We've Identified Dysgraphia; Now What?

Building a Dysgraphia Intervention Plan

Dyslexia Summer Institute
Hurst, TX
July 2017

Who are we?

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Objectives

Review
“A School-wide Process for Dysgraphia Assessment”
• Primary characteristics
• Associated cognitive processes

Explore
Areas of Assessment to Include in an Evaluation
• Academic and cognitive processes to include in an evaluation

Understand
Best practices for dysgraphia intervention
• Appropriate intervention strategies
• Possible accommodations
Texas Law and Dysgraphia

Texas Education Code §38.003 (State Law)

(a) Students enrolling in public schools in this state shall be tested for dyslexia and related disorders at appropriate times in accordance with a program approved by the State Board of Education.

(b) 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.

(d) In this section (page 47):

(2) “Related disorders” includes disorders similar to or related to dyslexia, such as developmental auditory imperception, dysphasia, specific developmental dyslexia, developmental dysgraphia, and developmental spelling disability.

Instruction for Students with Dysgraphia

TEC §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.”
Planning Dysgraphia Instruction

Dysgraphia

Difficulties with...

Handwriting
Spelling
Getting Thoughts on Paper

Dysgraphia

Handwriting Spelling Thoughts on Paper
Handwriting Instruction or Handwriting Accommodation?

“…done right, early handwriting instruction improves students’ writing. Not just its legibility, but its quantity and quality.”

~ Steve Graham, 2010
First Things First: Establish Handedness & Pencil Grip

An awkward pencil grip should be addressed as soon as possible. Once it becomes habit, it is very difficult to change.

Talk with your occupational therapist for suggestions on helping a child with an awkward pencil grip.

Try different pencil grips as a way to retrain the fine motor muscle into a correct grip.

Steve Graham, 2010

Remember the Four Language Systems

What skills are needed for efficient handwriting to take place?

Handwriting

Berninger & Wolf on Language Systems

“Despite the widespread beliefs that handwriting is purely a motor skill or that only multisensory methods are needed to teach handwriting, multiple language processes are also involved in handwriting. Handwriting draws on language by hand (letter production), language by ear (listening to letter names when writing dictated letters), language by mouth (saying letter names), and language by eye (viewing the letters to be copied or reviewing for accuracy the letters that are produced from memory).”
Effective Handwriting Instruction

- Short sessions • 10-15 minutes daily
- Teach letter identification • Name each letter as it is practiced
- Provide a model of the letter marked with numbered arrows
- Teach correct pencil grip and paper position
- Practice all learned letters instead of practicing one letter over and over
- Students practice writing letters from memory
- Develop writing fluency

Letter Formation

- Letter identification is an important part of handwriting instruction
- It serves as a memory cue for retrieving the motor movements needed to form the letter.
- Ask students to say the name of the letter as they write it
- Ask students to write the letter that comes next in a sequence (g, h, i, ___)

Best Practices

- Model correct formation • Visually and verbally
- Use numbered arrows to help students remember which way to move the pencil next.
- Encourage practice using visual memory. • Look, say, cover, write, check
- Practice letters in isolation then within words
- Encourage children to critique their own handwriting (circle your best R)

Letter Formation

Teach handwriting first for legibility and then for automaticity.

Berninger & Wolf, 2016

Sequence of Instruction
Manuscript

• Teaching the letters in ABC order may not be the best approach

The easily confused letters b and d are too close together

The easily confused sounds of letters are also close together (vowel sounds like bad, bed)

Therefore, be sure to separate easily confusable letters/sounds

Teach letters in a sequence that allows for quick word writing (a, m, p, s, t, i)


Sequence of Instruction
Cursive

• The same considerations we discussed for manuscript apply to cursive.

• Teaching the cursive letters in groups according to the approach stroke is a way to help students recall the motor sequence.
Approach Stroke Groups


Incorporate ALL Elements of Legibility

• Legible handwriting includes six, interrelated characteristics:
  – Letter formation
  – Size and proportion
  – Spacing
  – Slant
  – Alignment
  – Line quality


Handwriting Rate & Automaticity

Think of the hierarchy and build incrementally.

• Letters
• Syllables
• Words
• Phrases
• Sentences
• Paragraphs

Have students chart their progress.
### Building an Intervention Plan

<table>
<thead>
<tr>
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<tbody>
<tr>
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<td></td>
<td></td>
</tr>
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<td></td>
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<tr>
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### Dysgraphia

#### Spelling

- Orthographic Processing
- Phonological Processing
- Phonemic Awareness

### Effective Spelling Instruction

Include these guiding principles in instruction:

- Phoneme-grapheme correspondence
- Letter order and sequence patterns, or orthographic conventions
- The position of a phoneme or a grapheme in a word
- Meaning (morphology) and part of speech
- Language of origin

Moats, L. (2005)
Orthographic Processing

Considerations

- Forgets how letters look
- Confuses letters with similar appearance (e.g., n for h)
- Misreads little words in text (e.g., were for where)
- Reverses letters when spelling (e.g., b instead of d)
- Transposes letters when reading or writing (e.g., on instead of no)
- Has trouble remembering basic sight words
- Transposes letters when writing
- Spells the same word in different ways
- Spells words the way they sound rather than the way they look
- Does trouble with initial letter of words
- Reads at a slow rate
- Stamina and legibility deteriorate over time

Orthographic Processing

Additional considerations

- Does trouble with final letter of words
- Has trouble changing from a book or board to paper

Phonological Processing

Considerations

- Phonemes out of order
- Missing phonemes
- Number of phonemes in a word
- Number of syllables in a word
- Number of words in a sentence
- Number of phonemes in a sentence
- Number of syllables in a word
- Rhyming words
- Onset rime
- Number of words in a sentence
- Number of phonemes in a syllable
- Missing phonemes
- Number of word in a sentence
- Number of phonemes in a word
- Number of syllables in a word
Orthographic Conventions

Step 1: Use spelling assessment & task analysis to guide instruction.

Based on the error analysis of the spelling assessment or inventory, determine areas of skill deficits. Depending on student need, include explicit instruction about...

- Phonological Awareness
- Phoneme-Grapheme Mapping
- Syllable types
- Spelling Situations
- Orthographic Rules
- Irregular words
- Morphology
- Orthographic Rules
- Irregular words
- Morphology

Handwriting & Spelling Practice

As students gain more handwriting skills, combine spelling instruction with handwriting practice.
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Dysgraphia

Thoughts on Paper

Verbal Expression

Written Expression

Verbal & Written Expression

Based on the student’s assessment data…

• May need to have short, targeted instruction to build oral language.

• May be able to work simply on capturing thoughts in written form.
Building Verbal Expression

Strategies could include...

- Vocabulary Development
  - “Hink Pinks”
  - Naming Games or I Spy
  - Illustrating multiple meaning words
- Describing Hierarchy
- Model and teach syntax
- Use manipulatives to practice telling and retelling stories

Bridging from Verbal Expression to Written Expression

1. Teacher serves as scribe to model good writing.
2. Teacher and student “partner write.”
   a. Take turns between teacher acting as scribe and student writing phrases or sentences.
   b. As time goes on student takes on more writing responsibilities and teacher scribes less and so on.
3. Teacher gradually “hands off” writing responsibilities to student.

Bridging from Verbal Expression to Written Expression

Activities to use during Model & Partner Writing

- Provide sentences to examine, manipulate, and model depending on target skill
- Write sentences with words or phrases taught during
  - Vocabulary Development
    - Idioms or multiple meaning words
  - Describing Hierarchy
- Using same manipulatives (telling and retelling stories), begin practicing writing summary sentences
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What about instructional accommodations?
Accommodations: Levelling the Playing Field

Possible Accommodations

- ______ Check
- Allow ______ responses
- ______ to ______ Software
- Allow student to ______ an _______ version of what they want to _______ and then _______ what they hear
- Allow _______ for revising & editing
- _______ Organizers
- _______ Time
- Copies of _______ (with or without _______ to fill in _______ ; with or without _______ being responsible for _______ along)
- Provide _______ list of _______ or allow student to take a _______ of it

And more….

Turn and Talk with your neighbor about additional accommodations you have used or seen used for students at-risk for or identified with dysgraphia.
Time for Reflection

• What skills and associated processes should be addressed when planning instruction for students identified with dysgraphia?

• Name 1 accommodation or technology options you plan to utilize when your students return.

Questions???

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