 2001) (painting, erasing, and sky-writing) to establish hand dominance.
4. Use an enlarged copy or one with wider margins and/or triple-spaced lines.

5. Color code where to stop and start on paper or use colored paper (MATN, 2001).
6. Experiment with different types of lined papers (raised lines, colored lines, extra space between lines, graph paper).
7. Use writing instruments that are easier to handle or grasp (primary - larger pencils; intermediate - mechanical pencils; weighted pencils).
8. Stabilize paper to prevent writing surface from moving using tape, clipboards, sticky notes, and glue sticks.
9. Use specialized materials to enlarge or change the shape of writing tools (different shapes of pencil grips such as triangular, or pear shaped).
10. Provide both written and oral directions for the same activity.

What Can Math Teachers Do To Help?

1. Reduce workload, e.g., solve every other math problem.
2. Minimize the number of problems per page.
3. Enlarge worksheets.
4. Provide graph paper to keep number problems lined up - allow one block for each number. Turn lined paper sideways to use lines as columns to help keep numbers lined up.
5. Highlight math signs, key words in math problems or instructions.

What Can Reading Teachers Do To Help?

1. Reduce written work (alternate using fill-in blanks, multiple choices, complete sentences, short answers) on tests and other assignments.
2. Allow extra time on assignments or shortening the length of the assignments.
3. Provide chapter outlines or teacher notes.
4. Story mapping.
5. Enlarge worksheets.

What Can Spelling Teachers Do To Help?

1. Practice spelling high frequency words.
2. Practice proofreading for spelling errors.

3. Teach mnemonic strategies to retain word spellings.
4. Word walls or create decks of cards with commonly misspelled words or organized alphabetically on, or in, a folder.
5. Personal spelling dictionary using alphabetized dividers.

Special note: Teachers can double grade assignments with spelling graded and without spelling graded (based on content only).

What Can Writing Teachers Do To Help?

1. Provide classroom charts that specify tasks for structuring the writing process.
2. Provide extra time for writing assignments.
3. Provide models of what writing projects should look like.
4. Provide checklists to prompt the use of targeted writing traits.
5. Use highlighters or colored pencils to focus on specific conventions (e.g., parts of speech, punctuation, and capitalization).

Writing Strategies:

A. Ideas:

- Use literature that illustrates good ideas
- Teach students to discriminate intriguing, interesting ideas from irrelevant or overly general ideas
- Help struggling writers create lists of their ideas and select the best ones that provide focus and clarity
- Teach students how to ask questions to develop ideas

B. Organization:

- Have students sequence the events in a story
- Have students write 3 or 4 different endings and discuss which one is best and why
- Model a piece of writing that has sentences with unnecessary fillers.
- Replace "And then"; teach transition words

C. Voice:

- Read aloud from books that have a strong voice
- Match writings to their intended audiences (e.g., letter to a friend, business letter)

- Have students write an event from different perspectives e.g., (a house fire from the perspective of a child, an adult, a fireman)
- Attach a "voice" to people in photographs

D. Word Choice:

- Word walls of favorite lively words
- Burying tired, overused words
- Write a simple description of an object, then rewrite it with stronger words
- Replace the verbs to make a paragraph stronger

E. Sentence Fluency:

- Have the students count the number of words in their sentences, and write the first word in each sentence to see if there are a variety of sentence beginnings.
- Teach a variety of sentence starters
- Teach connecting words such as "however", "therefore"
 - Use early emergent books and rewrite them to improve sentence fluency.

- F. Conventions: (Spelling, grammar, punctuation, capitalization) • Teach conventions based on what students need to learn given their age and ability.
- Conventions need to be focused upon one at a time, at a minimum of 3 times per week, in short 15 minute lessons with repetition and practice.
 - Don't ask students to edit all conventions at once
 - Students below 4th grade need to revise one trait at a time. Struggling writers who are older than 4th grade should focus on only 2-3 traits at a time.

Resource: Spandel, V. (2001). *WriteTraits: 6 trait instruction and assessment*. Wilmington, MA: Great Source Education Group, Houghton Mifflin.

What Can Parents Do To Assist Their Children With Dysgraphia Characteristics?

What kinds of activities would improve handwriting?

- Playing with clay to build hand strength
- Using tweezers or tongs to pick up small items to help build hand strength
- Keeping lines within mazes to develop motor control
- Connecting dots and dashes to create complete letter forms (free printable handwriting sheets from www.spellingcity.com/handwriting.html)
- Stringing beads (wooden or plastic)
- Forming letters, shapes, and designs in salt/sand trays
- Writing on vertical and horizontal spaces using a variety of materials (shaving cream on a mirror, tempera paint in a Ziploc bag and Wikki Stix)
- Involving children in hand-to-eye coordination activities such as softball, tennis, ping-pong and other bi-lateral coordination activities

After children learn to form legible letters, they could benefit from activities that help them develop letter writing automatically. The following activities are beneficial:

- Writing brief letters, thank-you notes, recipes, shopping lists, parent-child response journals, and to-do lists with or without a copy
- Solving word hunts with specific syllable or morpheme patterns
- Practice writing the alphabet or a handwriting curriculum

References and Resources

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Assessment results should be analyzed by a committee of knowledgeable persons possibly including the campus counselor, the reading specialists, the dyslexia specialist, and administrators.

Dysgraphia Instruction for the Teacher

Students who have been identified as having characteristics of dysgraphia, will be served with supplemental handwriting and spelling instruction. The lessons should be completed in logical order. The teacher will move at the student's pace (as quickly as possible or as slowly as needed). Results of skill mastery checks will determine whether or not the student is ready to move forward or needs more instruction. Dysgraphia instruction should be scheduled for 15-30 minutes per day.

If the dysgraphia assessment determines the student has a weakness in copying skills, a 10-minute copying component can be integrated into the instruction time. The teacher can allow the student to choose which story he will copy. The teacher will determine what type of pencil and writing paper best suits the student's needs (i.e. regular-ruled paper, lined-paper, raised-line paper, etc.)

