

## Dyslexia Technical Assistance Document and LB 1052:

### What Educators Need to Know

Eileen Vautravers, M.D.  
Gwelda Carlson, M.A.

---

---

---

---

---

---

---

### Dyslexia – IDA Definition

► Dyslexia is a **specific learning disability** that is **neurological** 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**, often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction.

---

---

---

---

---

---

---

### Dyslexia – IDA Definition

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: November 12, 2002. This definition is also used by the National Institute of Child Health and Human Development (NICHD) and in NE Education Statute 79-1118.01 (6), revised when LB645 passed in 2017.

---

---

---

---

---

---

---

## Dyslexia

- Neurobiological language-based learning disability
- Difficulty with phonological (sound) part of language
- Absence of brain wiring to left hemisphere posterior reading systems
- Manifests as difficulty with reading, writing, spelling, comprehension and/or fluency
- Wide spectrum of severity

---

---

---

---

---

---

---

## Dyslexia

- Most common specific learning disability: 1 in 5 – (Shaywitz)
- Number of males equals number of females
- Genetically programmed error in wiring: 40% – 50% of siblings and parents of children with dyslexia may have same reading issues
- Dyslexia cannot be outgrown
- Dyslexia is **not the result of vision problems**

---

---

---

---

---

---

---

## Secondary Dyslexia

- Absence of activation of brain wiring to left hemisphere posterior reading systems
- Associated with:
  - Environmental deprivation
    - Economically deprived students
    - Students exposed to adverse childhood experiences and toxic stress
    - English as a Second Language students
  - Poor school reading instruction

---

---

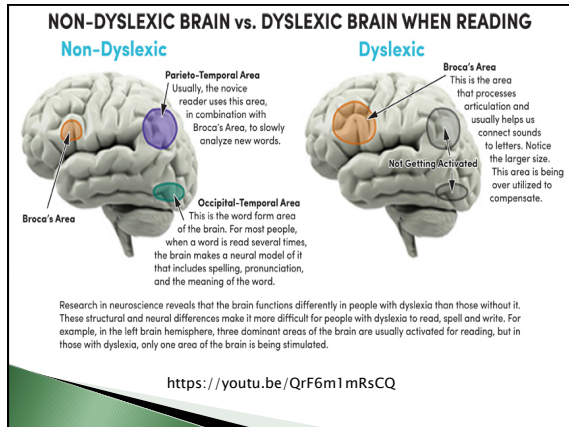
---

---

---

---

---




---

---

---

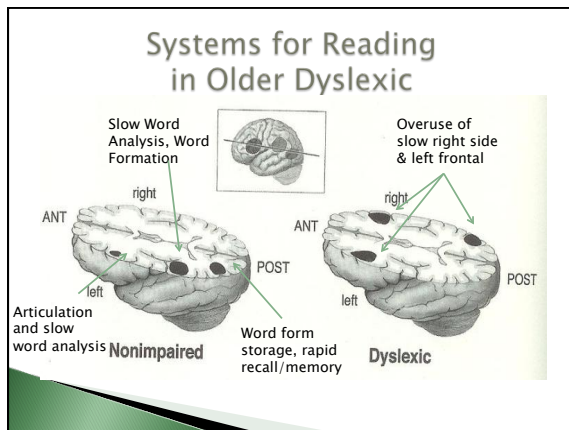
---

---

---

---

---




---

---

---

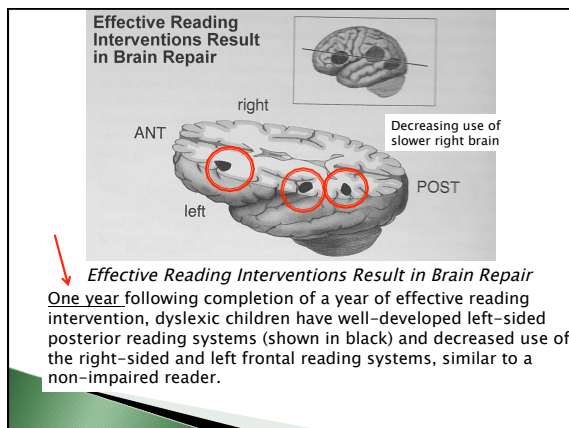
---

---

---

---

---




---

---

---

---

---

---

---

---

### Dyslexia – Common Indicators At-risk signs in Preschoolers

- Late learning to talk
- Difficulty rhyming words
- Difficulty sequencing as in counting, alphabet, days of week
- Difficulty learning names of letters and numerals
- Difficulty following simple one-step directions
- Difficulty recalling the right word/object names

---

---

---

---

---

---

---

### Dyslexia – Common Indicators At-risk signs in Elementary

- Difficulty using age appropriate grammar
- Difficulty acquiring vocabulary
- Misreads/omits common short words
- Reads slowly
- Spelling and punctuation are weak
- Disorganization in school and at home
- Poor performance on tests
- Difficulty putting ideas on paper

---

---

---

---

---

---

---

### Dyslexia – Common Indicators At-risk signs in Secondary

- Reads so slowly meaning is lost
- Difficulty keeping up with increased volume of reading and written assignments
- Frustration with amount of time and energy required for reading
- Extreme difficulty learning a foreign language
- Difficulty with note taking in class

---

---

---

---

---

---

---

### Dyslexia – Associated Conditions

- ▶ **ADHD**
  - 30% – 50% also have some form of specific learning disability
- ▶ **Emotional Disturbance**
  - 60% – 80% have some form of learning disability
- ▶ **Speech and Language Impairment**
  - Poor academic performance as a result of the interplay between language deficits (written and oral) and academic deficits

---

---

---

---

---

---

---

---

### Dyslexia – Associated Conditions

- ▶ **Dysgraphia**
  - Expressed primarily through writing; awkward grip
  - Difficulty organizing and getting thoughts on paper
  - May affect eye-hand coordination and penmanship
  - May affect letter writing automaticity – slow in taking notes and written assignments
- ▶ **Dyscalculia**
  - Difficulty with math computation and application processes
  - May have difficulty understanding math concepts, completing word problems, performing math operations or learning math facts.
  - 50%-60% of students with dyslexia have math difficulties

---

---

---

---

---

---

---

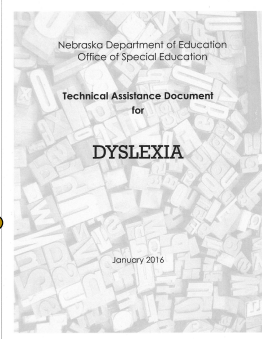
---



**LB 645**  
May 10, 2017

**LB 1052**  
April 17, 2018

**LB 1081**  
April 17, 2018



---

---

---

---

---

---

---

---

### Window of Opportunity



When appropriate instruction **begins in first grade**, the expected reading disability of 12% to 18% is **decreased by 67% to 87%**.

When this intervention is **delayed until third grade**, 74% of students **continue** with **reading difficulties** through high school.

---

---

---

---

---

---

---

### What Educators Should Know

- ▶ Early Identification of students at-risk for reading difficulties
- ▶ Universal Screening (LB 1081)
  - Quick, accurate, cost effective
  - 3 times per year
  - Critical for Kindergarten through third grade
  - Evidence-based assessment

---

---

---

---

---

---

---

### Norm-Referenced vs. Criterion-Referenced Assessment

| Norm                                                                                | Criterion                                                                           |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Student performance in relation to performance of other students                    | Student performance in relation to pre-established criteria or objectives           |
| Standard scores<br>Percentile rank                                                  | Tells what student can actually do<br>Teach to mastery                              |
|  |  |

---

---

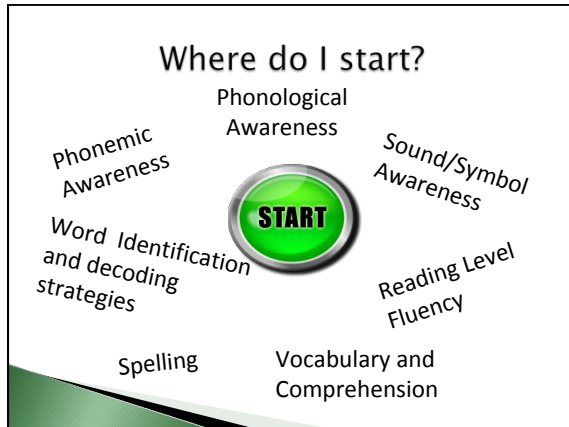
---

---

---

---

---




---

---

---

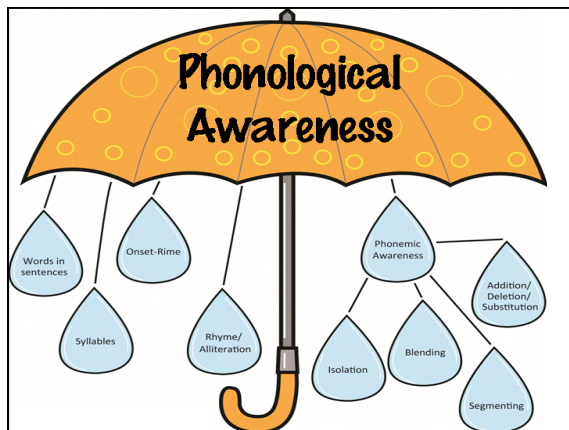
---

---

---

---

---




---

---

---

---

---

---

---

---

### Why is phonological awareness so important?

- ▶ The best early **predictor of reading difficulty** in kindergarten or first grade is the inability to segment words and syllables into constituent sound units (phonemic awareness).

(Lyon, 1995)

---

---

---

---

---

---

---

---

## What Educators Should Know




---

---

---

---

---

---

---

## Phonics Generalizations and Patterns

Phonics generalizations and patterns are the **general rule** for most phonetically spelled words. Students should not be taught exceptions until phonetic decoding and encoding rules are practiced and mastered. The purpose for learning generalizations and patterns is to increase reasoning and application of strategies to word attack and spelling.

VCe r-vowels -ck Syllable types  
FSZL C-le -tch VV  
-dge

---

---

---

---

---

---

---

## Syllables

**Closed:** short vowels in syllables  
(CVC, CVCC, CVCCC)

**Open:** long vowels in syllables (V, CV)

**Silent 'e':** long vowel in syllable words with silent  
'e' at the end (CVCe)

**r-controlled:** vowel-r sound (ar, or, er, ir, ur, ear)

**Double vowel:** single vowel sound (ow, ee, oo, ea)

**Consonant -le:** at the end of the word,  
no vowel sound (ble, gle, dle, stle, fle,  
zle, tle)

---

---

---

---

---

---

---

## Word Origins

*Most English words are of Anglo-Saxon, Romance, or Greek origin, each with distinct morpheme patterns.*

Anglo-Saxon morphemes consist of:

Compound words  
Prefixes  
Suffixes

Romance morphemes consist of:

Roots (*vis, tract, ped, rupt, spect*)  
Prefixes  
Suffixes

Greek morphemes consist of:

Two equally important parts  
(*tele + scope, auto + graph*)

---

---

---

---

---

---

---

---

## What Educators Should Know Evidence-Based Instruction

- ▶ Research supports the conclusion that no single reading program or method worked in every case in every situation (NICHD 2000)
- ▶ Evidence from research supported the conclusion that it is evidence-based practices and not specific reading programs that are effective (NICHD 2000)
- ▶ National Center on Intensive Intervention has evidence-based assessments and interventions for literacy, math and behavior at <https://intensiveintervention.org>
- ▶ Council for Exceptional Children Standards for Evidence-Based Practices in Special Education at <https://www.cec.sped.org>

---

---

---

---

---

---

---

---

## Evidence-Based Instructional Practices

- ▶ Instruction that is:
  - Explicit, direct and systematic in phonemic awareness, phonics, fluency, vocabulary and comprehension
  - Sequentially taught
  - Multisensory
  - Cumulative
  - Structured practice for mastery

---

---

---

---

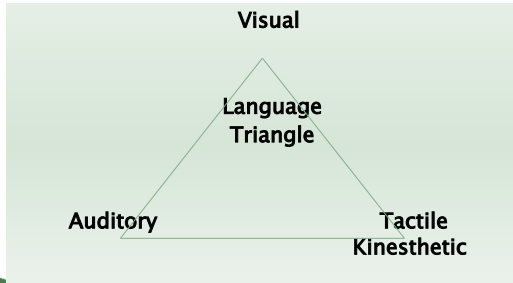
---

---

---

---

## Multisensory Techniques



28

---

---

---

---

---

---

---

## What Educators Should Know

- ▶ Effective accommodations for students with dyslexia **SHOULD BE** aligned with classroom instruction, classroom assessments, and district and/or state testing.
  - Materials
  - Instruction
  - Student Performance

---

---

---

---

---

---

---

## What Educators Should Know

- ▶ The evidence-based practices mentioned today are **effective for all emergent readers, but are critical for children with dyslexia** – often in higher doses and greater intensity than for other students.
- ▶ The mix of evidence-based practices must be varied enough to **meet each child wherever he or she stands on the continuum of reading development.**

---

---

---

---

---

---

---

## Teachers are Key!

- ▶ **Teachers are the key to evidence-based practices that lead to student learning!**

It is the teacher and the learning environment he/she creates within the classroom that make the difference (Bond & Dykstra, 1997).

The evidence underscores the need to join practices grounded in sound and rigorous research with well-prepared and skillful teachers (IRA/ILA, 2006)

---

---

---

---

---

---

---

## Teachers' Knowledge of English Language Affects Teaching, Learning

- ▶ What teachers know about phonics affects what and how they teach reading. (Brady, et al., 2009)
- ▶ What teachers know about linguistics affects student improvement in reading scores. (McCutchen, et al., 2009)
- ▶ What teachers know affects what students learn. (Kroese, Mather and Sammons, 2006)
- ▶ Teachers cannot teach well what they do not understand themselves. (Moats, 2009)

---

---

---

---

---

---

---



- ▶ Ongoing professional development for all staff (Classroom, Support, SLP's, Paras, ESU)
- ▶ College and teacher preparation programs
- ▶ Evidence-based practices effective for ALL students, but critical for students with dyslexia
- ▶ Collaborative instruction provided between classroom teachers and support staff
- ▶ Universal screening is essential for early identification

---

---

---

---

---

---

---

### Nebraska Center for Research on Children, Youth, Families, Schools

- ▶ Strengthen school/district core instruction
  - ▶ Assist with selection of evidence-based screening assessments to prevent learning difficulties
  - ▶ Assist with selection of evidence-based interventions, accommodations, assistive technology
  - ▶ Assist with implementation plan
  - ▶ Inform use of data to guide decision-making at all levels with fidelity
  - ▶ Provide special education audits
- Services are free!

---

---

---

---

---

---

---

### Questions



---

---

---

---

---

---

---

### Thank You!

Dr. Eileen Vautravers [dvautravers@neb.rr.com](mailto:dvautravers@neb.rr.com)

Gwelda Carlson [gjcarlson@windstream.net](mailto:gjcarlson@windstream.net)



---

---

---

---

---

---

---