

Parent and
Educator
Information

Dyslexia

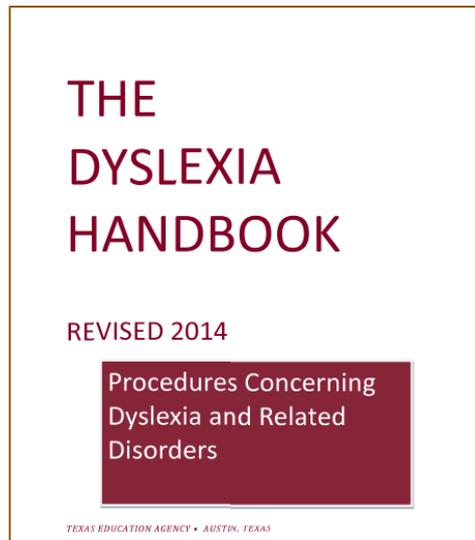
Katy ISD

What is Dyslexia?



Reliable Information

Texas Education Agency



Click on the above image
for more information.



The Texas Education Code defines dyslexia in the following way:

1. “Dyslexia” means a disorder of constitutional origin manifested by a difficulty in learning to read, write, or spell despite conventional instruction, adequate intelligence, and sociocultural opportunity.
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.

(TEA, 2014, p. 8)

“Students identified as having dyslexia typically experience **primary difficulties in phonological awareness,** including phonemic awareness and manipulation, single-word reading, reading fluency, and spelling.”

(TEA, 2014, p. 8)

As noted, dyslexia is a result of difficulties with phonological awareness.

It is not visually based.

Therefore, dyslexia is not:

Reversals of letters or numbers (backwards)

Inversions of letters or numbers (upside down)

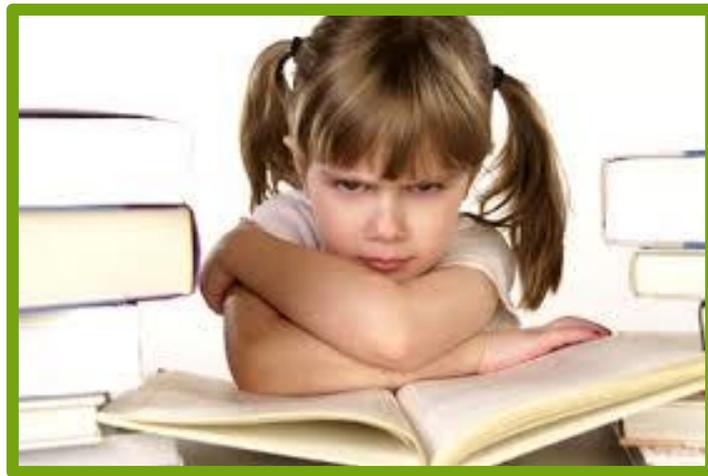
Transposals of letters, numbers, or words (out of order)

Dyslexia is NOT this



WAS	SAW
p	q
b	d

“Consequences may include difficulties in reading comprehension and/or written expression. These difficulties in phonological awareness are unexpected for the student’s age and educational level and are not primarily the result of language difference factors. Additionally, there is often a family history of similar difficulties.”





There are so many phone words! What does it all *mean*?



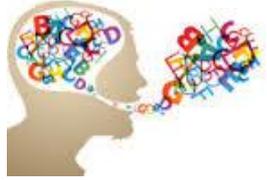
- **Phonology** – study of sounds and how they work in their environment
- **Phonological Awareness** – the ability to recognize, identify, and manipulate the sound structure of language such as speech sounds and rhythms (alliteration, onomatopoeia, and prosody) [working with words rather than one word]
- **Phonemic Awareness** – (an aspect of phonological awareness) the ability to segment words into their component sounds (syllables, onsets and rimes, phonemes) [working within one word]
- **Phoneme** – smallest unit of sound in a given language (can be recognized as distinct from the other sounds in the language)
*** There are *approximately* 44 phonemes in the English language.
- **Phonics** – letter sound correspondences and their use in reading and spelling

Primary Reading and Spelling Characteristics

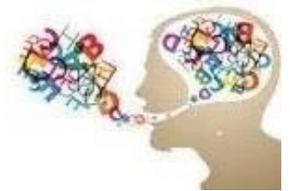


- “Difficulty reading real words in isolation
- Difficulty accurately decoding nonsense words
- Slow, inaccurate, or labored oral reading
- Difficulty with learning to spell”

(TEA, 2014, p. 8)



Reading/Spelling characteristics are often associated with:



- Segmenting, blending, and manipulating sounds in words (phonemic awareness)
- Learning the names of letters and their associated sounds
- Holding information about sounds and words in memory (phonological memory)
- Rapidly recalling the names of familiar objects, colors, or letters of the alphabet (rapid naming)

(TEA, 2014, p. 8-9)

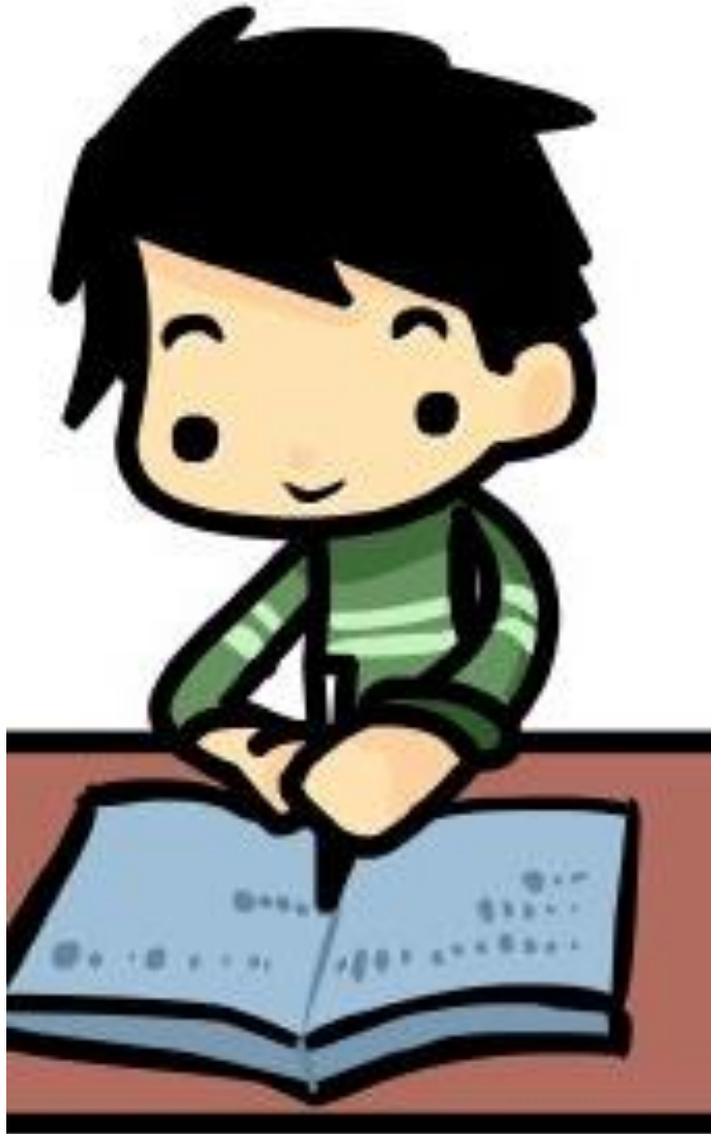
Consequences of Dyslexia

- Variable difficulty with aspects of reading comprehension
- Variable difficulty with aspects of written language
- Limited vocabulary growth due to reduced reading experiences

(TEA, 2014, p. 9)



These are used to supplement the assessment through the data gathering process.



Important to Note:

There is a high probability that other co-occurring conditions associated with Dyslexia (including ADHD and specific language development disorders) may be evident in students with dyslexia.

(TEA, 2014, p. 11)

Assessment



What is the ***procedure*** for assessment for dyslexia?





Formal Assessment



“After data gathering, the next step in the evaluation process is formal assessment. This is not a screening; rather, it is an individualized assessment used to gather evaluation data. Formal assessment includes both formal and informal data. All data will be used to determine whether the student demonstrates a pattern of evidence for dyslexia. Information collected from the parents/guardians also provides valuable insight into the student’s early years of language development. This history may help to explain why students come to the evaluation with many different strengths and weaknesses; therefore, findings from the formal assessment will be different for each child. Professionals conducting assessment for the identification of dyslexia will need to look beyond scores on standardized assessments alone and examine the student’s classroom reading performance, educational history, and early language experiences to assist with determining reading and spelling abilities and difficulties.”

(TEA, 2014, p. 18)

Data Gathering

Information may include:

- Vision/hearing screening
- Teacher reports of grades, concerns, accommodations and samples of classwork, I-station reports
- Gifted/talented assessments
- K-2 reading instrument results
- STAAR results
- Full Individual Evaluation (FIE)
- Outside evaluations
- Speech and Language assessment
- School attendance
- Instructional strategies provided and student's response to the instruction
- Universal screening



(TEA, 2014, p. 17)

Areas for Assessment

Academic Skills	Cognitive Processes	Possible Additional Areas
<ul style="list-style-type: none">• Letter knowledge (name and associated sound)• Reading words in isolation• Decoding unfamiliar words accurately• Reading fluency (both rate and accuracy are assessed)• Reading comprehension• Spelling	<ul style="list-style-type: none">• Phonological/phonemic awareness• Rapid naming of symbols or objects	<ul style="list-style-type: none">• Vocabulary• Listening comprehension• Verbal expression• Written expression• Handwriting• Memory for letters or symbol sequences (orthographic processing)• Mathematical calculation/reasoning• Phonological memory• Verbal working memory• Processing speed

(TEA, 2014, p. 21)

Identification

The identification of dyslexia is made by a §504 committee or, in the case of a special education referral, the admission, review, and dismissal (ARD) committee. In order to make an informed determination, either committee must include members who are knowledgeable about the

- **student being assessed,**
- **assessments used, and**
- **meaning of the collected data.**

Additionally, the committee members must have knowledge regarding the reading process;

- **dyslexia and related disorders;**
- **dyslexia instruction; and**
- **district or charter school, state, and federal guidelines for assessment.**



(TEA, 2014, p. 21)

Three areas to consider in identification:

- Word Level
- Phonological / Phonemic Awareness
- Unexpectedness



Word Level

The committee (§504 or ARD) must first determine if a student's difficulties in the areas of reading and spelling reflect a pattern of evidence for the primary characteristics of dyslexia with unexpectedly low performance for the student's age and educational level in some or all of the following areas:

- **Reading words in isolation**
- **Decoding unfamiliar words accurately and automatically**
- **Reading fluency for connected text (both rate and/or accuracy)**
- **Spelling (An isolated difficulty in spelling would not be sufficient to identify dyslexia.)**



(TEA, 2014, p. 22)

Phonological / Phonemic Awareness

If the student exhibits reading and spelling difficulties and currently has appropriate phonological/phonemic processing, it is important to examine the student's history to determine if there is evidence of previous difficulty with phonological/phonemic awareness. It is important to note that because previous effective instruction in phonological/phonemic awareness may remediate phonological awareness skills in isolation, average phonological awareness scores alone do not rule out dyslexia. Ongoing phonological processing deficits can be exhibited in word reading and/or spelling.



(TEA, 2014, p. 22)

Unexpectedness

Based on the above information and guidelines, should the committee (§504 or ARD) determine that the student exhibits weaknesses in reading and spelling, the committee will then examine the student's data to determine whether these difficulties are unexpected in relation to the student's other abilities, sociocultural factors, language difference, irregular attendance, or lack of appropriate and effective instruction. For example, the student may exhibit strengths in areas such as reading comprehension, listening comprehension, math reasoning, or verbal ability yet still have difficulty with reading and spelling. Therefore, it is not one single indicator but a preponderance of data (both informal and formal) that provide the committee with evidence for whether these difficulties are unexpected.



(TEA, 2014, p. 22)

Common Risk Factors Associated with Dyslexia

Preschool

- Delay in learning to talk x Difficulty with rhyming
- Difficulty pronouncing words (e.g., “pusgetti” for “spaghetti,” “mawn lower” for “lawn mower”)
- Poor auditory memory for nursery rhymes and chants
- Difficulty in adding new vocabulary words
- Inability to recall the right word (word retrieval)
- Trouble learning and naming letters and numbers and remembering the letters in his/ her name
- Aversion to print (e.g., doesn't enjoy following along if book is read aloud)



Common Risk Factors Associated with Dyslexia

Kindergarten to 1st Grade

- Difficulty breaking words into smaller parts (syllables) (e.g., “baseball” can be pulled apart into “base” “ball” or “napkin” can be pulled apart into “nap” “kin”)
- Difficulty identifying and manipulating sounds in syllables (e.g., “man” sounded out as /m/ /a/ /n/)
- Difficulty remembering the names of letters and recalling their corresponding sounds
- Difficulty decoding single words (reading single words in isolation)
- Difficulty spelling words the way they sound (phonetically) or remembering letter sequences in very common words seen often in print (e.g., “sed” for “said”)



Common Risk Factors Associated with Dyslexia

2nd and 3rd Grade

Many of the previously described behaviors remain problematic along with the following:

- Difficulty recognizing common sight words (e.g., “to,” “said,” “been”)
- Difficulty decoding single words x Difficulty recalling the correct sounds for letters and letter patterns in reading
- Difficulty connecting speech sounds with appropriate letter or letter combinations and omitting letters in words for spelling (e.g., “after” spelled “eftr”)



Common Risk Factors Associated with Dyslexia

2nd and 3rd Grade Continued

- Difficulty reading fluently (e.g., slow, inaccurate, and/or without expression)
- Difficulty decoding unfamiliar words in sentences using knowledge of phonics
- Reliance on picture clues, story theme, or guessing at words
- Difficulty with written expression



(TEA, 2014, p. 10)

Common Risk Factors Associated with Dyslexia

4th – 6th Grade

Many of the previously described behaviors remain problematic along with the following:

- Difficulty reading aloud (e.g., fear of reading aloud in front of classmates)
- Avoidance of reading (e.g., particularly for pleasure) x Acquisition of less vocabulary due to reduced independent reading
- Use of less complicated words in writing that are easier to spell than more appropriate words (e.g., “big” instead of “enormous”)
- Reliance on listening rather than reading for comprehension



Common Risk Factors Associated with Dyslexia Junior High and High School

Many of the previously described behaviors remain problematic along with the following:

- Difficulty with the volume of reading and written work
- Frustration with the amount of time required and energy expended for reading
- Difficulty with written assignments
- Tendency to avoid reading (particularly for pleasure)
- Difficulty learning a foreign language



But what about *instruction*?

How do we help our students
who are identified with
dyslexia?



**Dyslexia intervention
should include
specific components
(what is taught)**



and

**approaches
(how it's taught).**



What should be taught?

According to J. R. Birsh, as quoted in the *Dyslexia Handbook*, critical, evidence-based components of dyslexia instruction should include:

- **Phonological awareness** —Phonological awareness is the understanding of the internal sound structure of words.
- **Sound-symbol association**—Sound-symbol association is the knowledge of the various speech sounds in any language to the corresponding letter or letter combinations that represent those speech sounds.
- **Syllabication**—A syllable is a unit of oral or written language with one vowel sound.



(as cited in TEA, 2014, p. 26 - 27)

Instructional Components for Dyslexia Intervention according to J.R. Birsh, continued:

- **Morphology** — Morphology is the study of how a base word, prefix, root, suffix (morpheme) combine to form words.
- **Syntax**— Syntax is the sequence and function of words in a sentence in order to convey meaning.
- **Reading comprehension**—Reading comprehension is the process of extracting and constructing meaning through the interaction of the reader with the text to be comprehended and the specific purpose for reading.



(as cited in TEA, 2014, p. 26 -27)

Instructional Components for Dyslexia Intervention, continued:

- **Orthography**—Orthography is the written spelling patterns and rules in a given language.
- **Reading fluency**—Moats & Dakin add that “reading fluency is the ability to read text with sufficient speed and accuracy to support comprehension.

(as cited in TEA, 2014, p. 26 -27)



How should dyslexia intervention be delivered?

Delivery of Dyslexia Instruction

- **Simultaneous, multisensory (VAKT)** – According to Birsh, “Multisensory instruction utilizes all learning pathways in the brain (visual, auditory, kinesthetic-tactile) simultaneously in order to enhance memory and learning”; and
- **Systematic and cumulative** – “Systematic and cumulative instruction requires the organization of material follow order of the language.”
- **Explicit instruction** – Moats & Dakin add, “Explicit instruction is explained and demonstrated by the teacher one language and print concept at a time, rather than left to discovery through incidental encounters with information.”

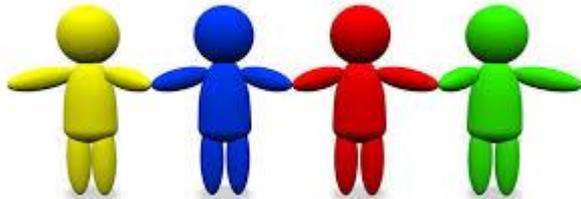


(as cited in TEA, 2014, p. 28)

Delivery of Instruction, continued:

J. R. Birsh continues:

- **Diagnostic teaching to automaticity**—Diagnostic teaching is knowledge of prescriptive instruction that will meet individual student needs of language and print concepts. The teaching plan is based on continual assessment of the student's retention and application of skills.
- **Synthetic instruction**—Synthetic instruction presents the parts of any alphabetic language (morphemes) to teach how the word parts work together to form a whole (e.g., base word, derivative).
- **Analytic instruction**—Analytic instruction presents the whole (e.g., base word, derivative) and teaches how the whole word can be broken into its component parts (e.g., base word, prefix, root, and suffix).



(as cited in TEA, 2014, p. 28)

Because diagnosed students can receive services for dyslexia at any age, Katy ISD offers various types of interventions that

- Incorporate the necessary instructional components (*what is taught*)

and...



- Utilize the prescribed techniques for delivery (*how it's taught*)



Katy ISD Instructional Options for Dyslexia Intervention:

- Reading Readiness
- Dyslexia Intervention Program (DIP)
- Esperanza
- BOOST
- Blitz
- *REWARDS*



A few points to note about secondary instruction:



Junior High

- Multisensory dyslexia instruction focusing on decoding multisyllabic words, reading fluency, basic comprehension, and utilizing accommodations in the classroom.
- Students receive dyslexia intervention services as a pull-out program from the following:
 - Advisory period
 - Reading Elective class
 - Elective class

High School

- Multisensory dyslexia instruction continues with the focus on utilizing accommodations in the classroom.
- Students receive dyslexia intervention services as a pull-out program from the following:
 - Advisory/Enrichment period
 - Reading Elective class
 - Elective class

The dyslexia intervention teacher has the diagnostic teaching knowledge to choose the appropriate instructional option or combination of options to meet individual student needs.



References

Texas Education Agency. (2014). *The dyslexia handbook: Procedures concerning dyslexia and related disorders*. Retrieved from <http://www.region10.org/r10website/assets/File/DHBwithtabs10214.pdf>