DEMYSTIFYING
DYSLEXIA

AOGPE Annual Conference
April 5-6, 2019
White Plains, NY

Sheryl Knapp, M.Ed., C/AOGPE, CDT/IDA
sknapp@literacylearningct.com
Katie Curra, M.S., CCC-SLP
katie@kidslanguagecenter.com

Formal Definitions

DSM-5 diagnostic subtypes:

1. 315.00: Specific learning disorder with impairment in reading; includes possible deficits in:
   - Word reading accuracy
   - Reading rate or fluency
   - Reading comprehension
   
   Note: Dyslexia is an alternative term used to refer to a pattern of learning difficulties characterized by problems with accurate or fluent word recognition, poor decoding, and poor spelling abilities.

2. 315.2: Specific learning disorder with impairment in written expression; includes possible deficits in:
   - Spelling accuracy
   - Grammar and punctuation accuracy
   - Clarity or organization of written expression

Formal Definitions (cont’d)

DSM-5 diagnostic subtypes (cont’d):

3. 315.1: Specific learning disorder with impairment in mathematics; includes possible deficits in:
   - Number sense
   - Memorization of arithmetic facts
   - Accurate or fluent calculation
   - Accurate or fluent math reasoning

   Note: Dyscalculia is an alternative term used to refer to a pattern of difficulties characterized by problems processing numerical information, learning arithmetic facts, and performing accurate or fluent calculations.
Formal Definitions (cont’d)

IDA Definition:
“Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge.”

(Adopted by the IDA Board of Directors, Nov. 12, 2002)

Early Detection
• Often identified initially by a Speech and Language Pathologist due to the existence of early language delays.
• Very young students who are dyslexic may meet grade level expectations due to compensatory strategies and curriculum-based interventions, making it critical that educators know how to detect early warning signs and effectively screen students.
• As many as 90% of at-risk children who receive intensive interventions in kindergarten or first grade achieve average reading performance levels (Torgeson, 2004).

Early Detection (cont’d)
• Common Signs: Preschool & Kindergarten
  ➢ Speech delay
  ➢ Frequently mispronounced words/sounds (simplifying blends, deleting final consonants or medial syllables)
  ➢ Difficulty learning new vocabulary and retrieving words (uses “this”, “that”, “thingie”, “stuff”)
  ➢ Struggles with pre-academic skills/sequences (e.g., learning colors, shapes, alphabet song, counting to 10, days of the week)
  ➢ Delayed phonological awareness (e.g., rhyming, syllabication, identifying initial sounds, segmenting and blending sounds)
  ➢ Difficulty following multi-step directions and routines
  ➢ Difficulty retelling events/stories in correct sequence
  ➢ Family history of learning disorders
Early Detection (cont’d)

Skills to Assess:

Typical Detection

• As students progress through the grades, compensatory strategies typically grow less effective.
• Difficulties with reading/spelling, especially involving more lengthy and foreign-derived words, as well as higher level language deficits, begin to surface.
• It is critical that intervention begin as early as possible, especially as children transition from “learning to read” to “reading to learn” – and as secondary consequences surface.

Typical Detection (cont’d)

• Common Signs
  ➢ History of Early Detection signs (above)
  ➢ Slow, labored reading rate/fluency
  ➢ Frequent sound insertions/omissions/transpositions/substitutions when reading and spelling – and speaking
  ➢ Frequently misspelled words – even with spellcheck
  ➢ Difficulty understanding text the first time it is read
  ➢ Difficulty retrieving words
  ➢ A general aversion to reading/writing.
  ➢ Difficulty with sequencing (events, months, letters, etc.)
  ➢ Difficulty with organization (assignments, ideas, etc.)
  ➢ Difficulty learning a foreign language
Typical Detection (cont’d)

Skills to Assess:

Speech/Language
- Phonological Analysis
- Auditory Processing & Comprehension
- Narrative Language
- Higher Level Language
- Concept Development (esp. sequencing)

Literacy
- Phonological Awareness
- Word Identification (esp. decoding)
- Reading Fluency (oral/silent)
- Sound-Symbol Correspondence
- Spelling (esp. encoding)
- Vocabulary (including word retrieval)
- Phonological Memory
- Listening Comprehension
- Rapid Naming
- Reading Comprehension
- Written Expression

Assessing Phonological Awareness

• Should be done on purely phonological level.
• Assessment tools include:
  - CTOPP-2 (Comprehensive Test of Phonological Processing)
  - The PAT-2 (Phonological Awareness Test) – standardized only through ages 5-9
  - The KTEA-3 (Kaufman Test of Educational Achievement)
  - The WRMT-III (Woodcock Reading Mastery Test)
  - The Intermediate Phonological Awareness & Reading Profile (for secondary level students)
  - The CORE Assessments

Assessing Word Recognition & Spelling

• Areas to assess:
  - Phonetically regular and irregular words
  - Real and made-up words
  - Words in isolation as well as in context/passages
• Include a comprehensive error analysis across all reading assessments/subtests
  - Often the pattern of errors is as important as the scores.
Assessing Word Recognition/Spelling (cont’d)

• Commonly used assessments include:
  ➢ Standardized Achievement “Batteries” (WIAT-III, WJ-Ach-III, KTEA-3)
  ➢ Skill Inventories, Criterion-Referenced (WADE, Gallistel-Ellis Test of Coding Skills, CORE Assessments) and Standardized (WIST)
  ➢ Standardized Reading/Writing Assessments (GORT-5, WRMT-III, TOWL-4)
  ➢ Informal Reading Inventories (e.g., QRI-6 and Jerry Johns) – non-standardized, more curriculum-related

Assessing Fluency

• Areas to assess:
  ➢ Reading rate – typically as words per minute (wpm)
  ➢ Reading accuracy – both the percentage of words correctly, and correct words per minute (cwpm or wcpm)
  ➢ Prosody – including phrasing and intonation/inflection, reflecting spontaneous speech

• Utilize a variety of assessment tools to encompass:
  ➢ Real and made-up words
  ➢ Words in isolation as well as in context/passages
  ➢ Oral and silent reading

Assessing Fluency (cont’d)

• Commonly used assessments include:
  ➢ Standardized Achievement “Batteries” (WIAT-III, WJ-Ach-III, KTEA-3)
  ➢ Standardized Reading Assessments (GORT-5, WRMT-III)
  ➢ Standardized fluency assessments (TOWRE-2, TSWRF, TSCRF)
  ➢ Informal Reading Inventories (QRI-6, Jerry Johns)
  ➢ Progress monitoring tools (DIBELS, AIMSWeb)

Sheryl Knapp, M.Ed., C/AOGPE, CDT/IDA
sknapp@literacylearningct.com
Assessing Vocabulary

- Receptive vocabulary is the best measure of general knowledge; expressive vocabulary, and the comparison between the two measures, is critical for assessing word retrieval skills.
- Commonly used assessments measure:
  - Receptive (PPVT-5, ROWPVT-4) and expressive (EVT-3, EOWPVT-4) vocabulary, including comparison analyses
  - Word associations (WRMT-III, CASL-2)
  - Word retrieval (TWF-3)
  - "Embedded" skills – reading/contextual vocabulary (KTEA-3), written definitions (TOWL-4)

Assessing Comprehension

- Comprehension – especially reading comprehension – is extremely difficult to assess
  - There is no single measure of “reading comprehension”
  - Other contributing factors must first be ruled out
  - Bright students are often able to correctly guess the answer to questions without reading the text

Assessing Comprehension (cont’d)

- Commonly used assessments include:
  - Standardized Achievement “Batteries” (WIAT-III, WJ-Ach-III, KTEA-3)
  - Standardized Reading Assessments (GORT-5, WRMT-III)
  - Standardized Reading Comprehension Assessments (TORC, GSRT)
  - Informal Reading Inventories (QRI-6, Jerry Johns)
- Look for examples of applications of specific comprehension strategies to isolate any struggles
- For students suspected of having dyslexia, always assess listening comprehension
Assessing Language

- A comprehensive language evaluation for a student suspected of having dyslexia should include:
  - A broad based receptive and expressive language assessment (e.g., CELF-5, CASL-2)
  - An auditory processing and comprehension assessment (e.g., TAPS-4, OPUS)
  - A higher-level language assessment (e.g., CELF-5 Metalinguistic)
  - A narrative language assessment (e.g., SALT, TNL-2)

Assessing Written Expression

- In the same way that reading comprehension ability is impeded by poor/dysfluent word identification, written expression is impeded by poor/dysfluent spelling, coupled by a mastery of syntactical and grammatical structures

- Commonly used assessments include:
  - Standardized Achievement “Batteries” (WIAT-III, WJ-Ach-III, KTEA-3)
  - The Test of Written Language (TOWL-4)

Case Study

- 10 year, 1 month old female
- In fourth grade
- Recently unilaterally outplaced by parents into private school specializing in language-based learning disabilities
Putting it All Together

• Dyslexia is frequently difficult to detect, especially at the earliest stages.
• However, remediation is often most effective when provided at an early age.
• Early detection can also prevent later academic struggles and the other secondary effects of dyslexia.