



**PUBLIC SCHOOLS OF NORTH CAROLINA**

State Board of Education | Department of Public Instruction

# **DYSLEXIA AND DYSCALCULIA**

## **A Report on Statewide Efforts**

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## Dyslexia and Dyscalculia

This report describes statewide efforts of the Exceptional Children Division at the North Carolina Department of Public Instruction to empower educators to effectively identify and educate students with reading and math disabilities, including dyslexia and dyscalculia.

Within the definition of Specific Learning Disability in the *NC Policies Governing Exceptional Children* (Public Schools of North Carolina Exceptional Children Division, 2014) and the *Individuals with Disabilities Education Act* (Part II 34 CFR Parts 300 and 301 Assistance to States for the Education of Children with Disabilities and Preschool Grants for Children with Disabilities Final Rule, 2006), the term *dyslexia* is included as a subtype of specific learning disability. Dyslexia is recognized by the North Carolina Public Schools as a subtype of learning disability manifesting itself in reading and spelling difficulties involving the ability to map sounds onto letters in order to read and spell accurately and automatically. “Word level reading disability is synonymous with dyslexia (Fletcher, Lyon, Fuchs, & Barnes, 2007).”

The term *dyscalculia* is not included within the federal Individuals with Disabilities Education Act (IDEA), nor current NC policy, however is included in [NC policy](#) effective July 1, 2020.

As with all disabilities, a student with dyslexia or dyscalculia may or may not need special education. The school team must establish the criteria required for eligibility determination to find the student eligible for special education under IDEA: (1) the disability must have an adverse effect on educational performance and (2) the student must require special education.

### 1 PREVENTION OF FAILURE: MULTI-TIERED SYSTEM OF SUPPORT (MTSS)

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The North Carolina Department of Public Instruction has established the vision that “Every NC Pre K-12 public education system implements and sustains all components of a Multi-Tiered System of Support to ensure college and career readiness for all students” (North Carolina Department of Public Instruction, 2015). One critical component of an MTSS is the practice of providing effective instruction and intervention across tiers of academic and behavioral support to all students. Assessment, progress monitoring and data-driven decision making are components of an MTSS System that is responsive to the needs of all students. Within MTSS, students who are “at-risk” for reading difficulties, including dyslexia, are identified early through the universal screening system. One source of data for the universal screening system, is data derived from the NC General Assembly Read to Achieve Program which mandates early literacy screening for K-3 students to identify those who are having reading difficulties and ensures students identified with risk factors receive appropriate instruction and intervention.

Once students are identified as “at-risk,” data-based problem solving identifies appropriate research-based strategies and preventive intervention begins. Careful progress monitoring and analysis of student performance assesses the student’s response to intervention and assures the student is making progress toward grade-level standards.



For those students whose difficulties persist, the school makes a referral for an initial comprehensive evaluation to determine if the child has a disability as defined under the Individuals with Disabilities Education Act (IDEA). At any time, a parent may also make a request for an initial comprehensive evaluation under IDEA.

## 2 THE NC STATE IMPROVEMENT PROJECT (NC SIP)

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The NC State Improvement Project (NC SIP) was established in North Carolina in 2000. The project aims to improve the quality of instruction for students with disabilities through research supported personnel development and on-site technical assistance for public schools and university teacher education programs. The project goals support improving the performance and success of students with disabilities in North Carolina. The Exceptional Children Division Program Improvement and Professional Development section has ten (10) regional and statewide consultants that provide professional development, technical assistance and coaching support to build a sustainable system.

Improving the teaching of students with disabilities is a major focus of NC SIP. There is clear and extensive research evidence supporting that the vast majority of students with disabilities can read and write, as well as demonstrate math skills, on grade level. The NC SIP project and a Multi-Tiered System of Support both strive to ensure students who struggle, including students with reading and/or math difficulties, benefit from appropriate, research-validated instructional and learning techniques that are effectively employed.

A primary component of the NC SIP project is the *Reading Research to Classroom Practice* and *Math Foundations* courses. These courses are both rigorous 30-hour 5-day courses. Both courses underwent a rigorous review and revision process this past year based on an extensive review of the research literature. All instructors were recertified after completing additional professional learning with Exceptional Children Division consultants.

*Reading Research to Classroom Practice* is based on the principles of instruction for students with dyslexia: explicit, multisensory and systematic.

*Foundations of Math* course is based on the research-based principles of math instruction for students with learning disabilities, including the seven components of number sense. A comprehensive review of the research provided the conceptual framework for the development of the *Foundations of Math* course.

NC SIP Facts:

- **71 LEAs, across all eight (8) regions, participate in the NC SIP project**, focusing on reading, writing and math. Each of these districts has certified *Reading Research to Classroom Practice* and *Foundations of Math* instructor(s) and coaching support systems to build an infrastructure that supports teachers and sustains best practice.
- **254 certified Reading Research to Classroom Practice instructors** provide the 30-hour *Reading Research to Classroom Practice* course offerings each year providing accessibility to educators throughout North Carolina. Since the beginning of the project, **13,397 special educators**,



general educators, administrators and Institutions of Higher Education faculty have completed this rigorous 30-hour course; 5404 in the past six years.

- **151 certified instructors provide the 30-hour *Foundations of Math* course offerings** each year. Since the beginning of the project in 2006, **3,868 special educators, general educators, administrators and Institutions of Higher Education faculty have completed this rigorous course.**
- Over the past sixteen years, **15,207 educators in North Carolina were trained in evidence-based reading programs** for students with persistent reading difficulty; 5145 in the past six years.
- Between 2011-2016, **1523 educators were trained in evidence-based math programs** for students with math disabilities.

An annual 3-day conference of the NC SIP sites is held each March, which now includes an Instructor Institute. This one-day professional learning opportunity offers certified *Reading Research to Classroom Practice and Foundations of Math* instructors the opportunity to strengthen their literacy and math knowledge by exploring current research findings on reading/math instruction, reading/math difficulties and reading/math intervention. Featured keynote speakers in past years have included nationally renowned reading and math experts including Rebecca Felton, Maryanne Wolf, Jan Hasbrouck, Louisa Moats, Nancy Hennessy, John Woodward, Doug Clements and Bradley Witzel.

For further information on NC SIP, visit <http://www.ncsip.org/> or contact Dr. Paula Crawford at [paula.crawford@dpi.nc.gov](mailto:paula.crawford@dpi.nc.gov).

### 3 PROFESSIONAL DEVELOPMENT

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The Exceptional Children Division offers additional professional development in assessment and evidence-based instructional strategies for students with Specific Learning Disabilities, including students with dyslexia, to educators across the state in a variety of formats, including the annual Exceptional Children Summer Institutes and the Exceptional Children Conference.

In recognition of the need to continue to increase the capacity of North Carolina Public School educators to identify and educate students experiencing core difficulty with word recognition, fluency, spelling and writing (dyslexia), **32 *Reading Research to Classroom Practice* instructors** were selected to engage in deep study of dyslexia. This professional learning event occurred over two days at the Exceptional Children Summer Institute (July 2016) with dyslexia expert and author Nancy Hennessy. To continue to build capacity, in December 2016, ten (10) NCDPI literacy consultants also completed the two-day course. Trainer knowledge is continuously supported and developed through required webinars.

This first cohort of trainers, the Dyslexia Delegates, is providing a ***A Deep Dive into Dyslexia: The Science of Reading and Expert Teaching***, a full day course within their LEAs. To date, **eleven (11) local and four (4) regional professional development sessions have been offered, with 542 educators participating. An additional fourteen (14) sessions (4 regional) are scheduled through August 2017.**

The Exceptional Children Division has a process for LEAs to request professional development to fulfill additional need. Once a request is submitted, trainers are identified to fulfill the request.



Participants attending *A Deep Dive into Dyslexia: The Science of Reading and Expert Teaching* gain knowledge of the following:

- The science of reading, including an understanding of why children experience reading difficulty, including dyslexia
- Causes and characteristics of dyslexia and reading disabilities
- The components of word level reading difficulties, including phonological awareness, decoding, encoding, and sight word recognition related to dyslexia, and
- Evidence informed instructional and assessment practices in reading appropriate for students with dyslexia.

To continue expanding our capacity, the NC Department of Public Instruction's (NC DPI) Exceptional Children Division will be training a second cohort of Dyslexia Delegates over two days during the 2017 Exceptional Children Summer Institute.

In addition to the above professional development, ***Demystifying Dyslexia: Breaking Down Barriers and Developing Common Language***, a 1.5 hour session, has been developed by the Exceptional Children Division and provided to all Dyslexia Delegates for use with various audiences to build awareness of dyslexia. **This training has been provided in fourteen LEAs to 575 participants.**

The Exceptional Children Division Specific Learning Disability Consultant is scheduled to provide dyslexia awareness sessions at the Collaborative Conference for Student Achievement, the NC Reading Conference and the Hill Center Community Event series in an effort to reach a wider audience. A session was provided at the NC Council for Exceptional Children Conference in January 2017.

## 4 COMMUNICATION

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To provide stakeholders accurate information regarding the evaluation, identification and education of students with dyslexia within North Carolina public schools the NC DPI Exceptional Children Division published a *Dyslexia Topic Brief* in November 2015.

This document has been widely disseminated to LEAs and charter schools and is housed on the NCDPI Exceptional Children website. Also included on the website is the US Department of Education October 2015 dyslexia guidance from Secretary Michael Yudin.

Please see the attached NC Dyslexia Facts document with links and descriptions of the professional development and communications specific to dyslexia.

For further information, please contact:

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