

Dyslexia Topic Brief



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Exceptional Children Division

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The use of the term dyslexia continues to cause misunderstanding when educators, other professionals and families communicate. The intent of this document is to provide stakeholders accurate information regarding the evaluation, identification and education of students with dyslexia within North Carolina public schools.

What is dyslexia?

“Word level reading disability is synonymous with dyslexia,” (Fletcher, Lyon, Fuchs, & Barnes, 2007). Dyslexia literally means difficulty (dys) with words (lex) and is widely considered to be a reading disability at the word level involving the ability to map sounds onto letters in order to read and spell words accurately and automatically.

Definitions of dyslexia vary, but all propose that dyslexia is a learning disability that primarily impacts the areas of reading, spelling and writing. The International Dyslexia Association and the U.S. National Institutes of Child Health and Human Development define dyslexia as follows:

“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.”

The Individuals with Disabilities Act (IDEA 2004) as well as the *North Carolina Department of Public Instruction Policies Governing Services for Children with Disabilities*, includes dyslexia as an example of conditions under the definition of Specific Learning Disability.

What is the prevalence of learning disabilities and dyslexia?

An estimated 40% of the population is likely to have academic achievement problems related to inadequate reading skills. However, not all of these students have a learning disability or dyslexia requiring special education services. An estimated 5% of the population will have enduring, persistent reading difficulties that are very difficult to treat given our current knowledge (Moats & Dakin, 2008).

Nationally, 42% of all public school students are identified as having a Specific Learning Disability (IDEA Part B Child Count, Ages 6–21). Approximately 85% of students with LDs have a primary learning disability in reading and language processing (Moats & Dakin, 2012).

Do North Carolina Public Schools recognize dyslexia?

Myth: NC Public Schools do not recognize dyslexia as a disability.

Fact: Schools evaluate and identify children as eligible individuals within the disability areas as defined by federal law, one of which is Specific Learning Disability. Dyslexia is recognized as a Specific Learning Disability (SLD); children with dyslexia may be found eligible as a child with a disability under the category of Specific Learning Disability.

There is nothing within NC policies or guidance, or within IDEA, that prohibits the use of the term dyslexia in evaluations, eligibility determinations, or IEP documents (Yudin, 2015).

As with all disabilities, a student with dyslexia may or may not need special education. A diagnosis of dyslexia alone is insufficient to find a student eligible for special education services. The school team must establish all criteria required for eligibility determination to find the student eligible for special education under IDEA.

What are indicators of dyslexia?

Myth: Students with dyslexia see words and letters backwards.

Fact: Symptoms sometimes include flipping or reversing letters. But reversing letters isn't always a sign of dyslexia. Young children who don't have dyslexia often do this too. Nor is it the only problem associated with dyslexia. People with dyslexia may have trouble with a number of skills, including writing, spelling, speaking and socializing (Lapkin, 2015).

Myth: All students with dyslexia are intellectually gifted.

Fact: Dyslexia occurs in people of all backgrounds and intellectual levels (Moats & Dakin, 2012).

General problems experienced by individuals with dyslexia include the following (Moats & Dakin, 2012):

- Learning to speak
- Learning letters and their sounds
- Organizing written and spoken language
- Memorizing number facts

- Reading quickly enough to comprehend
- Keeping up with and comprehending longer reading assignments
- Spelling
- Learning a foreign language
- Correctly doing math operations.

Specific signs for elementary aged children may include (International Dyslexia Association, 2013):

- Difficulty with remembering simple sequences such as counting to 20, naming the days of the week, or reciting the alphabet
- Difficulty understanding the rhyming of words, such as knowing that fat rhymes with cat
- Trouble recognizing words that begin with the same sound (for example, that bird, baby, and big all start with b)
- Pronunciation difficulties
- Trouble easily clapping hands to the rhythm of a song
- Difficulty with word retrieval (frequently uses words like “stuff” and “that thing” rather than specific words to name objects)
- Trouble remembering names of places and people
- Difficulty remembering spoken directions.

For further information regarding indicators of dyslexia, please see the resources at the end of this document.

Not all students who experience difficulty in learning to read will require special education. A child’s response to instruction is a critical indicator of the nature and severity of his or her reading difficulty (Moats & Dakin, 2008). In fact, Moats and Dakin state, “We usually refer the term dyslexic for children whose reading, spelling and language difficulties persist even when they receive excellent instruction.”

With the utilization of a multi-tiered system of support (MTSS), including universal screening, students with indicators of risk receive appropriate and timely interventions matched to student need. If a student does not respond to high quality instruction and research-based intervention, then the need for further assessment and/or an evaluation to determine eligibility for special education should be determined. “Within an MTSS framework, schools identify students at risk for poor learning outcomes, including those who may have dyslexia, dyscalculia, or dysgraphia; monitor their progress; provide evidence-based interventions; and adjust the intensity and nature of those interventions depending on the student’s responsiveness (Yudin, 2015).”

Do North Carolina public schools screen students for risk of reading difficulty or dyslexia?

Myth: North Carolina public schools do not screen students for risk of reading difficulty or dyslexia.

Fact: NC Public Schools are required through the Excellent Public Schools Act (HB 950/ S.L. 2102-142) to assess all kindergarten, first, second and third grade students with valid, reliable, formative and diagnostic reading assessments. Screening assessments required for use by all North Carolina schools in grades K-3 include the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) components named below:

- First Sound Fluency and Phoneme Segmentation Fluency
- Nonsense Word Fluency
- Letter Naming Fluency
- Oral Reading Fluency and
- Oral Reading Accuracy

Assessments that serve as screening tools can provide early warning indicators of students who are at risk of reading failure. These include (Moats & Dakin, 2008):

- Timed tests of letter naming or letter sound associations. These are the most accurate and powerful single predictors of later reading achievement in kindergarten and first grade.
- Phonemic awareness assessments at kindergarten and first grade.
- After first grade, direct measures of decoding simple real and nonsense words and word recognition.
- Once students can read sentences and paragraphs, oral reading fluency (ORF) that combines accuracy and fluency is a powerful *predictor*. ORF can help educators find the students who read accurately, but very slowly and whose fluency difficulties will predict later problems in reading.

Within a MTSS, students who are identified at risk are provided supplemental and/or intensive supports matched to their identified area(s) of need. Formal or informal assessments, as well as a review of other data sources, can provide important information to the problem solving team to assist in identifying areas of need as well as strength, so appropriate instruction and intervention can be designed and delivered. Results of frequently scheduled progress monitoring should be routinely analyzed to ensure the student is responding adequately to the instruction being provided.

What is the obligation of NC Public Schools to evaluate and determine eligibility for special education services for students who may have a Specific Learning Disability (SLD) in the area of reading (dyslexia)?

Myth: North Carolina public schools do not evaluate students for dyslexia.

Fact: Dyslexia is considered an alternative term for reading difficulty at the word level involving the ability to map sounds onto letters in order to read and spell words accurately and automatically. North Carolina Public Schools **do** assess students for word level reading difficulties and other characteristics typical of students with dyslexia.

As part of Child Find obligations under federal law, the NC Public Schools are required to locate and identify children with disabilities. Schools evaluate and identify children as eligible individuals within the disability areas defined by federal law, one of which is Specific Learning Disability. Dyslexia is recognized as a SLD.

Educational professionals evaluate and conduct assessments in all areas related to the suspected disability, which would include word level reading and spelling difficulties, areas which are characteristic of dyslexia. The IEP team determines the assessments that are needed as a part of a comprehensive evaluation in order to determine eligibility through the educational eligibility criteria defined within the IDEA and *North Carolina Department of Public Instruction Policies Governing Services for Children with Disabilities*. The assessment results guide the team's determination of eligibility and the design of appropriate instruction and intervention for the individual student.

There is nothing in the IDEA or NC Policies that would prohibit the inclusion of the condition (i.e. dyslexia) that is the basis for the child's disability. If a child's dyslexia is the basis for the determination that a child has a SLD, there could be situations where an IEP team would determine that personnel responsible for IEP implementation would need to know about the condition (i.e. dyslexia) that underlies the child's disability (Yudin, 2015).

Who may conduct the assessments and evaluations for a student having characteristics of dyslexia when a disability is suspected?

Myth: Dyslexia requires a medical diagnosis.

Fact: Dyslexia does not require a medical diagnosis to be recognized within the public school setting. Dyslexia is best assessed using appropriate educational assessments in the areas detailed in the previous section and in the context of effective evidence-based instruction. Dyslexia requires educational intervention and treatment. There are no known evidence-based medical interventions for students with dyslexia.

North Carolina Department of Public Instruction Policies Governing Services for Children with Disabilities and IDEA 2004 requires that professionals who administer assessments and conduct evaluations must be trained and knowledgeable regarding such assessments.

School psychologists licensed in North Carolina have the skills necessary to evaluate students for word level reading difficulties and other reading related disabilities. Often, trained special educators, speech-language therapists and reading specialists also have the necessary skills to administer and interpret diagnostic assessments that lead educators to determining areas that require intervention and are related to word level reading difficulties and dyslexia (e.g. formal and informal assessments of phonemic awareness, letter naming, letter-sound association). Neither the *North Carolina Department of Public Instruction Policies Governing Services for Children with Disabilities* or IDEA indicates that there is one type of professional who is uniquely qualified to provide such identification.

Can the term dyslexia be included in a student's IEP?

Myth: The use of the term dyslexia is prohibited from use within a student's IEP.

Fact: There are no legal restrictions to the use of the term dyslexia within the Present Levels of Academic Achievement and Functional Performance (PLAAFP) or elsewhere within a student's IEP. However, use of the term dyslexia is not sufficient; the term alone does not provide specific, measurable and objective information which describes the student's needs so that appropriate specially designed instruction can be designed and delivered. Information included in the PLAAFP must include data-based student specific information describing the student's strengths and needs resulting from the disability.

If the IEP team has been provided a medical or mental health diagnosis of dyslexia by a private service provider, the team must consider this diagnosis in their eligibility determination and educational programming and should include this information within the PLAAFP, but it does not dictate specific instructional services or eligibility determinations.

Do North Carolina Public Schools provide instruction to meet the needs of students with dyslexia (word level reading difficulties)?

Myth: We do not teach students with dyslexia (word reading difficulties) in North Carolina public schools.

Fact: Students with persistent reading disabilities, learning disabilities and dyslexia, need informed expert instruction in a research-based curriculum, provided by highly trained teachers, with the developmentally appropriate amount of instructional time. The NC Department of Public Instruction Exceptional Children Division offers professional development in reading, math, learning disabilities and dyslexia, at no cost, to teachers within the state.

Myth: Dyslexia can be cured or helped by special balancing exercises, fish-oils, dyslexia fonts, color overlays, vision therapy, or sensory integration therapy.

Fact: None of these remedies have been found to be effective based on scientific evidence. The best intervention for dyslexia is instruction in reading and spelling using evidence-based practices.

The characteristics of effective reading instruction for all students has been well established by the 2009 National Early Literacy Panel and the 2000 Report of the National Reading Panel. The provision of evidence-based reading instruction to all students, within a multi-tiered system of support, is critical to the accurate identification of students with Specific Learning Disabilities, including dyslexia, and to eliminate the identification of students who struggle acquiring proficiency in reading due to inadequate instruction.

There is ample evidence-based research supporting structured literacy instruction as an approach for students with word level reading and spelling difficulties characteristic of dyslexia. Structured literacy instruction includes instruction in the following elements:

phonology, sound-symbol association, syllable types, morphology, syntax and semantics. The use of structured literacy instruction includes the following instructional principles: explicit, systematic, cumulative and diagnostic (International Dyslexia Association, 2015). Other important factors include the intensity and fidelity of instruction, the use of assessment to guide instruction, customization of instruction to meet individual needs and teaching for mastery. For further information regarding structured literacy instruction, see the resources at the end of this document.

The NC Department of Public Instruction Exceptional Children Division offers professional development in reading, math, learning disabilities and dyslexia, at no cost, to educators within the state.

The NC State Improvement Project (NCSIP) aims to improve the quality of instruction for students with disabilities, including dyslexia, through research supported personnel development and on-site technical assistance for public schools and university teacher education programs. NCSIP has five key goals which include (Public Schools of North Carolina, 2015):

1. Improve basic skills performance of students with disabilities.
2. Increase the percentage of qualified teachers of students with disabilities.
3. Increase graduation rates and decrease dropout rates of students with disabilities.
4. Improve parent satisfaction and involvement with, and support of, school services for students with disabilities.
5. Improve the quality of teachers' instructional competencies.

The NCSIP Reading Foundations five day course addresses the following:

- informal assessment, progress monitoring and diagnostic assessment for students with persistent reading difficulties, and
- evidence-based instructional principles and strategies for students with persistent reading difficulties, including multisensory structured language.

For further information regarding NCSIP and Foundations courses, contact Paula Crawford, Project Director, at paula.crawford@dpi.nc.gov . Contact information for regional literacy consultants and additional information about NCSIP may be found at www.ncsip.org .

For further information regarding Specific Learning Disabilities or dyslexia, contact Lynne Loeser at lynne.loeser@dpi.nc.gov or any of the Regional Literacy Consultants found at <http://ec.ncpublicschools.gov/directory/staff-members> .

Additional resources may be found below and on the NCDPI Exceptional Children website at <http://ec.ncpublicschools.gov/disability-resources/specific-learning-disabilities>.

References

- Cortiella, C., & Horowitz, S. H. (2014). *The State of Learning Disabilities: Facts, Trends and Emerging Issues*. New York City: National Center for Learning Disabilities.
- Fletcher, J., Lyon, G. R., Fuchs, L. S., & Barnes, M. (2007). *Learning Disabilities From Identification to Intervention*. New York, New York: Guilford Press.
- IDA Board of Directors. (2012, November 12). *Definition of Dyslexia*. Retrieved 2015, from International Dyslexia Association: <http://eida.org/definition-of-dyslexia/>
- International Dyslexia Association. (2013). *Dyslexia in the Classroom: What Every Teacher Needs to Know*. Retrieved from International Dyslexia Association: <http://eida.org/dyslexia-in-the-classroom/>
- International Dyslexia Association. (2015, August). *Effective Reading Instruction*. Retrieved from <http://eida.org/effective-reading-instruction/>
- Lapkin, E. (2015, August 2). *Understood for Learning and Attention Issues*. Retrieved from Understood.org: <https://www.understood.org/en/learning-attention-issues/child-learning-disabilities/dyslexia/common-myths-about-dyslexia-reading-issues#slide-2>
- Lowell, S. C., Felton, R. H., & Hook, P. E. (2014). *Basic Facts About Assessment of Dyslexia Testing for Teaching*. Baltimore, MD: International Dyslexia Association.
- Moats, L. C., & Dakin, K. E. (2008). *Basic Facts About Dyslexia and Other Reading Problems*. Baltimore: International Dyslexia Association.
- Moats, L. C., & Dakin, K. E. (2012). *Dyslexia Basics*. Retrieved from International Dyslexia Association: <http://eida.org/dyslexia-basics/>
- Public Schools of North Carolina. (2015, August 7). *North Carolina State Improvement Project*. Retrieved from North Carolina State Improvement Project: http://www.ncsip.org/about/purposes_goals.php
- Public Schools of North Carolina Exceptional Children Division. (2014). *Policies Governing Services for Children with Disabilities Amended July 2014*. Retrieved from <http://ec.ncpublicschools.gov/policies/nc-policies-governing-services-for-children-with-disabilities>
- Yudin, M. K. (2015, October 23). *Dear Colleague*. Retrieved from US Department of Education: <http://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/index.html?exp=0#memos>