

Characteristics of Dyslexia

Risk Factors and Characteristics of Dyslexia Across the Lifespan

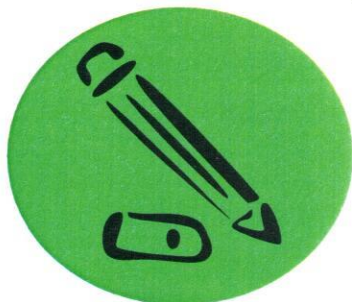
Tennessee Center for the Study and Treatment of Dyslexia

Risk factors that may predict difficulty with word reading skills can be identified as early as preschool, and older students who are struggling to read words at a developmentally appropriate level continue to display specific characteristics. Understanding and responding to these risk factors and characteristics will support early identification for younger students, as well as identification and intervention for older students. A family history of problems with reading, spelling and writing are also risk factors that should be considered.



PRESCHOOL - KINDERGARTEN

- Delay in talking; articulation problems
- Difficulty recognizing and producing rhymes
- Difficulty remembering written information, such as letter names (also phone number and address)
- Difficulty remembering and following directions
- Difficulty matching words by initial sound



GRADES 1 - 3

- Difficulty learning sound/symbol correspondences
- Persistent confusion of visually similar letters (b/d/p, w/m, h/n, f/t)
- Confusion of letters whose sounds are similar (d/t, b/p, f/v)
- Difficulty remembering basic sight vocabulary (e.g. colors)
- Problems segmenting words into individual sounds and blending sounds to form words
- Reading and spelling errors that involve difficulties with sequencing and monitoring sound/symbol correspondence such as reversals of letters (past/pats), omissions (tip/trip), additions (slip/sip), substitutions (rip/rib) and transpositions (stop/pots)
- Omission of grammatical endings in reading and/or writing (-s, -ed, -ing, etc.)
- Difficulty remembering spelling words over time and applying spelling rules when writing



GRADES 4 - 8

- Significant difficulty reading and spelling multisyllabic words, often omitting entire syllables as well as making single-sound errors
- Lack of awareness of word structure (prefixes, roots, suffixes)
- Frequent misreading of common sight words (e.g., where, there, what, then, when)
- Difficulty with reading comprehension and learning new information from text because of underlying word recognition difficulties
- Difficulty in comprehension of text because of underlying oral language problems affecting vocabulary and grammar
- Significant difficulty in writing related to problems in spelling and organization



HIGH SCHOOL/COLLEGE/ADULT

- Continued difficulty with word recognition that significantly affect acquisition of knowledge and ability to analyze written material
- Slow rate of reading
- Continued difficulty with spelling and written composition
- Difficulty taking notes in class
- Trouble learning a foreign language

Accommodations for Dyslexia

Commonly Adopted Accommodations to Support Students with Characteristics of Dyslexia

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As with any learning difference, individuals who have a reading disability can struggle to demonstrate their full potential on class assignments and tests. In the case of individuals with characteristics of dyslexia, their difficulties reading words accurately or fluently can impact class assignments and tests that require reading. These difficulties can also limit their learning from class assignments and activities that are heavily text dependent. Accommodations are one means of helping to address these challenges. These following accommodations are not a complete list, and they may not be appropriate for all students with characteristics of dyslexia.

Effective Accommodations:

- Do not reduce learning expectations
- Reduce or even eliminate the effects of a student's disability
- Allow students to access grade-level curriculum and to demonstrate learned knowledge despite disability
- Ensure that assessments measure a student's knowledge and skills rather than a student's disability



Text Reading

- Provide text to speech technology allowing the student to hear digital text. This allows for digit textbooks and digital books to be read to the student in part or whole as the student follows along in the text.
- Provide audio books for literature and grade level text. Student should have a copy of the text in front of him/her while listening to help focus his/her attention, to increase his/her visual memory of words, and so that he/she may take advantage of graphics within the text (see www.learningally.org or www.bookshare.org for low cost and free audiobooks for schools and families; ebooks, which can be converted to audiofile, are another good option).
- Oral testing or prompting upon request (i.e., allowing student to request that certain words or text be read to him/her) when allowable.



Spelling & Writing

- Use spelling words that test knowledge of specific features (e.g., CVC; CVCe) rather than subject matter or typical vocabulary. When possible, the student's spelling list should come from his/her phonics based intervention program, as he/she should be learning to spell the same patterns he/she is learning to read.
- Allow use of a personal 'vocabulary' notebook, a dictionary, a speller's dictionary, a Franklin Speller, or similar device for in-class assignments and to assist with correct spelling. (His/Her spelling skills will need to be at a 5th to 6th grade level for this device to be helpful.)
- Assignments and tests graded for content only (letter reversals, spelling errors, and punctuation errors should be noted but not reduce grade)
- Use of a recorder to record lectures or directions, especially as he/she gets older (e.g., Livescribe Pen, www.livescribe.com).
- Allow Student to type his/her writing assignments. A program, such as Kurzweil or Dragon, with word prediction and text to speech to compose writing assignments may be helpful as he/she gets older.
- Access to a computer for written assignments (allow him/her to type responses instead of writing by hand)
- Allow oral reports or small-group presentations in lieu of written reports (if the student feels comfortable doing this).

Foundational Reading Skills

Evidence Based Instructional Practices that Support Reading Development in Grades K - 3

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Instructional recommendations included in this document are based on a review of empirical research synthesized in practice guides published by the Institute of Education Sciences.

Academic Language Skills

Inferential Language Skills, Narrative Language Skills, Academic Vocabulary

Directly Teach Academic Vocabulary (teach vocabulary when students listen to and read text — use targeted vocabulary words in other contexts to reinforce learning)

Directly Teach Grammatical Structure (teach the parts of sentences)

Directly Teach Text Structure (teach the components of narrative and informational text)

Inferential Processing (engage students in oral comprehension and reading comprehension activities that have them predict, problem-solve, hypothesize or contrast; have students link information to their background knowledge)

Use various sources of student data to identify deficits in academic language skills. When assessing reading comprehension, use various sources of information to rule out deficits in reading fluency or word reading skills. Address areas of weakness in Tiers 2 and 3.

Directly teach academic language skills in support of reading comprehension. Model the application of these skills when reading connected text. Support acquisition of academic vocabulary during wide reading.

Reading Fluency

Oral and Silent Reading Fluency of Connected Text

Oral Reading (oral reading with teacher support — choral reading, echo reading, simultaneous reading)

Repeated Reading (a student reads the same text multiple times with supervision to support mastery)

Wide Reading (a student reads many different texts — teacher supports accurate reading and scaffolds the application of decoding skills to read decodable words)

Comprehension Monitoring (when students are reading connected text use this opportunity to ask comprehension questions to support comprehension monitoring)

Use various sources of student data to identify deficits in reading fluency and use various sources of information to rule out word reading skills deficits. Address areas of weakness in Tiers 2 and 3.

Provide daily opportunities for students to read instructional-level text with scaffolded support. Model the application of word reading skills to reading connected text and to reading with expression.

Word Reading

Decoding, Sight Word Reading, High Frequency Words, Spelling

Directly Teach Phonological Awareness (words, syllables, phonemes)

Directly Teach Letter Knowledge (letter formations, letter-sound correspondence)

Directly Teach Sound Symbol Correspondence (letters, graphemes - digraph, trigraphs)

Directly Teach Word Parts and Patterns (morphology - base words, prefixes, suffixes; high frequency word parts)

Directly Teach High Frequency Words (whole word instruction)

Directly Teach Irregular Words (whole word instruction)

Directly Teach Spelling Patterns (write and recognize words)

Use various sources of student data to identify skills deficits and provide more intensive direct instruction for the areas of weakness within Tier 2 and Tier 3 instruction.

Directly teach skills that support word reading and provide opportunities for students to read words in isolation, in phrases and in sentences to support mastery.